

Regional disparities in the utility sector services in Russia – does the reform of local self-governance help reduce them?

by

Roman MARTUSEVICH

Institute for Industrial and Markets Studies, Moscow
martusevich@pochta.ru

June 2008

This report was initially prepared in November 2007 for the PSI Yearbook,
and was slightly updated afterwards.

INTRODUCTION	2
1. UNEXPECTED MAIN RESULT OF THE UTILITY SECTOR REFORM ACHIEVED SO FAR: INFRASTRUCTURE FURTHER DETERIORATES DESPITE FAST TARIFF GROWTH	2
2. REFORM OF LOCAL SELF-GOVERNANCE HAS NEGATIVELY AFFECTED PERFORMANCE OF THE UTILITY SECTOR.....	7
3. PRIVATE SECTOR PARTICIPATION IN THE UTILITY SECTOR: RESULTS BELOW EXPECTATIONS.....	11
4. RECOMMENDATIONS.....	14
REFERENCES	15
NOTES	17

Introduction

Recent sustainable economic growth in Russia and progress in strengthening national sovereignty are in deep contrast with weaknesses of the policy for socio-economic development of Russian regions conducted by the national and regional governments. As a result, one can see a number of huge and further growing disparities: in economic performance of, and the quality of life in different Russian regions (provinces); between urban and rural areas; huge and growing disparity between low-income and high-income households, etc. This paper aims to reveal some of such disparities, foremost regarding utility sector services, and discuss their reasons, and finally to propose some recommendations on how to reduce the disparities.

1. Unexpected main result of the utility sector reform achieved so far: infrastructure further deteriorates despite fast tariff growth

Fast tariff growth in the utility sector exacerbates the affordability constraints for a growing share of the population

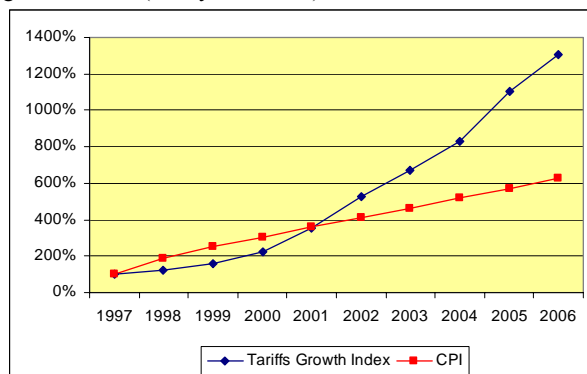
With the average GDP growth rate exceeding 6% per annum over the last 5 years Russia nevertheless faces growing regional disparity measured in terms of per capita Gross Regional Product (GRP) and household income differentiation (for example, the ratio between average income of those 10% of households with highest incomes (10th decile) to the average income of those 10% of households with least income (1st decile) had increased from **13.8** in 2000 to **15.3** in 2006). At the same time the Government motivates the regions to liquidate cross-subsidization in the utility sector, and reach full recovery of utilities costs by tariffs as soon as possible (see Table 1). Taking into account that before 2005 there was no federal legislation on regulation of water supply and sanitation (WSS) tariffs, realization of this plan has so far resulted only in (a) a rapid growth of tariffs with the rate far exceeding inflation rate measured in terms of Consumer Price Index (CPI) – see Fig.1, and (b) huge regional disparities in tariffs for all utilities services. The disparities cannot be explained only by regional differences in production costs and/or affordability thresholds: in 2005 the ratio of the maximum domestic tariffs rates observed in some Russian regions to their minimum levels observed in other regions exceeded: **30** times in the electricity sector, **40** times in water supply and sanitation, **6** times in district heating and **8** times in hot water supply (HWS). In 2006, the gap became smaller in WSS and electricity sectors, while it considerably increased in district heating and HWS sectors.

Table 1. Recovery of utilities services' production and distribution costs by tariffs for households

Utility Service	2001	2002	2003	2004	2005	2006
Utilities services, as a whole	61	70	74	78	86	89
including:						
Water supply	62	69	73	78	87	91
Sewerage / Water sanitation	63	69	75	78	86	90
Electricity	82	82	79	80	83	87
District heating	53	65	70	76	85	88
Hot water supply	52	66	71	77	84	88

Source: Rosstat (Russian Statistical Service)

Figure 1. Accumulated inflation index (in terms of CPI) vs accumulated housing and utility services tariffs growth index (base year – 1997).



to Russia, we will see that in 2001 the WSS bill exceeded 3.5% of total household expenses only in the first decile, while in 2006 the WSS bill exceeded 3.5% of total household expenses already in the first **seven** (!) deciles (that is for 70% of the population) while in the first three deciles households spent for WSS services¹ more than **6%** of their income (see Table 2) – no surprise that some Russians protested in the streets (see Picture 1).

Consequently, a growing proportion of households is receiving public subsidies (housing and utility services allowances): this proportion had increased from **7.7%** in 2000 to **10.9%** in 2006 passing through its peak of **15.3%** in 2003.

We could not exclude that the observed in 2003-2006 reduction of proportion of households receiving these public subsidies is related to the fact that the application procedure has become more complex, during the transition to the system of targeted social support to the poor². In 2006, the proportion of households receiving these subsidies varied from just **1.7%** in Smolensk *oblast* (province) to **40.6%** in the Republic of Ingushetia. The latter proportion is more than 20 times larger than the former, and such disparities cannot be explained only by regional differences in household incomes. E.g. in Moscow City, where households are on average much richer than is Smolensk *oblast*, **14.1%** of households received the subsidy in 2006.

Anyway, one could not name normal the situation, where **2/5th** of households require the subsidy, like in Ingushetia.

All this takes place despite the fact that in the considered period the President of Russia has several times publicly expressed his awareness about the fast growth of tariffs for utility services. It is evident that the solution of the problem would be an adequate tariff policy and regulation. Taking into account that considerable proportion of Russians is poor indeed, and the growing disparity in household incomes, we have to conclude that *in many places (settlements and regions)* the transition to full cost recovery (by tariffs set for population) in the utility services sector is neither realistic, nor advisable in the medium term. Not least because the existing system of public subsidies targeted to the poor people simply will not be able to manage with too big number of applicants, for example, if some 50% of population will get the right to receive the subsidy.

So, it is not a big surprise that from 2000 to 2006 tariffs for utilities services (as a whole and by each type of service) had become unaffordable for a growing proportion of the population. According to OECD (2003), WSS services are quite affordable for household if the WSS bill do not exceed 1,5-2% of total household's expenses, and they become very expensive, if WSS bill exceeds 3%-5% of household disposable income (household expenses are often used as a good proxy for disposable income).

If we apply the affordability threshold of 3.5%

Picture 1. Social protests against fast tariffs growth were quite visible in 2005 and 2006



Source: Kommersant, 27.01.2006

Table 2. Average share of expenditures for utilities services in per cent of total household expenditures, by income group (by the level of household average disposable income per capita) (data from household expenditure surveys, based on samples representative for the whole Russia)

Expenditures	Households grouped into deciles by average disposable income per capita ¹⁾									
	I ²⁾	II	III	IV	V	VI	VII	VIII	IX	X ³⁾
2000 r.										
Households expenditures on all utilities services	9,4	8,1	7,4	6,8	5,9	5,3	4,5	4,1	3,8	3
Including expenditures on:										
District heating	1,4	1,2	1,2	1	0,9	0,8	0,7	0,6	0,6	0,5
Water supply and sanitation, etc. ⁴⁾	2,7	2,4	2,1	2,1	1,9	1,5	1,3	1,3	1	0,7
2001 r.										
Households expenditures on all utilities services	10,1	8,8	7,9	7,3	6,7	6	5,2	4,5	4,2	3,4
Including expenditures on:										
District heating	1,8	3	1,6	1,4	1,3	1,2	1	0,9	0,8	0,6
Water supply and sanitation, etc.	3,5	3	2,6	2,4	2,3	2	1,7	1,5	1,4	1
2002 r.										
Households expenditures on all utilities services	11,8	10,6	9,9	9,1	8,1	7,1	6,2	5,4	5,2	3,9
Including expenditures on:										
District heating	2,2	2,1	2,1	2	1,7	1,5	1,3	1,1	1,1	0,8
Water supply and sanitation, etc.	4,3	3,8	3,5	3,2	3	2,5	2,2	1,8	1,7	1,2
2003 r.										
Households expenditures on all utilities services	13,4	12,3	11,5	10,5	9,4	8,2	7	6,4	5,9	4,6
Including expenditures on:										
District heating	2,5	2,6	2,5	2,4	2,1	1,8	1,6	1,4	1,3	1
Water supply and sanitation, etc.	4,8	4,8	4,4	3,9	3,6	3	2,7	2,3	2,2	1,4
2005 r. ⁵⁾										
Households expenditures on all utilities services	16,1	14,6	13,6	12,4	11	9,7	8,5	7,7	6,5	4,9
Including expenditures on:										
District heating	3,4	3,3	3,2	2,9	2,7	2,2	1,9	1,7	1,5	1,1
Water supply and sanitation, etc.	6,6	6,3	5,7	5,3	4,8	4,1	3,4	3,1	2,5	1,8
2006 r.										
Households expenditures on all utilities services	16,4	15,2	14,2	12,7	12	10,3	8,6	7,5	7,2	5,3
Including expenditures on:										
District heating	3,6	3,5	3,4	3,1	2,7	2,4	2,0	1,7	1,6	1,1
Water supply and sanitation, etc.	6,9	6,8	6,2	5,5	5,1	4,5	3,6	3,0	2,6	1,8

Source: Rosstat

Notes:

¹⁾ **Disposable income** includes all forms of income that households receive and can use for consumer expenditures and for making savings. This income includes salaries and wages, in-kind allowances for employees, *budget subsidies* and so on.

²⁾ First group/decile is 10% of population – those with lowest disposable income per capita.

³⁾ Tenth group/decile is 10% of population – those with highest disposable income per capita.

⁴⁾ These group of households' expenditures also includes expenditures for garbage removal and utilization, and some other communal services. Expenditures on these other (than WSS) services don't exceed 1-1.5% of household disposable income even for the first group/decile.

⁵⁾ There is no data for 2004 in official statistical reports for 2005 and for 2007.

In some cases, to minimize total social costs, despite well-known distortions associated with subsidization of utilities rather than poor households, it might be less costly to continue providing direct budget subsidies to utilities and thus support low tariffs for all – the poor and richer people. A reduction of life comfort for the poor people (for example, by shifting from in-house taps to stand-posts or to portable water fountains established in the streets) is not a viable alternative in Russia as it will lead to social conflicts and disturbances, and thus is politically unacceptable in most urban areas.

Growing accumulated depreciation of the infrastructure reduces technical reliability of utility services systems

A kind of paradox is that despite so spectacular growth of tariffs over the last decade, the situation in the sector has not change to better significantly, while in some aspects it has even aggravated compared to year 2000: apart from the district heating sector, one cannot see any reduction in the number of accidents in the network and other elements of the infrastructure used for producing utility services (see Table 3); the real/physical³ *accumulated depreciation* of the infrastructure had been growing over 2000-2005, amounting to 65% on average (while in some municipalities it exceeds 80-90%), the share of production assets that are highly deteriorated and requires *urgent* replacement at the end of 2005 amounted to 35% (according to Rosstat, in 2006 in *urban settlements*, 42% of outdoor/street water supply network, 35% of street sewer network, 25,5% of district heating network required urgent replacement. In Table 3 one can see the share of networks required urgent replacement in all Russian settlements, including urban and rural settlements).

Table 3. Technical state of fixed assets in selected utility sectors

Sector, type of fixed assets	2000	2004	2005	2006	2007
Number of accidents, thousand					
Water supply network	200,5	204,1	197,7	195,4	n.a.
Sewer network	25,6	34,7	38,4	39,9	n.a.
Sources of heat and heating network	n.a.	34,5	27,6	22,6	n.a.
Accumulated depreciation of fixed assets, as of Jan. 01, in % of historical value					
Depreciation of fixed assets in all utility sectors, and in specific sectors:	39,1	46,3	n.a.	n.a.	n.a.
Production, transportation and distribution of heat	n.a.	n.a.	n.a.	41,3	43,4
Water abstraction, treatment and distribution	n.a.	51	53,7	54,7	55,3
Wastewater collection and treatment, municipal waste management	n.a.	41,3	34,5	33,4	37,2
Highly deteriorated fixed assets which require urgent replacement					
Outdoor water supply network, % of total length	31,6	37,8	37,7	39,1	n.a.
Outdoor sewer network, % of total length	27,7	33	30,5	32,6	n.a.
District heating network, % of total length	16,2	19,3	25,2	25,0	n.a.

Source: Rosstat

The paradox can be explained by the fact that despite the growth of tariffs, **financially the utility sector as a whole is still a loss maker** (though total losses have reduced over last years, in some regions they continue to grow); utilities have accumulated a huge *outstanding debt* (aged 3+ years) including liabilities related to wages (by mid 2003 the number of enterprises in the sector with such a problem had not even reduced), etc.

In other words, we must conclude that **so far the utility services sector “reform” has been limited mainly to the fast tariff growth without substantial improvements in the sector performance** - in terms of service quality, reliability of their provision (frequent interruptions in water supply are still common) and financial sustainability, as well as future performance (due to critical level of assets deterioration).

So far the reform of the utility sector implemented in Russia has generally failed to address the following key issues: (a) **create incentives** for providing services of required quality, and for efficiency of their production – the latter is extremely needed in Russia because for historical reasons the capacity of the utility systems is in many cases highly oversized, while their design is suboptimal and the infrastructure is highly deteriorated; (b) create reliable **mechanisms for attracting investments** required for infrastructure rehabilitation, modernization and development (including extensions, especially in rural areas and small towns); (c) ensure technical **reliability** and financial **sustainability** of the utility sector; and (d) maintain utility services **affordable** for the poor peoples when introducing market-based mechanisms in the sector.

One of the most spectacular regional disparities concerns **per capita capital investments** in the utility sector, e.g. in the WSS and district heating infrastructure – depending on the individual sector, per capita investments in best performing regions (typically, economically strong) are **hundreds and even thousands** times (!) greater than lowest per capita investments in depressive regions (see Table 4).

Table 4. Financing capital investments in replacement of deteriorated assets (including networks), modernization and development of utilities systems, in 2006

(Rub. per capita)

Performance indicator	Sector			
	Water supply	Water sanitation	District Heating	Electricity
Average	20,88	32,35	22,31	3,33
Maximum investment (in best performing regions)	204,29	390,27	1559,36	2474,24
Minimum investment (in poorly performing regions)	0,01	0,04	0,00	0,00
Max / Min ratio, times	15'390	8'819	1'548'224	1'190'108

Source: Rosstat

One of the main reasons for the failure of the reform of the utility sector in Russia were probably sever mistakes made in the reform of local self-governance (LSG), as well as some mistakes in the organization of private sector participation (PSP) in the utility services provision which did not allow to utilize high potential of the private sector participation at its full capacity.

2. Reform of local self-governance has negatively affected performance of the utility sector

Excessive decentralization and fragmentation aggravated the lack of capacity problem

Excessive decentralization of responsibilities for public services provision that does not take into account existing economic realities and present low managerial and financial capacity of local authorities, as well as **excessive fragmentation** of the utility business has been amongst the main reasons why in most municipalities the situation in the utility sectors has deteriorated upon the last decade. The new Federal law *On local self-governance* (№131-FZ) that came into force 01.01.2006 has forced Russian provinces (Subjects of Federation) to create a bigger number of smaller municipalities thus aggravating the lack capacity problem at the local level. Now in Russia we have some **28,000** (!) municipalities compared to **11,700** before the Law was adopted. In some regions (including Republic of Komi, Ryazan, Kostroma, Kaluga, Tver, Tula and Moscow regions) the number of municipalities was increased by the factor of **10!** The most critical situation is in Siberia, Far East and North European part of Russia with huge territory and small density of the population. It is still unclear where all these newly created local authorities will find *qualified staff* to hire and resources to pay to staff? This is extremely important for the utility sector because according to the Law on local self-governance (131-FZ, and previous law 154-FZ), local authorities are responsible for the organization of utility services provision to the population.

Huge imbalance between own revenues of local public authorities and expenses associated with their responsibilities established by law leads to “clientism”

There is a huge imbalance between expenses and own revenues⁴ of local budgets in Russia. Today quite a big number of municipalities lack own revenues needed for fulfilling their tasks⁵. The Russian Accounting Chamber has estimated that in 2004 only 50% of expenses planned by local budgets were supported by any revenues, while only **15%** (!) of the planned expenses were supported by their own revenues! As a result, 95% of municipalities needed subsidies from higher level budgets⁶. That is, most municipalities in Russia are not financially autonomous, as they do not have sufficient resources to fulfill their obligations established by the legislation, including utility services provision.

Due to high dependence on transfers from upper budgets, the local self-governance in Russia *de facto* becomes an element of State governance systems, ruled by the national and regional governments. This trend likely contradicts the Russian Constitution and the European Charter on Local Self-governance. Not only because local self-governance is overloaded by carrying out of the State functions delegated to it – often without asking them whether they agree to accept new responsibilities, or not (and the new law has further aggravated this situation), but also because in fact the citizens do not participate in local decision-making (Kosareva, 2003). As a result, the local self-governance could be recognized as a typical bureaucratic body often taking its decisions under supervision of, and pressure from upper level authorities.

Like in many other countries, for instance in Poland, such a situation of total dependence of local public authorities on upper level budgets (and on officials in higher level public administrations) leads only to growing lack of initiative and “*clientism*” among local officials (high dependence on subsidies from upper jurisdictions strengthen the willingness to please them in return to subsidies). Particularly, almost total absence of own resources for capital investments and huge dependence on the upper level

budget regarding investments in the utility sector infrastructure weakens incentives for local authorities regarding strategic planning, including setting development goals, elaboration of long-run investment programs in the utility sector that would be balanced with regard to expenditure needs and finance available.

A much better alternative to such a “reform” of local self-governance would be, on the contrary, **to consolidate some small and economically and financially weak municipalities**, basing on the principle that most municipalities should have enough own resources for fulfilling their tasks, including provision of WSS services, municipal waste management (MWM), district heating and so on. For example, as a result of recent administrative reform in **Germany** (more rich country with much smaller land area than Russia) the number of municipalities has been decreased: many small municipalities have been consolidated/merged in bigger ones.

We should also note that in Russia before the law initiated by the Presidential Administration came into force, there were a lot of discussions attracting all stakeholders, including heads of municipalities, experts, NGOs etc. Nevertheless, numerous objections of the civil society to the new law were simply ignored by the federal authorities.

Excessive fragmentation makes utility services provision more costly, and that further aggravates the affordability problem for the poor people

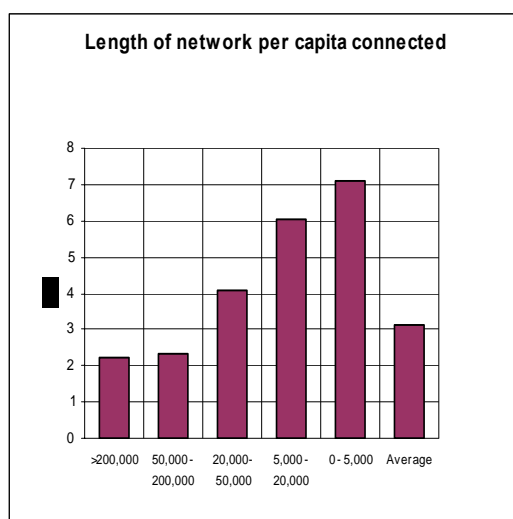
Excessive fragmentation of the utility sector was a natural outcome of the reform of local self-governance in Russia. Note that the same happened in many other countries which used similar approach (for example, Hungary) following recommendations of foreign and domestic “experts” on developing self-governance: each municipality tried to create its own utility preferring control over the sector to the benefits of the “economy of scale”. The excessive fragmentation has become especially critical problem in the municipal waste management (MWM) sector, in district heating, and centralized (piped) WSS services in rural areas and in small towns.

A partial solution of the problem of excessive fragmentation would be consolidation of small utilities under management of one operator. For example, in the WSS sector it is possible to create inter-municipal WSS companies, and in the most depressive regions – regional water utilities operating also in regional capitals and applying a uniform tariff across its service area. In the latter case customers living in regional capitals and/or in big cities will cross-subsidize people living in rural areas and in small towns. It was probably this logic that stood behind decisions made by some regional governments to create regional water utilities. For example, in 2006, despite an inevitable conflict with the administration of Nijnij Novgorod city (regional capital), regional government decided to establish a regional water utility operating in the capital city as well as in many small municipalities in the region. In Murmansk region, the state-owned water utility has operated in Murmansk city and in many small municipalities since 1931 and was not split into smaller water utilities even during reforms of 1990s.

Growing disparity between urban and rural areas leads to depopulation of rural areas

Growing disparity between urban and rural areas with regard to access to utility services is another area of concern in Russia. For example, coverage by centralized utility services in rural areas is usually more than 50% lower than in urban areas, while tariffs in rural areas are often higher than in urban areas - with obvious consequences for the quality of life and affordability problem thus decreasing the desire to live in rural areas and stimulating migration to big cities.

Figure 2. Length of water supply network per capita connected for different size of settlements, meters



Source: (OECD/EAP Task Force, 2007b)

The objective reason of the higher unit costs and hence higher tariffs is the “economy of scale” which works against smaller service areas. For instance, in piped water supply, other things equal, the average unit costs (per person served, or per unit of capacity) in small settlements (below 10,000 people) could be 2-3+ times higher than in big cities (above 100,000 people). Inter alia, it could be explained by the fact that the length of network per person served strongly depends on the number of consumers and the density of population, which is usually higher in bigger settlements (see Fig. 2). While the smaller the length of the water supply network is (per person served), the smaller is the sum of capital expenditures required for construction, rehabilitation or replacement of the deteriorated existing water supply system⁷.

How to address the disparity issue?

How to address the disparity issue? – assuming that in the medium term would be very difficult or even impossible to change the administrative frontiers of newly-created municipalities (that is abolish/cancel the reform of local self-governance that started so unsuccessfully). A recommendation here could be to use more widely the mechanisms of “*solidarity and cooperation*” successfully used e.g. in France in 1950-70s (Smets, 2007). For instance, in the form of inter-municipal cooperation and cross-subsidization through applying a uniform tariff in the area of responsibility of a utility service provider that operates in bigger and smaller municipalities.

The *solidarity and cooperation* could also be in the form of centralization of water abstraction fees and pollution charges paid by different economic agents in a special **Fund for utility sector development**, earmarking the Fund’s money for developing the WSS and MWM infrastructure in rural areas and small towns. All these solutions would help reduce the disparity between urban and rural areas in Russia.

Turkey provides an example of strong motivation for inter-municipal cooperation in the MWM sector (OECD/EAP Task Force, 2007a). The Turkish government has decided to provide investment subsidies in the first place to Associations of municipalities created namely for the sake of cooperation in improving MWM services. In other countries (e.g. in Armenia, Argentina, Guinea) one could find examples of creation of water utilities operating both in big cities and small municipalities. Such examples also exist in Russia. But in Russia the existence of political and financial dependence of local authorities on the state government significantly reduces incentives for inter-municipal cooperation, and for finding their own ways for efficient and cost-effective implementation of local tasks.

Responsibility for tariff regulation was levied on local public administration despite lack of their capacity to regulate

Not appropriate level of tariff regulation. The *Law on local self-governance* has established that organization of provision of WSS and MWM services is the task of local authorities. Based on this provision, Russian legislator has found it logical to transfer the responsibility for tariff regulation for these utility services to the local level. But this decision looks poorly justified. Indeed, the responsibility for elaboration of Master plans for developing a settlement, its territory and utility systems and other municipality-owned infrastructure in it *could be separated* from the responsibility for checking adequacy of tariff rates, accuracy of cost calculations, and calculations of budget subsidies requested by utilities. Taking into account lack of relevant expertise and extremely low overall managerial capacity of most local authorities in Russia, the latter responsibility **must** be transferred to the regional level for the time being, because only regional administrations (and administrations of big cities) are really independent of local utilities and able to hire teams of qualified and well-paid specialists (economists, financial and legal experts, etc.) capable to properly regulate tariffs and to elaborate sound contracts to be concluded with operators (be they municipal and private). At present, it is evidently impossible to organize and maintain such professional teams of well-paid specialists in each and every 28,000 Russian municipalities.

Moreover, because of (a) low share of own revenues in local budgets, (b) high share of transfers from upper level budgets (typically regional), and (c) the fact that significant proportion of capital investments in utility infrastructure is financed namely from regional budgets, the establishment and coordination of tariff rates with direct budget subsidies to utilities should be made at the regional level. In Russia now one can see a very strange picture where tariffs calculated at the local levels are then aggregated at regional level in the tariffs growth index and then are usually cut at the federal level for political reasons: with declared key objective to scale down present high inflation.

But when doing so, the federal government is not consistent: e.g. for politically powerful utilities, like natural gas and electricity producers it allows much higher maximal tariff growth rate (by **25-30%** in 2008) than to other utilities (maximum by **14%** in 2008), thus making the former utilities even more profitable at expense of not only end-users of utility services (e.g. in Moscow region some domestic consumers already pay for electricity **10 US cents per 1 kWh** with the perspective of further 50-80% electricity tariff increase in 2009-2011), but also by undermining financial health of WSS companies, and municipality-owned district heating companies, artificially making many of them hopeless loss-makers for years to come.

3. Private sector participation in the utility sector: results below expectations

Natural desire of municipalities to shift responsibility for providing utility services to a third party leads to decisions which looks very simple, but usually are deceptive

The problems that Russia faces today in improving operational efficiency of the sector and attracting required investments are in many aspects the same as problems met in the recent past by many developing countries (e.g. in Latin America) and other transition economies (for example, Hungary). Nevertheless, Russia has a good chance to learn about mistakes made by other countries and try to avoid them (according to an old Russian proverb “*not to step again on the same rake*” - as it is very dangerous for one’s eyes).

Excessive decentralization of responsibilities and over-fragmentation of the utility sector, enormous financial needs of the sector and scarcity of own investment resources as well as lack of needed special knowledge often lead local authorities to a decision that looks very simple: to transfer the responsibility for providing public services to the private sector, expecting that private operators will certainly (a) ensure efficiency and (b) attract required investments.

In principle, the society can benefit a lot from properly organized private sector participation in the infrastructure sector. But the international experience also shows that without establishing sound contractual relations between public and private partners⁸ such expectations will very seldom (if ever) materialize in practice. In Russia, this international experience has never been popularized, and now one can see quite many municipalities that are ready to “*to step on the same rake*”, while the Federal government does little to nothing to protect them from mistakes similar to those made by Latin American countries some years ago. Without any knowledge of how to properly use the potential of the private sector, without sufficient resources and capacity to negotiate contracts and to defend public interests, these municipalities, however, consider private sector participation (PSP) as a *panacea* and firmly believe the PSP will solve all their problems, and will also help substantially reduce public expenses on the utility sector.

Other local authorities delegate management of local infrastructure to municipal companies (utilities owned by municipalities), with the same hope: to forget about their role of owners of infrastructure and their responsibilities associated with this role. Such a misleading objective often results in: (a) lack (or absence) of monitoring and control of the municipal operator performance, (b) low attention to strategic planning of infrastructure development, as well as planning of the financial needs of the operator. The obligations of municipal companies regarding infrastructure exploitation, operation and maintenance, modernization and extension, as well as for the quality of services are often poorly defined. Obviously, such a governance can not be considered a “good governance”, and it is difficult to expect any efficiency gains under such a system.

Absence of tenders does not allow reallocating expected efficiency gains to consumers

Absence of tenders: in Russia private companies are entering the utility sector under quite standard slogans promising **to increase efficiency and provide private investments** thus forming *overly-optimistic expectations*. Moreover, private operators of infrastructure usually conclude contracts

without tenders and under poorly written contracts, often substituted by references to their promises! In the absence of relevant statistics it is impossible to say something definite about how the efficiency has been improved after transfer of infrastructure to private management. But even if private operators have got significant efficiency gains indeed, absence of tenders (or their formal nature/organization hiding the lack of real competition) would not allow reallocating some portion of such eventual gains to the benefit of consumers, as it was assumed by Harold Demsetz (1968) and other advocates of the fair “*competition for the market*”.

In addition to the aforementioned problems, some other problems emerge on top of the agenda. One of them is the problem of unjustified too long term of lease contracts conducted with some private operators. For example, the term of the contract concluded with “Novogor-Prikamie” (a private operator of the WSS system servicing more than 1 million people in Perm city) was **49 years** (!) which is clearly too long, taking into account modest investment obligations of the private operator. Median value of the terms of lease contracts concluded with private operators in 9 big Russian cities is 20 years, while the average term is higher than **26** years. This does not comply with what the theory and international experience recommend: typically for such contracts without significant investment obligations (like lease and *affermage* contract) the term should not exceed **15** years. Main reason for such big terms could be found in the fact that these new long-term contracts were awarded to private firms again without tenders. In the absence of tenders one could also suppose that the volume of investment obligations of the private operators will be too little. Fortunately, the new version of the Federal Law *On protection of competition* (art.7) made it impossible to lease utilities infrastructure without participating in open competitive tender. And there are already examples (for instance, in Yujno-Sakhalinsk city) where judges declared invalid (negligible) lease contracts in the WSS sector concluded without tenders after this law came into force.

Additionally to the absence of the competition, usage of inappropriate winner selection criteria can also prevent improvement of efficiency

Existence of competition is a necessary, but not a sufficient condition to achieve allocative efficiency in natural monopoly industries. As Richard Posner proved in 1972, usage of the *maximum franchise fee* criterion leads to the extraction of the monopoly rent at the level corresponding to the situation of *unregulated* monopoly, while the price could be *even higher* than price that an unregulated monopolist would establish. In other words, usage of the maximum concession fee (or lease rent) criterion for selecting the concessionaire (or leaser) *is not coherent with the objective of the monopoly rent minimization*. **Consequently, the usage of this criterion is not coherent with the objective to make vital infrastructure services more affordable for the poor**, because *ceteris paribus* higher monopoly rent means higher prices/tariffs.

International experience shows that when using this selection criterion the local authorities usually aim to increase local budget revenues (Lobina and Hall, 1999). In this case the concession (lease) fee has the nature of the shadow (hidden) taxation prohibited by the legislation in many countries.

Despite all these arguments (or being not aware of them), in Russia this selection criterion was already used by Volgograd city officials when organizing a tender for a long-term lease of urban WSS and district heating systems, and is now under discussion in Kaliningrad and some other cities. Taking into account the aforementioned highly imbalanced local budgets in 95% of Russian municipalities, their officials have strong incentives to use this selection criterion in tenders for infrastructure concessions and leases, to increase revenues of their budgets. In the absence of strong political competition and corresponding legislative prohibition to use this criterion, it is quite probable that local authorities will ignore all associated negative consequences of such a decision: “deadweight”/social welfare losses due to underproduction of vital utility services (in Russia they are called *life-supporting* services), tougher affordability problem for the poorest groups of the population due to higher tariffs, and hence also higher inflation.

The desire of local authorities through any step and available measures to increase local budgets revenues is clear and quite understandable. And if we would speak about concessions of *natural resources*, the establishment of the concession fee at the maximum possible level to capture all natural resource rent extracted by the concessionaire – that would be *the best practice* indeed (still rare in Russia, though). But it is absolutely incorrect to attempt to solve the problem of imbalances between expenses and own revenues of local (municipal) budgets through the extraction of the *monopoly rent paid by the consumers of the vital utilities services*. Because it will first of all further aggravate social inequalities, contribute to higher inflation and make the comfort life less affordable for growing proportion of people, that is, will aggravate exactly those problems that the local and state governments would like to solve when trying to mobilize additional resources to the public budget by the usage of the maximal concession fee (or lease rent) criterion.

It seems *much more expedient* to resolve the problem of huge imbalances in the local budgets through appropriate reform of taxation and inter-budgetary relations.

Contrary to widespread overly-optimistic expectations, private operators have not provided (and will not provide) investments sufficient to meet huge needs of the whole utility sector

Overly-optimistic expectations regarding private investments: speaking about private investments in infrastructure used for producing utility services, it was initially (a priori) difficult to expect such investments under 11-months lease contracts that were widespread in the utility sector several years ago (OECD, 2004). Only in 2005 the short-term contracts were replaced by long-term contracts (that is by *other* contracts). And only after that the biggest private operator – JSC “Russian Utilities Systems” issued 3-year bonds (of RUR 1,5 billion value) to finance investments in the utility infrastructure it operates. Recently the company also announced its desire to issue shares to increase its Chartered capital from 1 to 4 billion rubles. Similarly, substantial investment obligations were taken by other big domestic companies operating in the utilities sector in Russia.

But it has become clear today that private operators have not yet provided (and will not provide) investments sufficient to meet huge investment needs of the whole utility sector in Russia, and that the main responsibility for investments in utility infrastructure will for many years to come be with the public authorities and public budgets. It is true even for big cities that are most attractive for private operators. For example, in the WSS sector big private operators are interested to operate WSS systems only in big cities with population exceeding 200-300 thousand people, at present paying little to no attention to small distant towns and rural areas (the latter will likely have to wait for private operators and their investments for decades).

In the case of privatization of utility infrastructure (networks) local authorities risk to loose an instrument of control over the sector, while regulators loose an effective instrument of tariff regulation in the form of tenders for the right to exploit the infrastructure

Privatization of utility infrastructure. A hidden “creeping” privatization of local utility infrastructure could become even a more serious problem in Russia because if it happens, the discussion about reallocation of eventual efficiency gains in favor of consumers, as well as about any increase of efficiency resulting from the “*competition for the market*” will be closed forever. And, as nowadays in England, under this scenario the only hope of Russia will be the quality of the sector regulation.

In Russia, all infrastructure assets constructed or rehabilitated by private companies or by corporatized municipal companies, usually remain in their property. Another way of the “creeping” privatization widely used in the district heating sector is *expropriation* of infrastructure assets from municipalities in exchange of writing-off their debts to private energy utilities. Finally, there is a third less recognized way of hidden infrastructure privatization. It is a creation of municipal enterprises operating under the private law *accompanied by transfer of some infrastructure assets to their property* (for example, through simple transformation of municipal unitary enterprises into joint-stock companies with infrastructure on their balance sheets).

There was an attempt to organize something like that in Moscow - in deep silence, on the back of the civil society - before the expected leave of the Moscow governor Yury Luzhkov from his present post. But his retirement was postponed, and such a “reform of the utility sector” was postponed also. Negative consequences of such a practice could be seen in the WSS sector in Hungary: when a municipality is not the owner of WSS infrastructure, it loses opportunities to implement any sector development policy (Boda et al., 2006).

4. Recommendations

A sound regional development policy is desperately needed in Russian. First and foremost, the federal government, in co-operation with regional governments, large municipalities, civil society and key private sector players, should develop and start implementing a sound regional development policy. This may require a **substantial revision of the recent reform of local-self governance, and facilitation of inter-municipal cooperation.**

Such a policy will inevitably involve massive **capital investments** in utility infrastructure (mainly through budgetary investments, supported by PSPs).

It should also be supported by other policy reforms, including: (a) **tax reform and reform of inter-budgetary relations** aimed at achieving an overall balance between local budget expenditures and their own revenues; and (b) **assistance in overcoming the lack of managerial and technical capacity** of local authorities. The latter could include drafting a package of model methodologies, model forms of contracts and other model legal documents as well as creation of a system to prepare and train managers and technical specialists for the sector.

Need for standard (model) decisions. Benefits of transition to rational/sound economic and contractual relations based on model forms developed taking into account international and domestic “best practices” will undoubtedly exceed the losses related to possible little discrepancies between the model schemes and specific local situations.

E.g. in small municipalities not attractive for private operators we could recommend to use so called “*service contracts*” to be concluded with corporatized municipal utilities (Martusevich, 2006). The contracts should establish a sound system of incentives to achieve feasible performance objectives set by the municipality, and sanctions. Model forms of such contracts and related guidelines should be developed by the federal government in the frame of a general program of capacity building in local authorities.

More extensive use of the good experience accumulated in some Russian regions regarding development of **standard design documents for construction** of utility facilities, municipal infrastructure and social objects – from schools and hospitals to district heating substations and municipal waste landfills – and providing these documents to interested municipalities for free.

Need for an appropriate legal framework for PSP. All the aforementioned problems related to the PSP in Russia require an appropriate legal framework. Federal Law *On Concession Agreements* (№115-FZ) became one of such framework laws. Before approval, this law had been discussed in the State Duma and by many experts for more than 13 years. The main objectives of this law have been as follows: (a) to demonstrate the fidelity of Russia to the market reforms and progress in this field; (b) using the concession mechanisms to attract private investments in the sectors which traditionally are under responsibility of local authorities; (c) to create a sound legal framework for PSP in vital/life-supporting infrastructure sectors (like WSS). The latter goal was highly dominated by the first two goals. Perhaps namely because of the inflexibility in relations between public and private partners established by this law, largest Russian private water companies launched a big world-wide (!) campaign arguing why they would avoid working under this law in the WSS sector.

Development of **model agreements** between municipalities and private operators would also assist in resolving the problem of lack of special skills and weak management capacity of most of newly established small municipalities. Speaking about such legally difficult projects like concessions (and even leases) of utility infrastructure, such an assistance would be needed even for many large cities.

Today we still see the acute need in the legislation regulating *all conventional types* of contractual relations between the public authority (owner of infrastructure) and private business in the utility sector (as well as in some other infrastructure sectors), including: service and management contracts, leases and different types of concessions. The legislation should *inter alia* determine: (a) the **obligation to select the contractor via competitive tender**, prior signing any contract upon the utility assets and other municipal property; (b) the **maximum terms** of each type of contract; (c) the obligation, in agreement with private operator, to establish **performance indicators** to be achieved by the operator, to set targeted values for them and establish a system of awards and penalties for meeting the target values or not achieving them; (d) the **prohibition of privatization of the utility infrastructure**, (e) the **prohibition on the usage of the maximum concession fee (and lease rent) criterion** in tenders for concessions and leases, respectively, in such life-supporting sectors like WSS, district heating etc.

Note that the first two points were the main provisions of so called Sapin's Law adopted in France some years ago, aimed at reducing corruption, mainly at the local level. A similar law would be very useful for Russia, especially because now in most municipalities there is *no* control at all over utilisation of their financial and material resources (Stepashin, 2005a). And it is quite possible that by the moment when a system of control will be established, all municipal property will be legally perfectly privatized, leased for long- or next-to-infinite-term etc. and mostly will be lost for the municipalities - for a long time or forever.

In general, taking into account low management and financial capacity of local public authorities in most of the small and medium-size municipalities in Russia, it is extremely important to help local authorities resolve the problems they face in providing public services, including utility services.

References

- Boda Z., and Scheiring G. (2006), Water privatisation in the context of transition. In Chavez D. (ed.) "Beyond the Market: The Future of Public Services", TNI/PSIRU, April 2006, pp. 95-101
- Chernyshov L.N. (2002), Reform of housing and utility services sector – what has been done, *Energosnabjenie*, №4, 2002.
- Demsetz H. (1968), Why Regulate Utilities? *Journal of Law and Economics*, Vol. 11 (April 1968), pp. 55-65.

- Goscomstat (2003), Statistical bulletin №5 (98), December 2003. Moscow (Goscomstat).
- Kosareva N.B. (2003), Anatomy of municipal bureaucracy. In: Kuznetsov Yu.V. (ed.). Black book of bureaucracy. Moscow (SPS), pp. 130-137.
- Lobina E., Hall D.J. (1999), Public Sector Alternatives To Water Supply And Sewerage Privatisation: Case Studies. PSIRU Report, August 1999.
- Martusevich R.A. (2006), Analysis of service contracts concluded with municipal unitary enterprises operating in the water supply and sanitation sector in different Russian municipalities. PSIRU Report, November 2006.
- Mironova N.I. (2005), Inter-municipal cooperation in Russia. In: "Urban anthology", Vol. 1. Moscow (IUE), pp. 225-234.
- «Murmanskvodokanal» celebrates its 75 year. MurmanOut.ru, 19.10.2006.
- OECD (2003), Key Issues and Recommendations for Consumer Protection. Paris (OECD).
- OECD (2004), Overview of Domestic and International Private Companies Operating in the Utilities Sector in Russian Federation. Paris (OECD).
- OECD/EAP Task Force (2007a), Lessons Learnt from Financing Strategies for the Municipal Waste Management Sector in Selected EECCA Countries. Paris (OECD).
- OECD/EAP Task Force (2007b), Facilitating policy dialogue and Developing a National Financing Strategy for Urban and Rural Water Supply and Sanitation in Moldova. Final report. Paris (OECD).
- Rosstat (2005), Statistical review of housing sector in Russia. 2004. Moscow (Rosstat).
- Rosstat (2007a), Russian Regions. Statistical review. Moscow (Rosstat).
- Rosstat (2007b), Social state and living standards in Russia. 2007. Statistical review. Moscow (Rosstat).
- Rosstat (2007c), Statistical review of housing sector in Russia. 2007. Moscow (Rosstat).
- Smets H. (2007), Solidarity for Water in France. *Unpublished manuscript*.
- Stepashin S.V. (2005a), Ways to improve the state and municipal control systems under the reform of local self-governance. Report of the Chair of the Russian Accounting Chamber, Krasnoyarsk, 08.06.2005.
- Stepashin S.V. (2005b), Role of the Russian Association of accounting bodies in establishing and developing the state and local external financial control systems. Report of the Chair of the Russian Accounting Chamber, Moscow, 06.12.2005.
- Territory of local self-governance – is the whole country. Stenographical report on the meeting of the Russian Union of Municipalities, Moscow, 23.10.2007.
- Yabloko razdora. NewsNN.ru, 06.05.2006

Notes

¹ Russian statistics present household expenditure on (piped) water supply and water sanitation **jointly** with expenditures on garbage removal (considered as part of the sanitation service) and some other communal services. But expenditure on all these **other** (than WSS) services typically do not exceed 1-1.5% of household expenditures, so an adjustment of the affordability threshold could easily be made.

² It is not accidental that programs of different political parties participating in Dec. 2007 State Duma elections all paid special attention to the housing and utility services allowances. It is evident, that if this problem were not so critical for many Russians, the parties would not focus on it trying to attract additional votes.

³ Taking into account not sufficient financing of assets maintenance for many years, real physical depreciation of fixed assets is now significantly higher than the book depreciation calculated using linear depreciation rule, presented in Table 3.

⁴ Own revenues of local budgets are total revenues net of transfers and subsidies received from the higher level budgets.

⁵ Moreover, during the reform of local self-governance the share of own revenues in total revenues of local budgets has **decreased** compared to the situation before the reform. So, they have become even more risky borrowers than they were before. The risk that they will violate their commitments due to the factors out of their control has become much higher.

⁶ In Russia the federal government tries to address this imbalance through a system of inter-budgetary transfers with the objective to reduce regional disparities with regard to consolidated regional public revenues per capita: from year 2000 till year 2005 the ratio between the top 9 highest and 9 lowest consolidated regional public revenues per capita had reduced from 7,8 to 4,6. But the dark side of this “equalization” is that in 2005 some 27 regions of Russia were highly dependant on federal transfers, as soon as in those regions their own public revenues did not exceeded even **50%** of total public expenditures. The proportion of such financially highly dependant regions is especially high in South Russia, Siberia and Far East (Stepashin, 2005b).

⁷ While in big cities establishing and maintaining of individual sources of heat and water supply are usually more costly than the usage of centralized (piped) utilities services.

⁸ Local authorities too often do not have neither relevant expertise, nor resources, nor desire to do it.