## EXAMINING THE MANAGEMENT OF PUBLIC UTILITY COMPANIES OWNED BY MUNICIPALITIES OF COUNTY RANK

### Szilárd HEGEDŰS, Zsuzsanna SZÉLES

Szent István University, H-2100 Gödöllő, Páter Károly utca 1.

#### ABSTRACT

As regards the selection of tasks in the municipality sector, the local authorities have freedom both according to the former and current legislation. The advantages of providing tasks through companies owned by the municipality include the flexible adaptation to market conditions and integration into the relation network of the economy. In case of appropriate operation, the companies can be characterized by higher cost efficiency and by providing services of higher quality to the citizens and business actors. Moreover they ensure revenues for the municipality. The operation of companies, however, depends on municipality management, it is part of it because in many cases the tasks are assigned to them by the law. Some research works have proven, however, that their operation is rather risky, which in return determines the municipality operation, according to the above outlined thoughts. Out of the companies owned by municipalities of county rank, the present paper examines the management of water works, waste management and district heating companies between 2009 and 2011. We selected these three sectors because the (which?) municipalities had pricing authority competences at that time, therefore the operation of these companies was substantially affected by the fee policy of the municipality. In the frames of the research we reviewed the reports of companies and compared the formed indices, evaluating primarily their profitability, indebtedness, and solvency. In regards to liabilities of the examined companies, the dominance of short-term liabilities, increasing receivables and the profitable management were clear phenomena in most cases within the sample.

Keywords: municipalities, management, provision of tasks, public utility companies

#### **INTRODUCTION**

The most important function of municipalities is providing public services, in which people, local institutions and economic actors use public utilities. In the new system after the regime change, local authorities had freedom in their public duties.

As a result, municipalities provide services through municipality owned business organizations. Rentability and the effective use of received resources are key factors. Beyond the organization of services, municipalities (city councils) are the main price regulators in public utilities. We can conclude that both regulatory and ownership functions are represented by local governments regarding public services.

This study is seeking to answer how (city-owned water utilities, waste management and district heating businesses) businesses have been operating in the last three years and what risk do they have on municipalities and what are the operating tendencies among them?

### LITERATURE REWIEW

After the regime change, the emphasis was on tasks outside the budget, which was carried out by taking over non-profit organizations and utility companies and outsourcing these public services to the market.

There are two main reasons for the development of municipality owned business organizations:

- privatization of utility companies after the regime change, in which asset management rights were converted to ownership rights, followed by more asset transfers (*Vigvári*, 2007a).
- Regarding the obligatory task performance of municipalities as a result of the New Public Management paradigm – local authorities are directly responsible for the organization of public services (*Vigvári*, 2009). Municipality owned business organizations meant flexible solutions regarding obligatory and voluntary municipal tasks, as more and more business organizations started their own operations and not only in the utilities sector (*Kopányi and Hertelendy*, 2004).

As a significant part of their capital, transferred assets played a major part in the balance sheets of municipalities, and this helped public utility companies. In order to verify my claim, we examined the transferred assets of select municipalities between 2003 and 2009. We chose 2003 as the starting value since local authorities had between 2001 and 2003 to evaluate the previously recorded assets without values. The reason for this is the pick-up in government projects implemented during the development, during which the development of the utilities could gain the support amounts. In parallel, the proportion of municipal assets also recorded a significant increase in the municipal property elements of dynamic growth.

The municipal utility companies, from the regulatory and administrative point of view, work like business organizations, and in some cases, provide not only public services. It was an important advantage over the municipal investments that VAT is recoverable; many projects were set-up on that (*Hegedűs and Tönkő*, 2007). Municipalities have many profiles which are regulated by the Local Government Act in force, as well as sector-specific laws.

The performance of tasks (outside the budget) can be carried out in three main ways which depends on local needs and local government decisions. As a result, municipal utility companies play an important role in task performance. Their task performance moves more and more towards being outside the budget (*Szabó*, 2012).

According to the literature, contingent liability has the greatest risk and reckons municipalities form relationships with the private economic sector, which in the case of a possible future loss will fall on local government or central budget (*Polackova*, 1998; *Schick*, 1999; *Hegedűs and Tönkő*, 2007). In this respect, the risk is the ownership guarantees resulting from municipal borrowings. It is not included in the local government's reports, but due to rigid revenues and unpredictable financing, it may cause substantial risks in the management of local governments. Based on *Vigvari* (2009), primarily cities with county rights are affected.

Similar problems may occur in the municipal company's over-indebtedness and, if loss making operation, as these activities cannot be terminated by the government

at a loss during operation, so the owner must stand firm in their company's obligations. Consequently, the literature sees the lack of transparency as a risk (*Vigvári*, 2009; *Hegedűs and Tönkő*, 2007).

The issue of ownership rights is not being properly enforced in the management of local governments. The operational management tasks are removed from the jurisdiction of local government, and mainly trust exists between the management and the owners (*Hegedűs and Tönkő*, 2007). It should be noted that in case of any change of political course, in many cases, the management of companies are also frequently changed. It is therefore an often cited proposal to consolidate the accounts of these companies (*Vigvári*, 2007b).

The revenue of utility companies is largely determined by the fact that prices of the services are not determined by the company's management, but the municipality or ministry responsible for that sector. It is a problem that local governments' price formulas and calculations allow minimal returns, which are influenced by political considerations, risking the profitability of public service companies. The local governments do not establish specific rules and regulations of pricing and product costing, thus it can be concluded that they were not prepared for a price regulator function. The payment difficulties of the general public can project liquidity problems as in the case of late payment, value added tax has to be paid anyway (*Kopányi and Hertelendy*, 2004). It was common for local governments to use "cross-financing" - that the losses of public service utility companies or low profitability be supported from the dividends of companies mostly operating in the real estate sector (*Varga*, 2005).

It can be concluded that the assets of local government-owned companies are recorded in the local governments' balance sheet. However, a number of tenders, due to EU accession, are available to local governments, which serves the development of public utilities. A number of these projects have been implemented in the National Development Plan and the New Hungary Development Plan, which increased the municipal assets.

It is thus concluded that the municipal utility companies are highly integrated in the municipal economy, which is monetization, largely determines the availability of credit.

## MATERIALS AND METHODS

In our research we tried to find an answer how municipal property management companies' assets, financial and earnings situation developed over the examined period. To this end, we analyzed the fixed assets ratio and liquidity ratio of equity to companies and private equity, as the profitability of the municipal contribution and potential areas which may require shareholder intervention, where is the risk in the municipal asset management.

In our research, we examined companies owned by local governments with county rights in water utilities, waste management and district heating services sector. Companies operating in these sectors belong to the regulatory and operating business model; the services rendered are paid by the customers. These public services serve not only cities with county rights but also the region, in particular water utilities and waste management companies. The sample contains a total of40 pieces under taking the distribution of attitude that is shown in *Table 1*.

Companies included in the whose profile clearly contains the given activity, as in terms of the organizational forms local authorities had freedom, so many companies also have multiple profiles, and several companies of local governmentowned holding company has also been among the sampled companies. The selection was made by the local government data, businesses were selected from three sectors accordingly.

## Table 1

	Pieces	%
Water utility	19	47,5
Waste management	13	32,5
Heating	8	20,0
Total	40	100,0

### Distribution of examined municipality companies among the three sectors

## RESULTS

*Figure 1* presents the distribution of firms by settlements. During the sampling, I found three settlements which companies supply principal profile of the examined tasks. In the case of Salgótarján, water and sewage works as separate organizations which is local government-owned. Szolnok has interests in two waste management companies, the same in Székesfehérvár. These tasks can be found in each of the villages, but they differ in the forms of organization.

The distribution of the studied sample was the following. All three company profiles only occur in Nyíregyháza, Pécs and Miskolc, in the other settlements public responsibilities are carried out in different organizational schemes. Examining the ownership structure it can be determined that 10 majority-owned and 3 are minority-owned while the seven local government owners. In the case of waste management companies, there are four cases when the municipality is in minority, in 6 cases the majority, while in four cases it is a sole owner. In the case of district heating supply, we found four sole and four majority-owned companies.

The growth was due to the increase in receivables, which also shows liquidity problems. The reason for the high inventory is that a given company performs district heating service as well. The next field we wanted to analyze the ratio of equity to liabilities. The changes in the indicators are largely scattered in the three examined sectors, mainly in the water utility sector. The change of equity is important, since it determines the credit worthiness of the company (*Figure 2*).

According to the creditworthiness threshold value (30%), there were in 2009-2010 five water utility companies (local government owned) and six companies in 2011 under this value. The average value was 44.9% in 2011 and 45% in 2010 and 46.25% in 2009. In 2009, there were 11 companies above the average and 10 in

## Figure 1



## Distribution of examined municipality companies by settlements

## Figure 2

Distribution and volume of own capital ratio index of the examined municipality companies within the three sectors, between 2009 and 2011



2009-2010. From the base ratios, the value of changes in equity, except for one business, is growing in the test sample, which is regarded as a favorable development because companies do not survive on their property, and they can increase the value of the assets entrusted to them, and to assets of the invested capital returns back shooting stems.

The breakdown of liabilities also shows an interesting dimension of the sector, since 9 companies did not have any long-term liabilities in the examined 3 years, resulting that the current liabilities represented the bigger part. Similarly to local governments, only three companies issued a foreign currency bond, which is believed to be a risky way to fund from external sources. The municipal improvements exist liabilities from purchase of two asset management businesses, public service contract duration. For the remaining companies long-term debt is less than HUF 100 million, which includes investment loans and leases.

Among the waste management (government owned) companies, short term liabilities were dominant. In our analysis, there were six companies, which have low equity and did not reach the minimum 30%. Among them are present either professional investors or minority government property for two businesses. The increase in equity was in 11, so they are considered favorable rate and the value of the capital increase, contrasted to the case of a company experiencing a significant downturn, which is due to the negative result.

In the case of district heating companies, three of them were found to be under the level of creditworthiness, others were over 50%. The increase of the equity was positive in every company. Suppliers were found to be the highest in short term liabilities, which is the result of the fact that the examined companies do not perform production activities, this it is the most significant liability (*Figure 3*).

Analysing liquidity status, we concluded that six companies, mainly in the water utility sector, have a higher liquidity rate (seven companies in 2011, and nine in 2009-2010), which means that current assets are double the amount of current liabilities. Among the companies with great liquidity we can state that cash played a major role, as it financed the current liabilities, thus, it provides a stable and safe operation. In 2009-2010, there were three companies with poor liquidity (less than 1), 6 in 2011 and overall 12 companies' liquidity indicator worsened due to an increase in their short term liabilities.

In the waste management sector, there were only three companies with great indicators and six companies in 2009-2010 and seven in 2011 with liquidity less than 1. The favorable liquidity situation in enterprises is not primarily a high proportion of liquid assets, but the assets portfolio of high value, because this sector is not affected by a high value of stocks, so liquidity is not considered to be appropriate, since neither of the claims money can be made always right. The sample tested how six company liquidity ratio deteriorated.

In the case of district utility companies, beside two normal liquidity companies, we found three other companies that can be rated as poor liquidity (less than 1). In this sector, we can also see that companies with higher levels of cash have better liquidity. Three companies have poor liquidity. A declining tendency can be observed in five companies, which are adverse in the sector (*Figure 4*).

## Figure 3

Distribution and volume of short-term and long-term liability ratio index of the examined municipality companies within the three sectors, between 2009 and 2011



#### Figure 4

Distribution and volume of liquidity ratio index of the examined municipality companies within the three sectors, between 2009 and 2011



Efficiency was observed through return on equity. Profitability regarding the water utility sector in 2009 showed a negative trend as three companies could not operate profitably, though in other years they performed well. This is advantageous, since the public services are operating well. The figure shows that there are several companies with outstanding values. The outstanding companies are either new or have low equity (*Figure 5*).

## Figure 5

# Distribution and volume of ROE ratio index of the examined municipality companies within the three sectors, between 2009 and 2011



The value of the average, not including the salient data, shows a negative trend in the sector. In 2009 it was 10.20%, in 2010 it was 6,16% and it was 4.24% in 2011. Ten companies' profitability has decreased compared to 2009. An interesting aspect of the business cost structure is that indirect costs are major cost factors in the sector, which show an increase as a function of larger asset companies.

The explanation for this is that higher asset maintenance means a major cost ratio. Analysing the cost structure we can conclude that depreciation is high. The depreciation period is long in the case of assets, thus, it allows replacing them. In Hungary, the waterworks is worn out, and EU accession commitments undertaken to ensure adequate drinking water and sanitation can be an important source of the resulting depreciation, and retained earnings of replacement, accordingly. Analysing the material expenses, we found only one outlier value, which is probably due to the cost of water production and wastewater treatment technology. Local deviations can be discovered in the costs which could have similar reasons. Financial operations are not considered to be indebted to the companies in the sample. The general tax changes in 2010 increased the tax liability by increasing the tax rate and the local business tax written authority of disks. Overall, corporate tax was decreased in 2011, changed to the band progressive taxation.

In the case of district heating, the number of companies with a loss was: none in 2009, one in 2010, and two in 2011. The indicator improved in the case of the other companies. In our sample, the average value was: 4.175% in 2011, 1.89% in 2009, 4.27% in 2010 and only increased in three companies and so did the after tax profit in two companies. In this sector, material costs represent the largest cost factor, which is a growing trend for each company in each year. This is because of the price of energy increased. Revenues decreased in seven cases showing the deterioration of the population's solvency. Investigating the factors that shape the level of sales, a strong positive Pearson's correlation can be observed in 2011, a 5% significance level, the residential heat consumption rate in effect on the developments of the retail amount of energy used.

In 2011, there were also loss-making enterprises in the case of waste management companies. Small equity firms showed outlier values, but other companies in the sample show a downward trend in the value of ROE. Revenue showed an increasing trend and only decreased in one company. We examined what factors influenced the change of revenue in the examined settlements. The turnover and material expenses were positively correlated with the number of homes placed in regular waste in 2009, with 5% of significance level considered medium (0.63), strong in 2010 and 2011 (over 0.7 and 0.8) relationship can be found at the 1% significance level. As a result of the scope of activities in this sector, material expenses are dominating, which results from high fuel costs.

## CONCLUSIONS

The given sectors are not indebted, as their long term debt was due to the takeover of assets. It was not normal to have such debt as municipalities and only three water utility companies issued foreign currency bonds. It was also a great achievement that companies managed to increase capital, which was due to reinvested earnings showing their rentability. More and more receivables and overdue debts show exactly how the financial status of the population has worsened, which resulted in many cases in a decrease in revenue.

In the waterworks sector, companies are profitable, which means that the pricing policy of the municipalities has worked. Unprofitable companies are mainly in the district heating and waste sector, which means that the owners must intervene in order to remain viable or revise some activities and decrease costs. Mainly in the case of district heating companies engaged in the use of renewable energy sources in order to reduce dependence on energy.

In the operation of the companies, it is mainly short term liabilities which dominate in the liabilities. Analysing the liquidity indicator we concluded that only companies with high asset-level managed to have good liquidity, in cases of smaller companies with low level of cash this indicator was lower. We believe that municipalities should act in this field as it is always a problem for smaller companies to be solvent.

There will be many changes in the sector, as a new tax will be introduced in the following sectors: water utilities, waste and district heating sector. This will probably put more weight on service providers with more assets, which can damage competitiveness without a compensation and profitability; and it will depend on the central government and local government consensus.

In the waterworks sector, it is a statutory requirement that assets must be assessed and recorded in the balance sheet of the municipalities until 2015, which will influence and change the values of companies. It is also an important change that in the waste management sector not only government-owned companies can operate, thus former professional investors could be pushed out of the system.

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Corresponding author:

### Szilárd HEGEDŰS

Szent István University Faculty of Economics and Social Sciences, Institute of Business Studies Department of Financial Management and Controlling H-2100 Gödöllő Páter K. út 1. e-mail: hegedus.szilard@gtk.szie.hu