Abstract
There are three stages to contract management. The first stage is assessing whether a situation is suitable for contracting. Public managers must assess whether market conditions are likely to support a competitive environment for contract service provision and identify which service production and/or management components can be unbundled for contracting. In the second stage, after the decision has been made to contract, public managers structure and execute a competitive bidding process. Finally, after a vendor has been selected and the contract awarded, public managers must manage service delivery under contract. The complexity of these stages may partially explain the uneven success contracting has had in delivering on its promises (improving the quality and efficiency of government performance), providing ammunition for contracting critics’ arguments that public managers have not always been deliberate and systematic in managing the contracting process.

The goal of our paper is to test the hypothesis of improving the efficiency of government performance carried by contracting out local public services in condition of Slovakia. Brief theoretical part of this paper, as the basic for hypothesis development, shortly mentions theoretical issues of contracting out public services and highlights the most important benefits and possible risks of contracting-out. Analytical part provides selected data on effectiveness of contracting-out of local public services in Slovakia. This study uses a positive approach to investigate the research issue and analyzes the original collected survey data from own research project no. APVV-0267-07 Contracting out services in public sector supported by Slovak Research and Development Agency.

Contracting out local public services in Slovakia is apparently more cost-intensive than internal delivery. Possible reasons can be the inaccuracy in calculating the real cost of service, the monopoly supply of public services produced by the private sector, and the non-systematic decision-making process in service delivery arrangement selection.

Solutions for this situation might be increased transparency, the implementation of regular testing of all existing arrangements of public service delivery and the implementation of accrual accounting in the public sector.

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Introduction

Public managers can decide among several approaches to structure the delivery of public services (see e.g. Salamon, 2002). There are three most common service delivery modes. First is the internal service delivery, in which the government produces the entire service, then it is the contracts with other governments, private firms, or nonprofit organizations and the last is joint service delivery arrangements, in which the government delivers part of a service and contracts for the rest (Warner and Hedbon, 2001).

In general theoretical literature has held that the acquisition of publicly provided services through the market is less costly than if the same services are produced by the government bureaucracy (Savas, 1987, 2000; Siegel, 1999; Greene, 2002; Dilger, Moffett, and Struyk, 1997; Brown and Potoski, 2003a, 2006; Van Slyke and Hammonds, 2003). The basis for this conclusion is formed by government-failure bureaucratic model and the evident empirical support for prediction of this theoretical model (Nelson, 1997, pp. 82). This evidence suggests that the government could realize cost saving by switching from in-house public services production to alternative service delivery arrangement in term of public services privatization.

The most pervasive form of privatization is contracting public services with private for-profit and non-profit firms, mainly at the local government level (Miranda and Andersen, 1994; Martin, 1999).

In many cases the introduction of contracting as alternative public services delivery arrangement do not produce the expected results and even create perverse effects. The causes of such failures include inadequate implementation expertise or merely formal implementation, and show the limitations of the potential of this service delivery method in real conditions. The risks connected with the improper implementation are much higher in developing and transition countries, where the public sector is over-politicized, policy and management capacities are inadequate and resources and experience are limited or often almost absent.

Contracting public services is a legal, economic and personnel-intensive process. The conditions for a successful realization of this alternative public services delivery arrangement have to be created: an appropriate legal environment, citizen participation in a transparent public decision-making process, measuring performance in the public sector, a modern form of public service delivery management, functional market mechanism.

This paper investigates the issue of the switching from in-house public services production to contracting in Slovak local government condition in the term efficiency and quality service increasing.

1. The theory of contracting in public sector

Literature directly relevant to contracting can be divided into four categories: the theory of contracting, conceptual models of the contracting process, measuring the performance of how public services are delivered, and the effect of contracting on the cost and quality of public services.

The theory of contracting addresses many aspects of the process and its outcomes, like the make or buy decision (Cooper 2003; Hirsch 1991; Chamberlin and Jackson 1987; Nemec 2002; Prager 1994), problems associated with agency relationships (Arrow 1985; More 1984; Pratt and Zeckhauser 1986) and the theory of transaction costs (Ferris and Gradddy 1996; Prager 1994; Hirsch 1991). The literature on contracting models (Kettner and Lawrence 1990; T. Kolderie 1986) provides information that gives a conceptual basis for two ideal approaches to service contracting. The literature on measuring performance (Engelbeck 2004; P.D. Epstein 1984) is important because it provides general insight on how local governments evaluate characteristics of service delivery and how performance of particular services might be measured. The literature on effects of contracting on service delivery (Shettely 1998; Engelbeck 2004) deals with research that has investigated the determinants of contractor performance.

Contracting public services with private for-profit and non-profit firms is one of the most prevalent types of privatization, mainly at the local government level. Under this arrangement, the “government retains responsibility for provision of the service but hires private firms to produce the service” (Nemec 2002, p. 14).

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4 i.e. agreements between governments and the private sector.
Contracting can also be explained as a binding agreement in which a public institution pays a private firm or non-profit organization to provide a specific level and quality of public service. Citizens as customers through their taxes or user fees pay the government, which in turn pays the contractor. According to Savas (1987, p. 88), since the provision function is retained by the government, contracting represents a conservative approach in terms of an increasing role for the private sector.

Contracting for services begins with the “organizational decision to make or buy a good or service” (Prager 1994, p. 176). As such, it is a fundamental decision faced by both public and private sector organizations. “To make or buy?” is a question faced by public organizations when considering how public services should be delivered to their citizens. Public organizations must decide whether to produce goods and services internally or to acquire them from external sources – contract out public service.

To contract out the public good (mostly public service) is the opposite of internalizing the production of a public good, which is very often used in the public sector of transitional countries. To put contracting out in perspective, it is necessary to consider pros and cons of internal and external forms of delivery.

Concerning the positive potential of contracting, the relevant literature proposes that contracting may, but need not, improve individual choice, cost-effectiveness and the quality of delivery, equity and to some extend also expenditure control (Bailey 1999, pp. 278-80).

On the other hand, many authors provide important arguments describing weak points of contracting. According to Prager, the general rule of public sector organization is to “internalize operations to the point where the costs of further expansion are perceived to be greater than the costs of acquiring the components or services in the market” (Prager 1994, p. 84). The next key reason is the need for close control of the process used to produce the good or service. The next reasons for the internalizing of public service delivery in transitional countries are that both the competitive market on the one hand and effective methods of public management on the other hand are not well-developed.

Finally, when expanding internal operations will result in more efficient operations or when control is considered important, internalizing production may be a desirable decision. However, at some point, greater size may not yield efficiency gains, and thus, contracting out becomes more attractive.

An important element of contracting is the process involved in establishing and maintaining a legal contractual relationship with a private firm. According to Shetterly (1998, p. 23), this process occurs in three phases; pre-solicitation, contractor selection and contract management. Two problems occur when the action and information of the private partner are not directly observable by the public partner: “moral hazard or the problem of hidden action and adverse selection or the problem of hidden information” (Arrow 1985, p. 37).

Moral hazard occurs because the behavior of the private partner is imperfectly controlled. When behavior is imperfectly controlled, it creates a situation where either shirking in performance of duties or inappropriate actions by the private partner adversely impacts the goals of the public partner.

In the adverse selection problem, the private firm has some information that is not shared with the public sector organization and uses the information to make decisions that affect the public organization. However, the public organization cannot check to see if the information is serving the public interest. For example, the public sector organization wants to hire the best private partner. But the private firm will know more about their qualifications than the public sector organization leading to the problem of information asymmetry rendering ex ante evaluation of the private offers impossible. Bailey (1999, pp. 290-292) indicates this problem associated with contracting public services via negative aspects of contracting.

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5 The pre-solicitation phase begins when public officials first consider contracting for a particular service. These discussions focus on the probability of adequate market competition, the characteristics of the service in question, the potential political and social obstacles to contracting, and the fiscal or budget circumstances of the jurisdiction.
According to More, “The principal must weave these interrelated components into a contractual framework that, in mitigating the informational asymmetries and structuring rewards, prompts the agent to behave as the principal himself would under whatever conditions might prevail” (More 1984, pp. 756-757).

Besides problems associated with agency relationships, the theory of contracting solves the problem of transaction costs. The transaction costs associated with contracting out and the relationship of these costs should be included in the complexity of the contracting relationship. When contracting for services, governments incur contracting costs which are implicitly or explicitly part of the make/buy decision. The transaction costs of contracting are of two types: “those associated with the contract formation stage and those associated with the contract performance stage” (Hirsch 1991, pp. 56-57).

From all above, it is apparent that contracting may, but need not, improve the performance of the public sector. The final outcome depends on local conditions, including the capacity of the implementing body to execute the contracting process.

2. The methodology

Afonso and Scaglioni (2005) measure the performance of public expenditure in Italian regions for the year 2001 regarding the provision of public services, by creating a Total Regional Performance Indicator (TRPI). This indicator is then used as output measure to evaluate expenditure efficiency for Italian regions. They underline the existence of room for obtaining better results and they suggest that improvements across regions are possible. On average, Italian regions could increase their output by 28% using the same resources. Other studies which have been done are oriented to lesser number of output indicators, they compare different sample of countries (Retzlaff-Roberts – Chang – Rubin, 2003, pp. 55-72), they make analysis on the level of providers (Al-Shammari, 1999, pp. 879-890, Ramanathan, 2005, pp. 39-54), they use different methodology, especially only DEA or FDH analysis without weight definition or they don’t take the specifics of expenditure measures into consideration.

The analysis performed and achieved results presented in this article are based solely on our own empirical work and primary research (research team in Banska Bystrica is focusing on contracting-out from the year 1999). We use original collected survey data from our own research realized in this field in the years 2008. The research sample contains 56 municipalities with number of inhabitants between 1000 and 4999. The research is focusing on five key local public services provided by the municipality.

We are fully aware about factors limiting the validity of research results. The main problem is the relatively low quality and reliability of the data provided by the municipalities.

Taking into account possibilities to obtain necessary dates, we focus on the following selected local public services:

- Maintenance of local communications;
- Maintenance of public lighting infrastructure;
- Management of cemeteries;
- Waste collection and waste disposal;
- Management of public parks and green areas.

In addition to used conventional methodology in assessing the technical efficiency and performance of public service providers, we have to take into consideration one important factor – transparency. Transparency in the provision of public services is often used as one of the criteria for assessing the overall performance. There are several ways to measure the risk of corruption. None is entirely satisfactory. We use two sources – the World Bank’s Enterprise Surveys (http://www.enterprisesurveys.org/) and Transparency International’s Corruption Perception Indices (http://www.transparency.org/policy_research/surveys_indices/cpi/), derived using partly different methodologies.

The Enterprise Surveys provide the world's most comprehensive company-level data on emerging markets and developing economies (Table 1).
Table 1 Indicators of corruption in Slovakia according to Enterprise Surveys

<table>
<thead>
<tr>
<th>Year</th>
<th>Observations</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>110</td>
<td>64.44</td>
<td>56.18</td>
<td>3.35</td>
<td>32.04</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>143</td>
<td>35.87</td>
<td>38.20</td>
<td>2.02</td>
<td>13.64</td>
<td>..</td>
</tr>
<tr>
<td>2009</td>
<td>275</td>
<td>11.63</td>
<td>23.06</td>
<td>2.31</td>
<td>33.11</td>
<td>20.67</td>
</tr>
</tbody>
</table>

Source: [http://www.enterprisesurveys.org/](http://www.enterprisesurveys.org/)

Legend:
A - % of Firms Expected to Pay Informal Payment to Public Officials (to Get Things Done)
B - % of Firms Expected to Give Gifts to Secure a Government Contract
C - Value of Gift Expected to Secure Government Contract (% of Contract)
D - % of Firms Identifying Corruption as a Major Constraint
E - % of Firms Believing the Court System is Fair, Impartial and Uncorrupted

Corruption Perception Indices (CPI) data collected by Transparency International are one of the most frequently quoted sources on the expected level of corruption across the world. CPI indices for Slovakia indicate that the risk of corruption in Slovakia is significant (see Table 2).

Table 2 Transparency International CPI indices: Czech Republic, Estonia and Slovakia

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>3.9</td>
<td>3.7</td>
<td>3.5</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
<td>4.0</td>
<td>4.3</td>
<td>4.7</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Source: [www.transparency.org](http://www.transparency.org)

Note: a higher score represents less corruption.

The higher risk of corruption indicates the lower degree of accountability of governments in Slovakia and may provide some explanation of our findings on transparency of contract award. Out of 280 observations in 56 municipalities, we found that the external form of local public services delivery was used in 108 cases (38.6%). Methods of awarding the contracts in these cases are presented in table 3.

Table 3 Methods of awarding contracts used for the external delivery of local public services in analyzed municipalities (in %)

<table>
<thead>
<tr>
<th>Procurement method used</th>
<th>in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open procedure</td>
<td>15.74%</td>
</tr>
<tr>
<td>Restricted procedure</td>
<td>12.04%</td>
</tr>
<tr>
<td>Negotiated procedure</td>
<td>2.78%</td>
</tr>
<tr>
<td>Price bid</td>
<td>2.78%</td>
</tr>
<tr>
<td>Direct purchase</td>
<td>10.19%</td>
</tr>
<tr>
<td>Municipality was not willing to provide information</td>
<td>56.48%</td>
</tr>
</tbody>
</table>

Source: original research based on the data obtained from 56 municipalities related to the local service delivery in 2008.

In more than 56% of all external forms of local public service delivery, the municipalities were not willing to disclose the method used for awarding the contract to the external provider. This means very low transparency for external form of service delivery, which can result in higher risk of corruption and inefficiency of service provision.
Combining the methods of awarding the contract with the transparency, we can create the risk of corruption index, which is derived from the procurement methods. Accepting the legal aspects of procurement methods defined in the Act 25/2006 Z.z. on public procurement, procedures of 5 key procurement methods give different room for transparent procurement. For the further analysis, we can derive the risk of corruption index that is rising with the less regulated procurement method. The assigned levels to the risk of corruption index are based on the logarithmic function of procurement methods and are presented in the following graph.

Graph 1 Risk of corruption of selected procurement methods

Further analysis oriented on technical efficiency of local public services delivery is focusing on finding the level of efficiency in analyzed municipalities. The efficiency is calculated on defined inputs and outputs of different types of local public services. The key aspects covered by defined method of analysis focus on:

1. Benchmarking of overall technical efficiency and quality impacts of provided local public services using input oriented Data Envelopment analysis covering both internal and external forms of local public services provision.

2. Benchmarking of technical efficiency of particular local public services (as defined in paragraph above) regardless the form of provision (internal and external form of provision).

3. Benchmarking of technical efficiency of external forms of local public services provision using output oriented Data Envelopment analysis separately for each type of local public service.

Data Envelopment analysis (DEA) is the linear programming using mathematical model, which computes the efficiency of evaluated DMUs by maximization of proportion between weight sums of outputs and inputs. The basis of DEA models we can express as follow:

\[ E_q = \max \frac{\sum_{j=1}^{m} u_{j} y_{jq}}{\sum_{j=1}^{m} v_{j} x_{jq}} \]

(1)
where the following notation is used:

- \( E_q \) – efficiency of \( q \)-th DMU,
- \( y_{iq} \) – \( i \)-th output of \( q \)-th DMU,
- \( x_{jq} \) – \( j \)-th input of \( q \)-th DMU,
- \( u_i \) – weight assigned to \( i \)-th output,
- \( v_i \) – weight assigned to \( j \)-th input.

Optimization procedure used by all DEA algorithms we could generally express by following conditions:

\[
\sum_{i=1}^{r} u_i y_{iq} \leq 1, \quad q = 1, 2, \ldots, n
\]
\[
\sum_{j=1}^{m} v_j x_{jq} ,
\]

under the condition: \( u_i \geq \varepsilon, v_j \geq \varepsilon \),

where \( \varepsilon \) is a constant, which makes all weights of outputs and inputs positive. These conditions were transformed by Charnes-Cooper-Rhodes algorithm to the standard linear programming assignment. There are two approaches in general. The first formulation maximizes the outputs that can be obtained and constrains the sum of the inputs to be unity. The second formulation minimizes the inputs needed and constrains the sum of the weighted output at unity. We could formalize it by multiplier model (Banker, R. – Charner, A. – Cooper, W. W., 1984). Adopted DEA models use the dual formulation of it.

**Input oriented model**

\[
\text{max } z = \sum_{i=1}^{r} u_i y_{iq}
\]
subject to
\[
\sum_{j=1}^{m} u_i y_{iq} - \sum_{j=1}^{m} v_j x_{jq} \leq 0
\]
\[
\sum_{j=1}^{m} v_j x_{jq} = 1
\]
\[
u_i, v_j \geq \varepsilon > 0
\]

**Output oriented model**

\[
\text{min } z = \sum_{j=1}^{m} v_j x_{jq}
\]
subject to
\[
\sum_{j=1}^{m} v_j x_{jq} - \sum_{i=1}^{r} u_i y_{iq} \geq 0
\]
\[
\sum_{i=1}^{r} u_i y_{iq} = 1
\]
\[
u_i, v_j \geq \varepsilon > 0
\]

These two models are called CCR and suppose the constant returns to scale (Charnes, Cooper, Rhodes, 1978). There is available also its modification for variable returns to scale. It is called BCC model (Banker, Charnes, Cooper, 1984) and its formulation is as follows:
Input oriented BCC model

\[
\begin{align*}
\text{max } z &= \sum_{i=1}^{m} u_i y_{iq} + \mu \\
\text{subject to} & \quad \sum_{i=1}^{m} u_i y_{iq} - \sum_{j=1}^{n} v_j x_{jq} + \mu \leq 0 \\
& \quad \sum_{j=1}^{n} v_j x_{jq} = 1 \\
& \quad u_i, v_j \geq \varepsilon > 0
\end{align*}
\] (5)

Output oriented BCC model

\[
\begin{align*}
\text{min } z &= \sum_{j=1}^{n} v_j x_{jq} + \mu \\
\text{subject to} & \quad \sum_{j=1}^{n} v_j x_{jq} - \sum_{i=1}^{m} u_i y_{iq} + \mu \geq 0 \\
& \quad \sum_{i=1}^{m} u_i y_{iq} = 1 \\
& \quad u_i, v_j \geq \varepsilon > 0
\end{align*}
\] (6)

The difference from CCR models is creating by including the constant \( \mu \). If \( \mu > 0 \), model uses increasing returns to scale, if \( \mu < 0 \), model is using decreasing returns to scale. If \( \mu = 0 \), it is the same as CCR model.

Analysis of overall technical efficiency of provided local public services (for both internal and external forms of provision) covers all services provided by municipalities. Therefore, we have selected the input indicators \( (x_{jq}) \) for the CCR DEA model as follows:

- \( x_1 \) - total costs of provided local public services by municipality,
- \( x_2 \) - total costs per inhabitant of provided local public services by municipality,
- \( x_3 \) - total costs per unit of provided local public services.

The output indicator \( (y_{iq}) \) for the CCR DEA model was selected as follows:

- \( y_1 \) - average overall satisfaction with provided local public services.

The second step focuses of technical efficiency analysis of particular local public services regardless the form of provision using the same input and output indicators.

In order to assess technical efficiency of external forms of local public services delivery, we had to differ among the provided local public services and analyze only those municipalities, which use the external form (contracting-out) of local public services provision. Therefore, we analyze separately all five types of local public services. In addition to the selected input and output indicators, we added one additional output indicators \( (y_2) \) covering the transparency and risk of corruption measured by defined risk of corruption index (graph 1).

3. Results of technical efficiency analysis of local public services provision

This part of our paper presents the results of an empirical analysis of technical efficiency of local public services provision in analyzed municipalities in the Slovak Republic for the year 2008.
The unit costs are the simplest benchmark of efficiency in service delivery. However, to be able to understand the data obtained, we have to respect several factors determining the complexity and character of the obtained data:

1. In some cases, we cannot calculate the unit costs. The reason is that the service extent can be hardly quantified and the unification of service delivery does not exist. There are no official standards of local public services delivery; we can only assume that the level of quantity and quality of the service in different municipalities of the same size group is similar;

2. The other problem is that the monitoring of this measure by the local self-government is by no means complex. In the year 2008, there was neither accrual accounting nor suitable programme budgeting at the level of local self-government and therefore no possibility to explicitly compare the real cost value of service delivery in comparison to the external forms.

Concerning local public service quality, we follow the research methodology of several studies realized in this area (Löffler 2002; Wisniewski 2001; Potůček 2005). The citizens’ satisfaction with local public services is the benchmark of local public services quality in these studies. Data on the quality service are provided by the users – citizens of different municipalities through the questionnaire (the sample was small, thus we accept that our summarized data are of very preliminary character).

Citizens have evaluated the service quality by expressing their satisfaction with the quality of the local public service on the following scale:

- Absolutely satisfied: 100%
- Satisfied: 80%
- More satisfied than unsatisfied: 60%
- More unsatisfied than satisfied: 40%
- Unsatisfied: 20%
- Absolutely unsatisfied: 0%

Table 4 presents the quality comparison of contracting-out and internal delivery arrangements of the analyzed local public services in the selected municipalities.

<table>
<thead>
<tr>
<th>Service</th>
<th>Evaluation of the quality of internal delivery</th>
<th>Evaluation of the quality of external delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste</td>
<td>69,15</td>
<td>68,98</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>69,09</td>
<td>75,51</td>
</tr>
<tr>
<td>Public parks</td>
<td>61,84</td>
<td>54,78</td>
</tr>
<tr>
<td>Communications</td>
<td>50,97</td>
<td>48,35</td>
</tr>
<tr>
<td>Public lighting</td>
<td>70,65</td>
<td>65,34</td>
</tr>
</tbody>
</table>

Source: original research of citizen satisfaction with provided local public services in 2008.

First, we have to test the correlation between the input (costs per inhabitant, costs per unit) and output indicators (overall satisfaction with the quality of provided services, risk of corruption). The correlation index (r) is 0,181, which suggests very low interdependence of the input and output indicators. This also means, that there exists the possibility and ways (managerial and legislative) to improve overall technical efficiency by increasing the quality and transparency of services provision and decreasing the costs of provided services at the same time.

6 In case of internal service delivery, the accounted service costs are mostly lower than the real costs of service delivery and it contains only the direct costs, because there is no accrual accounting at the local self-government level in Slovakia. We can consider the data of the costs of service delivery realized by the municipal employees, brutto-budgetary and netto-budgetary organisations of the municipality as disvalued.
The results of overall technical efficiency of local public services provision using input oriented CCR DEA analysis are presented in the Annex 1. The table presents the final score and ranking for all municipalities and local public services regardless the delivery form, as well as results for individual types of local public services, where the delivery form (internal vs. external) is taken into consideration.

The results show that there are large differences in the score of overall technical efficiency among municipalities when considering all local public service. Average technical efficiency score is 47.17%, which suggests large inefficiencies among municipalities. At the same time, more than 2/3 of analyzed municipalities achieved lower than 50% technical efficiency in provided local public services.

There are even greater differences among particular local public services in analyzed municipalities. The ranking of municipalities differ from service to service, but there is medium strength correlation among technical efficiencies of particular local public services within individual municipalities. This knowledge suggests that several municipalities with the highest technical efficiency score use more strategic approach to the provision of local public services.

The results suggest that there is only low correlation among achieved technical efficiency and the form of service delivery. Internal form of local public service delivery achieved generally higher efficiency than the external forms. Technical efficiency of external forms of local public services provision is generally lower, but considering the municipalities with the lowest risk-of-corruption index, the results suggests that these municipalities possess higher overall technical efficiency (with one exception).

Achieved results also suggest that the most of the local public services are characterized as quasi-collective goods with rising economy of scale. Further research should focus on exploitation of economy of scale by contracting larger capacities from several municipalities. Municipalities could form a strategic partnership to enjoy rising economies of scale by providing identical services within their area.

Further research in this field in Slovakia will cover the years 2009 and 2010 under the new budgetary conditions, while starting the year 2009, the programme budgeting was introduced in Slovakia. This can increase the quality of input data and improve the comparative and benchmarking analysis.

Conclusions
Our article tried to confront the theory of contracting with the real situation of contracting-out local public services in Slovakia. The main issues included in the analysis are a preliminary assessment of technical efficiency and quality impacts of contracting local public services in Slovak conditions.

The findings of this study are relevant to selected local services. However, the findings also indicate that the potential positive impacts of contracting on the delivery of public services identified by the theory of contracting cannot be fully proved in Slovakia. The main problems of contracting, prohibiting positive outcomes are connected with contractor selection and contract management phases. The problems also occur in the pre-solicitation phase because of the unsystematic decision for the “best value” delivery of local public services and the problem of corruption.

Possible solutions for this situation might be increased transparency, the implementation of regular testing of all existing arrangements of public service delivery; the implementation of accrual accounting in the public sector, which make the development of modern financial management approaches in the public sector possible; the implementation of actions proving public procurement ethics, and support of effective training of public servants in the area of modern public management methods.

References:


### Annex 1

Table 6 Technical efficiency of local public services

<table>
<thead>
<tr>
<th>Municipality</th>
<th>All local public services</th>
<th>Waste</th>
<th>Public lighting</th>
<th>Communications</th>
<th>Public parks</th>
<th>Cemeteries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Efficiency Score</td>
<td>Total Ranking</td>
<td>Procurement method</td>
<td>Technical Efficiency Score</td>
<td>Ranking</td>
<td>Procurement method</td>
</tr>
<tr>
<td>M30</td>
<td>100,00%</td>
<td>1</td>
<td>69,09%</td>
<td>3</td>
<td>2,58%</td>
<td>40</td>
</tr>
<tr>
<td>M35</td>
<td>100,00%</td>
<td>1</td>
<td>44,34%</td>
<td>11</td>
<td>4,25%</td>
<td>28</td>
</tr>
<tr>
<td>M51</td>
<td>100,00%</td>
<td>1</td>
<td>31,55%</td>
<td>30</td>
<td>4,00%</td>
<td>29</td>
</tr>
<tr>
<td>M37</td>
<td>94,02%</td>
<td>4</td>
<td>100,00%</td>
<td>1</td>
<td>3,02%</td>
<td>33</td>
</tr>
<tr>
<td>M29</td>
<td>91,90%</td>
<td>5</td>
<td>32,37%</td>
<td>28</td>
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Notes on “Procurement method” variables:
1 - Open procedure
2 - Restricted procedure
3 - Negotiated procedure
4 - Price bid
5 - Direct purchase
6 - Municipality was not willing to provide information
“blank field” - internal form of service delivery