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Contract management of municipal public services: the Slovak experience

Beáta Mikušová Meričková^{1,2}, Juraj Nemec^{1,3} & Nikoleta Jakuš Muthová ₀ ^{1⊠}

Contracting out services in the public sector should convey efficiency gains compared to the in-house delivery of these services because of the competition element. However, results from practice do not confirm this assumption. Generalising the reasons for this situation is still problematic, but there is no doubt that the quality of managing the processes of contracting out of public services should be the factor. The aim of this paper is to contribute to the discussion on contract management in the public sector by analysing the quality of contract management in Slovak municipalities in the context of contracting out risks as defined by the principal-agent theory. The study uses own methodological approach for quantifying the determinants of the quality of contract management in relation to the contracting out risks using Saaty's expert method. In total, 7 variables were constructed, and 3416 contracts are evaluated. Similarly to most existing studies, the results indicate severe problems in the quality of contract management in municipal sector, which increase the risks associated with contracting out. The most prevalent reserves in the quality of contract management of contracted local public and ancillary services in the Slovak municipal conditions are related to the selection of the public procurement procedure; the irregular monitoring of the quality of external production; and the type of payment. The outcomes clearly show that potential increases in efficiency via contracting out are unequivocally limited by the low quality of contract management.

¹ Faculty of Economics, Matej Bel University, Banská Bystrica 975 90, Slovakia. ² Faculty of Economics and Administration, Pardubice University, Pardubice, Czech Republic. ³ Faculty of Economics and Administration, Masaryk University, Brno 602 00, Czech Republic. ^{Slow}email: nikoleta.jakusmuthova@umb.sk

Introduction

hen delivering public services or arranging own internal ancillary services, public organizations have the choice of internal or external production. In case of external supplier, the externalisation of service production contracting out is done on the basis of a contractual relationship: a contract between a public institution and an external entity (Boston 2000; Cooper 2003; Peters and Pierre 2005; Overman 2016; Van der Valk 2023). Contract management is the basic tool and precondition for the execution of such contracts.

An in-depth understanding of factors determining the results of service externalisation in the public sector is critical for economic theory and administrative practice. Public and ancillary service delivery should guarantee cost efficiency and appropriate quality, among other goals. It has been confirmed that a simple switch from public to private production is not an automatic better means of achieving such a goal (Blomqvist and Winblad 2022). For developmental states, Maurya (2018, 295) even directly argues that "In theory, contracting out seems to be more efficient as it improves focus on cost and quality; but contrary to expectations, evidence suggests that efficiency gains are not realised in many cases".

In contemporary contracting out, global economic theory no longer addresses the question of whether private or public production is more profitable; it focuses on implementation aspects, such as how to manage the contracting out process (Bel and Rosell 2016; Gradus et al. 2016; Bel and Gradus 2018; Glas and Essig 2021), while trying to answer the question of why contracting out services in the public sector do not bring efficiency gains.

This paper plans to deliver extra information related to the quality of the contract management of externalising service delivery in the public sector, using the example of Slovak municipalities and their public and ancillary services (Petersen et al. 2018; Koprič et al. 2018; Dayashankar and Srivastava 2019; Nemec et al. 2020; Van der Valk 2023). One reason for this may be the low quality of contract management in the public sector (Benish 2014; Glas and Essig 2021; Blomqvist and Winblad 2022).

The aim of this study is to advance the knowledge of contracting out in the public sector by analysing several years of contract management in the Slovak municipal sector. This paper focuses on the quality of contract management in the context of contracting out risks as defined by the principal-agent theory.

Contracting out in the public sector

Globally, the issue of contracting out for services in the public sector has been a subject of interest to the professional and lay public for over three decades (Savas 1987; Kettl 1993; Brown et al. 2006; Amirkhanyan 2009, 2011; Ditillo et al. 2015; Ivančík and Nečas 2017; Dayashankar and Srivastava 2019; Nemec et al. 2020; Van der Valk 2023), not least because the government of each country annually spends a significant amount of public money to fund contracted services (Kettl 1993; Dicke 2002; Brudney et al. 2005; Mulgan 2006; Glas and Essig 2021).

Conventional views of the contracting out and externalisation problem of activities associated with the performance of government functions in the economy are influenced by the principal-agent theory, the competitive market theory, and the standard procurement practices regime, which view a contract as a particular agreement between two entities with divergent interests: the principal and the agent (e.g. Arrow 1985). The principal-agent theory represents the core theoretical background for our paper.

The principal (in our understanding, the arm of government that has a legislatively defined obligation to provide a given service; the 'service provider') bears the political responsibility for deciding from what sources the service will be financed and what form of service production will be chosen. The agent (the particular service producer) pursues their own objectives, which may not be (and usually are not) aligned (DeHoog 1990; Sclar 2000; Maurya 2018; Keller et al. 2021). Two basic problems associated with contracting out are the moral hazard or hidden action problem and the misselection or hidden information problem (Arrow 1985; Kettl 1993; Brown et al. 2006; Blomqvist and Winblad 2022).

A moral hazard arises when a contractor's activities are not adequately monitored and controlled, as manifested in the scope and quality of assurance services or other behaviours of the outside contractor that are contrary to the public interest. This problem should be taken care of by the procurement (secured principles) and ongoing production service (contractor) by the public institution.

The problem of misselection or hidden information is referred to as 'information asymmetry' (Stiglitz 2000; Blomqvist and Winblad 2022). Specialised services have information (mostly of a technical nature) that is not available to the public institution and its use may influence its decision on the choice of contractor. For example, a public institution may be interested in selecting, from among potential suppliers, a supplier that meets the set requirements for the maximum quality of the products of the output, but the bidders can only be evaluated before the work. Bailey (1999, 290-292) cited this problem as one of the risks associated with public service contracting out: external producers of a service, starting from a public service contract in the form of service provision, may deliberately underestimate the real cost of production when calculating the price for the service; if the contract is awarded, this leads to a range of both the provision of the service in the required state and the quality of the service.

In addition to the conventional view of contracting out from the perspective of principal-agent theory, in which the relationship between the service provider, the purchaser of the service, and the producer is seen as managerial or controlling (DeHoog 1990; Sclar 2000; Van Slyke 2007; Amirkhanyan 2009; Epstein 2014; Blomqvist and Winblad 2022), a more recent view sees this relationship as a partnership based on flexible cooperation (Tejedo-Romero and Aruajo 2023). In this view, other factors stand out as determinants of the benefits of contracting out: frequency of communication between the service provider and service producer (Behn and Kant 1999; DeHoog 1990; Keller et al. 2021), joint problem solving (Cooper 2003; Sclar 2000; Tejedo-Romero and Aruajo 2023), mutual trust, shared values, and a move away from sanctions to bargaining (Maurya 2018). The benefit (efficiency) of externalisation is most often found as the difference between the costs of internalising and contracting out for services, and possibly also as the difference between the quality of the internalised and contracted service (Epstein 1984, 2014; Shetterly 1998; Nullmeier et al. 2016; Maurya 2018; Keller et al. 2021). This approach has been applied by the majority of the world, and domestic studies have addressed the issue. In the Slovak Republic, the investigation of externalisation has been dealt with mainly by Beblavý and Sičáková-Beblavá (2007), Meričková and Majlingová (2005), Meričková et al. (2010), Meričková and Nemec (2007), Nemec et al. (2005), Mikušová Meričková and Jakuš Muthová (2023) and Pavel and Sičáková Beblavá (2012). In the neighbouring Czech Republic, studies have been conducted by Ochrana et al. (2008), Páleníková and Mikušová Meričková (2012), Pavel (2006), Soukopová and Klimovský (2016), Soukopová et al. (2017) and Nemec et al. (2020).

The issue of the determinants of the quality of contracting out process management has been addressed by many authors. In particular, they have investigated the following determinants: the degree of competition in obtaining a public contract (Savas 1987; Kettl 1993; Hodge 2000; Greene 2002; Racca et al. 2011; Glas and Essig 2021), ex-ante evaluation of public contract bidders (Romzek and Johnston 2002; Amirkhanvan 2009; Bertelli and Smith 2010; Amirkhanyan et al. 2012; Nullmeier et. al. 2016), clearly defined procurement subjects (Maurva and Ramesh 2018; Petersen et al. 2018; Rodionova et al. 2022), the extent and intensity of monitoring externalities (Prager 1994; Seidenstat 1999; Brown and Potoski 2003; Hefetz and Warner 2004; Keller et al. 2021), penalties for non-compliance with contract terms (DeHoog 1990; Petersen and Ostergaard 2018), the knowledge and experience of the procuring entity in contract management (DeHoog 1990; Romzek and Johnston 2002; Van der Valk 2023), and the expertise of the procuring entity on the technical parameters of the service being procured (Kettl 1993; Chan and Rosenbloom 2010; Fine et al. 2016).

The literature on the quality and results of the contracting out process and its management delivers a large spectrum of positions, especially highlighting reserves and limitations. For example, Blomqvist and Winblad (2022) focused on how public agencies can monitor the performance of private contractors and how the underperformance is sanctioned in the example of Swedish social services. They found that local governments somehow monitor the performance. However, they also found that local governments seemed less interested in holding the private contractors accountable for under-performance. Findings by Ditillo et al. (2015) are very similar – the trust-based control form is the most widespread.

Dayashankar and Srivastava (2019) found that contract management mechanisms are ineffective in mitigating opportunism (a critical dimension of contract performance) because they inflate the gaps in incomplete contracts, resulting in partner opportunism.

Maurya (2018) investigated contracting out in India's health sector. The author found many problems related to contract out management. The fact that agencies end up measuring and incentivising inputs and processes (resulting in higher volumes of inputs than needed) that the payment method adopted ended in misallocating risk (leading to predatory behaviours) and the trade-off between cost and quality is not well addressed.

From older literature Brown and Potoski (2003, 158) found that "not all municipal and country governments are equally capable of investing in the types of contract-management capacity discussed here. In other words, some governments do not invest in capacity, even while other governments with similar threats to contract performance are making the appropriate investments".

Research methodology

The finding that contracting out is frequently used to deliver services in Slovakia, but its results are contradictory in terms of the efficiency of service delivery, raises many questions. In this article, we focus on the issue of the quality of contract management. We try to answer the following research question: What is the quality of contracting out management in the Slovak municipal sector?

We decided to focus on selected local public services (the collection and disposal of municipal solid waste, maintenance of local roads, maintenance of public green spaces, maintenance of public lighting, and cemetery services) and selected ancillary services in municipal bodies (cleaning, building management and maintenance, catering and transport of employees, IT administration, and security services) in different research samples of

municipalities in different years. The selection was determined by the importance of these services from the contextual and financial point of view (services which can be simply externalised and which represent important percentage of costs of the municipal budget). The research includes contracting out data for 2,750 local public services and 1,860 ancillary services.

In assessing the quality of contract management in the public sector, we measured this quality by direct quantification based on the multiple criteria evaluation method. This method is frequently used in the academic literature to evaluate problems when faced with several alternatives/criteria. This method best suits our research goals because we have a comprehensive set of data.

Following the information provided in the literature review, we established a system of criteria that reflect the generally accepted risks of the process: the risk of information asymmetry, the risk of moral hazard, and the risk of non-transparency (Table 1). This list of criteria is based on the existing literature, which provides a large set of possible criteria and groups them according to main risks connected to the contract management. From all possible criteria, listed by the literature we selected our set of seven criteria, taking into the account the individual importance of a criterion (based on the literature review) and the possibility to operationalise their measurement. This full set of seven criteria was used for measuring the quality of contract management for ancillary services, to measure the quality of contract management for public services we excluded two criteria (X3 and X6), as it would be too complicated to operationalise their measurement.

Table 1 presents our methodological approach for quantifying the criteria of the quality of contracting out local public services concerning the contracting out risks. The criteria were defined as qualitative characteristics; we transformed them into a quantitative form according to the selected features for the research.

The quantification was determined using Saaty's method (expert method of determining weights - Saaty, 1994). To each of the determinants we assigned a qualitative (Qualitative characteristic) and a quantitative (Quantification) form of evaluation a weight in relation to its impact on the quality of the contract management. Individual values were assigned based on the evaluation by a group of experts on contracting out in public sector (Supplementary Table S1). The main criteria for the competence of the experts were considered to be their professionalism, degree of education, and experience in the subject matter.

For local public services, we did not track the determinants X3 (expertise of municipality staff involved in the contracting out process in the technical parameters of the service) and X6 (length of the contract) due to the non-availability of data. For ancillary services, we tracked all seven determinants.

Background information: externalisation of service delivery in the Slovak municipal sector

Slovak municipalities in their current form were established after the fall of the communist regime in 1989. The legislation adopted in 1990 provided them with formal and complete independence from the state, allocated them the right to have and manage their own budgets and with the right to decide freely about all matters related to the municipality (including the methods of delivering local public services and ancillary services within their jurisdiction – they can entirely and independently decide about internalisation or externalisation of a service production).

The legislation adopted in 1990 was amended in favour of municipal independence the in 2000–2005 "decentralisation period", when municipalities received extra responsibilities and the new fiscal decentralisation system was established. Following this period, no extra political, legislative or organisational changes

| Risk | Criterion | Qualitative characteristic | Quantification |
|--------------------|--|---|----------------|
| Non-transparency | X1: degree of competition for the award of a public contract | Public tender | 100 |
| | | Restricted competition | 70 |
| | | Negotiating procedure | 50 |
| | | Price tender | 30 |
| | | Direct award | 0 |
| Hidden information | X2: selection criterion | The most economically advantageous offer | 100 |
| | | Lowest price | 50 |
| | X3: the municipality staff involved in the contracting out process | Fundamentally agree | 100 |
| | have sufficient expertise in the technical parameters of the service | Agree | 50 |
| | to be procured | Disagree | 0 |
| | | Fundamentally disagree | 0 |
| Risk of hidden | X4: frequency of monitoring of the output of the contracted service | Regularly | 100 |
| activity | (how often the service is inspected by the municipality) | On an ongoing basis as required | 50 |
| | | Without monitoring | 0 |
| | X5: the procedure to be followed by the municipality in the event | Cancellation of the contract - termination | 100 |
| | of non-compliance with the obligations of the contract | Financial penalties | 70 |
| | | Demanding redress | 30 |
| | | Other procedures | 0 |
| | X6: duration of the contract - length of the contract | Up to and including 1 year | 100 |
| | | Up to and including 2 years | 70 |
| | | Up to and including 5 years | 30 |
| | | Indefinitely | 0 |
| | X7: the method of payment to the external supplier for the service | Payment for performance | 100 |
| | | Fixed payment + performance, i.e. a combination | 50 |
| | | Fixed payment | 0 |

occurred at the Slovak municipal level. Today, Slovakia might be characterised as a highly decentralised country (especially from the point of "municipal freedom"), and the Slovak decentralisation system respects all principles defined by the European Charter of Local Self-Government. The fragmented municipal structure is the most criticised issue related to the Slovak local self-government system. There are almost 2,900 municipalities and 5.5 million inhabitants in the country. Most municipalities are small, many with fewer than 1,000 inhabitants (for more, see Plaček et al. 2020).

Even very small municipalities use contracting out to deliver public and ancillary services despite their potentially low professional capacity – as apparent from the following information about the extent and the efficiency of contracting out in the Slovak municipal sector. This part follows our own original data, obtained through long-term research of the contracting out in the Slovak municipal sector; the data were obtained through primary data collection between 2001 and 2021 (Supplementary Table S2).

The data document developments in contracting out during the last 20 years. In recent years, externalisation has become dominant in municipal solid waste collection and removal. Local road maintenance and public lighting services are also contracted quite frequently. The undisputed reason for this is the limited staff and capital capacity of fragmented local authorities, which do not enable these authorities to respond flexibly to the increasing demands of their citizens for the scope and quality of these public services. The solution to this problem lies in harnessing the capacities of the private sector and switching from an internal to an external mode of service provision – contracting out public services (Supplementary Table S3). For ancillary services, the most commonly contracted out services are catering and transport services for staff, security services, and IT administration services. Again, these are services whose in-house provision would place increased demands on public organisations' capital or staff capacity (Supplementary Table S4). Conversely, some services are dominated by in-house provision: maintenance of green spaces is provided by local public services; building cleaning, maintenance, and management are provided by ancillary services.

When examining contracting out efficiency, we started with the standard simple comparison of internal and external costs concerning population and output units. Therefore, to assess the efficiency of contracting out public sector services more objectively, we have used performance indicators and compared the expenditure on service provision attributable to these performance indicators (Supplementary Table S5). The results were contradictory. In some cases, contracting out is a cheaper form of service provision; in others, the expenditure on externally produced services significantly exceeds the expenditure on internalised services. Overall, the results suggest that contracting out is, on average, slightly more expensive than internalisation (Supplementary Tables S6–S9).

A general problem with the data is the comprehensiveness of capturing the cost-of-service provision indicator, which cannot be guaranteed given the available data, especially when looking at the costs of internalisation (absence of cost centres in the early years of the research, their formal operation in the later years of the research). Moreover, when tracking the costs of externalisation, municipalities and public organisations do not track the transaction costs associated with procurement or the subsequent monitoring of external production. As mentioned above, this may be (at least partly) due to the fact that internalisation does not quantify the actual cost of providing the service, only the budgeted expenditure due to the non-functionality of the cost centres. Based on the analysis results, confirming a positive impact of contracting out on efficiency is impossible. Similar findings are

| Local | Detern | ninant | | | | | | | | | | | | | |
|-----------------------|----------------|----------|----------|--------|---------|-------|----------------|--------|----------|-------|-------|-------|-------|-------|-------|
| public service | Risk of | contrac | ting out | | | | | | | | | | | | |
| | Non-tra | ansparen | су | Hidden | informa | tion | Risk of | hidden | activity | | | | | | |
| | X1 | | | X2 | | | X4 | | | X5 | | | X7 | | |
| | 2010 | 2020 | 2021 | 2010 | 2020 | 2021 | 2010 | 2020 | 2021 | 2010 | 2020 | 2021 | 2010 | 2020 | 2021 |
| Municipal solid waste | 42.84 | 46.53 | 43.25 | 67.12 | 50.00 | 38.75 | 70.32 | 48.15 | 75.3 | 42.08 | 27.27 | 10.74 | 65.65 | 71.89 | 26.9 |
| Public lighting | 47.11 | 40.38 | 15 | 72.73 | 62.96 | 40 | 65.26 | 33.33 | 68 | 45.20 | 26.00 | 1.33 | 63.72 | 67.62 | 45.4 |
| Roads | 50.12 | 39.07 | 40.77 | 64.40 | 62.50 | 20 | 64.13 | 33.72 | 94 | 43.50 | 26.83 | 8.67 | 74.15 | 83.51 | 58.3 |
| Green spaces | 58.89 | 28.42 | 20 | 66.39 | 55.26 | 40 | 54.72 | 33.33 | 68 | 46.81 | 26.32 | 1.33 | 75.90 | 76.38 | 33.33 |
| Cemetery | 29.43 | 26.19 | 38 | 68.27 | 59.09 | 28.57 | 64.29 | 32.61 | 51 | 45.18 | 30.95 | 0.8 | 45.79 | 70.64 | 25 |
| Average | 45.68 | 36.12 | 31.4 | 67.78 | 57.96 | 33.46 | 63.74 | 36.23 | 71.26 | 44.55 | 27.47 | 4.57 | 65.04 | 74.01 | 37.8 |

presented also by the research of other authors (Pavel 2006; Ochrana et al. 2008; Rousek and Fantová Šumpíková 2009; Simões et al. 2012; Dijkgraaf and Gradus 2013; Gradus et al. 2014; Benito et al. 2015; Soukopová and Klimovský 2016; Soukopová et al. 2017).

Results: quality of contract management in the Slovak municipal sector

We conducted research on the quality of contract management using three statistically significant samples (2010, 2020, and 2021); a total of 3,416 contracts were evaluated. The authors repeated the 2010 research after ten years to check the progress. As the results for 2020 did not show visible progress, we also repeated the research in 2021. The results for 2020 and 2021 do not differ significantly. Thus, there is no impact on the results related to the periodicity of samples. Data were collected by primary data collection through a questionnaire distributed physically (2010) and online (2020, 2021). A higher rating for the contract means a higher quality of contract management with a positive impact on the elimination of contracting out risks and thus with a positive impact on the efficiency of contracting out. Table 2 shows the outcomes of contract management quality ratings for local public services. The table shows the average scores for all the evaluated contracts of a service for a given determinant.

The results show a high level of all the mentioned risks of contracting out local public services in Slovakia, stemming from the low quality of the management of local public service contracts. The most surprising result is that the low quality of local public service contract management in the earlier externalisation phase (2010), when municipalities had just learned how to manage contracts, did not improve with time. Most of the values for 2020 and 2021 are even lower than in 2010.

The situation has not improved in the area of non-transparent risk. Similarly, deterioration can be seen in the area of hidden information risk. The ex-ante evaluation of contractors for public contracts is insufficient. The main selection criterion of external suppliers is price. The most economically advantageous offer is used as the selection criterion very rarely due to the lack of expertise of the contracting out authority staff. Similarly, the risk of moral hazard has increased due to insufficient monitoring of external production. There seems to be a lack of incentive on the part of the staff of public institutions to select the most suitable external contractor (which would imply the need to have expert knowledge of the subject matter of the contract) and to then ensure, through rigorous regular monitoring, that a certain standard in the quality of the service is maintained. From this perspective, a sub-factor of the final effect of contracting out is certainly the quality of personnel management in the public institution/service provider.

Table 3 shows the outcomes related to the contract management quality for ancillary services in municipal offices.

The results related to the contract management quality in the area of ancillary services show similar results as for local public services. The results indicate serious problems in the quality of contracting out management in the municipal sector, increasing the risks associated with contracting out. The biggest gaps in the quality of contract management of the contracts we assessed in terms of risk can be seen first in the process of the public procurement of a service (often a price bid or a direct award is chosen as the procurement procedure, despite the fact that, given the nature and scope of the activity to be procured, the most appropriate procedure would be a public tender; often there is no clear definition of the subject of public procurement; the only criterion for the evaluation of tenders is the lowest price) and then in the process of monitoring the external production of the service and solving the identified problems (including irregular control of the external production, 'soft' penalties on the external contractor in the event of breach of contract by the provider, limited room for negotiation, and limited room for changing the supplier due to disproportionate contract lengths).

The question arises whether the really low quality of contract management is the reason contracting out does not bring the expected increase in efficiency. We will try to answer this question by testing the correlation between the quality of contract management and the impact of contracting out on the efficiency of service provision. We tested this correlation in a sample of 115 municipalities in 2020 and a sample of 54 municipalities in 2021. We use the statistical method of Spearman's correlation coefficient to measure the degree of dependence. Based on the data obtained, we observe the degree of dependence between the impact of contracting out on efficiency as the dependent variable Y and the factors determined by the quality of contract management as independent variables X. The results are presented in (Supplementary Tables S10 and S11).

Discussion of results

Our findings describe the situation in one country. Slovakia is a small, fragmented country with highly decentralised local selfgovernment, community history, and evident path-dependence. Such characteristics of the country should cause limited generalisability of our findings. However, most of findings are similar

| Table 3 Quality of contract management ancillary service in $\%$ | manage | ment a | ncillary | service | : in %. | | | | | | | | | | | | | | | | |
|--|--------|------------------|-------------------------|---------------|----------|--------|---------|---------|-------|------------------------------|-----------|----------|---------|-------|---------|---------|---------|---------|---------|---------|-------|
| Ancillary service | Detern | Determinant | | | | | | | | | | | | | | | | | | | |
| | Risk o | f contra | Risk of contracting out | | | | | | | | | | | | | | | | | | |
| | Non-tr | Non-transparency | ncy | Hidden inform | informat | nation | | | | Hidden activity/moral hazard | ctivity/I | noral hë | ızard | | | | | | | | |
| | ۲X | | | X2 | | | ХЗ | | | K4 | | | X5 | | | X6 | | Î | X7 | | |
| | 2010 | 2020 | 2010 2020 2021 2010 | 2010 | 2020 | 2021 | 2010 | 2020 2 | 2021 | 2010 2 | 2020 2 | 2021 2 | 2010 2 | 2020 | 2021 | 2010 2 | 2020 2 | 2021 2 | 2010 2 | 2020 2 | 2021 |
| Cleaning | 45.28 | 45.28 14.62 x | × | 58.34 | 56.52 | | | | | | | | 57.22 | 25.50 | 34.67 | | | | | | 61.60 |
| Catering for employees | 32.91 | 32.88 | 32.91 32.88 19.55 | 73.90 46.49 | | | 69.69 | | | 55.25 4 | | | | 39.85 | | | | | 56.32 4 | 45.89 3 | 7.82 |
| Building administration and | 52.11 | 25.67 17.14 | 17.14 | 73.83 | 57.50 | 42.86 | | 48.81 4 | 45.00 | | 44.44 | 41.67 5 | 50.32 | | 33.78 5 | 56.08 4 | 47.27 3 | 33.33 7 | | | 75.67 |
| maintenance | | | | | | | | | | | | | | | | | | | | | |
| IT administration | 38.52 | | 19.00 | 71.39 | 50.70 | | | | | | | | | | | | | | | | 9.45 |
| Transport | 28.81 | 25.29 | 25.29 33.75 | 69.58 | 56.94 | | | | | | | | | | | | | | | | 8.00 |
| Security services | 37.14 | 27.59 | 27.50 | 57.25 | 51.79 | 20.00 | 66.50 4 | 40.63 4 | 47.06 | 59.52 4 | 46.08 4 | 45.45 4 | 45.76 3 | 32.16 | 31.79 3 | 33.05 1 | 19.49 1 | 14.29 4 | 47.05 4 | 41.08 5 | 53.10 |
| Average | 39.13 | 25.63 | 23.39 | 67.38 | 53.32 | | | | | | | | | | | | | | | | 9.27 |
| Source: Own primary research. | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | 1 |

to those found by other authors concerning t the quality of the contract management of externalisation in different contexts. Only few issues discovered may be of a country-specific (contextspecific) character, and we try to emphasise them to make the parallels, implications, or lessons for other contexts evident and understandable.

In the background part we documented that contracting out is frequently used to deliver municipal services in Slovakia. Considering the highly fragmented territorial structure of the Slovak Republic, the use of this solution is not surprising. Small municipalities may use an internal form of production for organisational, technical, and economic reasons (see Soukopová and Klimovský 2016). From this point of view, Slovakia does not differ from most other countries worldwide (for example Switzerland – Steiner 2003; USA - Warner, 2006; Spain – Bel and Fageda 2006; Czech republic - Soukopova and Klimovský 2016).

The article confirms the high risk of non-transparency in public procurement processes. Inappropriate procedures may lead a contracting out authority/principal not to select the most suitable supplier/agent for external service production. Moreover, the non-competitive selections have a relatively limited chance of generating expected savings from a competition related to externalisation (Yakovlev et al. 2020; Langr 2018). Regarding this aspect, the Slovak situation is country-to-region specific.

The fact that even today, some municipalities breach the law and select the suppliers directly is critical (Langr 2018). The fact that competitive bidding is avoided by municipalities when selecting the supplier should not be typical for all types of countries. This issue should be a problem for countries without proper public procurement legislation such countries, there are very few) or with limited quality of the rule of law. In Slovakia, public procurement legislation exists and is in full conformity with European Union directives. However, this legislation still needs to be by many municipalities. Unsurprisingly, the existing academic literature does not deal with the "law avoidance" aspect when evaluating contracting out, as such an approach does not exist (in developed countries), or the authors do not want to reveal it, even if it exists. However, our findings provide a clear warning for fragile legal systems.

The region-specific issues are connected with three core findings. First, as there are legal options to avoid open competition, municipalities, in specific cases, use other procedures. However, as a result, in some cases, a tender is won based on the price offer from the selected service supplier, although this approach is somewhat risky for services (Pavel 2006). Second, even for open tenders, only a minimal level of competition generally occurs within the Slovak public procurement system (Nemec et al. 2020); the same is true for contracting out. A low number of bids limits the competition and may result in higher-than-market prices. Third, the lowest price selection criterion is dominant; this disproportionately increases the risk of a decline in the quality of the service given. In Slovakia and most countries in Central and Eastern Europe (and in many other less developed regions), the lowest price determines the winner of procurement of services (Nemec et al. 2020). The problem of focusing on costs/price and not on the costs/quality balance was indicated, for example, by Maurya (2018), researching the Indian healthcare system and seems to be characteristic for all regions with insufficiently developed procurement practices.

We used the example of ancillary services to document that the ex-ante phase (preparation of tender documentation) suffers from the limited capacities of the responsible individuals, which is not surprising in a highly fragmented municipal system. However, the issue of limited municipal capacities for high-quality contracting out is mentioned by most studies dealing with the topic, independently from the country's level of development (such as Brown and Potoski 2003). Because of this, it should have a (almost) universal character.

The contracting out process does not end with the selection of the supplier. This appears to be forgotten by many Slovak municipalities. Inappropriately defined contractual conditions (in particular, the length of a contract, penalties, and type of payment) together with insufficient monitoring of external production increase the risks of hidden activities and moral hazard. Moral hazard creates room for the external service provider to pursue its own interests at the expense of the interest of the contracting out authority, which should be the economic, efficient, effective use of public funds to provide the service. The Slovak situation is similar to what happens worldwide. For example, Sweden is well respected as a country with actual local democracy and amalgamated municipal structures equipped with high-capacity human and other resources. However, the study by Blomqvist and Winblad (2022) documents that post-contract management is also an issue at the level of Swedish municipalities.

Regarding the final quantitative analysis, the statistical significance of the individual factors influencing the outcome of contracting out varies for the services studied. The degree of competition, monitoring of external production, and type of payment to the external contractor appear to be significant for several services. From this it can be deducted that in contracting out municipal public services in Slovakia, the risk of moral hazard and information asymmetry is more pronounced among the risks described by the principal-agent theory and dominated by a risk that is not recognised by the standard contracting out theory, namely the risk of non-transparency of public procurement processes. The risk of moral hazard related to the lack of postcontract monitoring of external outputs indicates that contract management is perceived by employees of public institutions/ contractors as the management of the public procurement process. Upon publicly procuring a service, they cease to be interested in the service in terms of its scope and quality; at most they deal with subsequent complaints from citizens. This points to deficiencies in the personnel management of public institutions and to a lack of employee motivation and involvement in the results of the public institution. In general, therefore, the quality of the management of the contracting out process has an impact on the contracting out of public sector services in terms of the efficiency of their delivery.

Conclusions

The goal of this article goal was to contribute to the discussion on contract management in the public sector by analysing the quality of contract management in the Slovak municipal sector in the context of contracting out risks defined by the principal-agent theory. The main research question focused on the quality of contract management; we evaluated this by applying our own innovative methodology to the conditions in the Slovak Republic.

The findings regarding the quality of the contract management for externalisation of services in the Slovak municipal sector are critical, and very much in line with previous research by other authors mentioned in the literature review section. The most prevalent reserves in the quality of contract management of contracted services in the Slovak municipal conditions are related to the selection of the public procurement procedure; the irregular monitoring of the quality of external production; and the type of payment. Moreover, the quality of contract management does not improve with time, as our data covering more than one decade confirm.

Our findings are related to one country, but the policy lessons based on them can be generalised. Accountable local selfgovernments should learn from our research and incorporate critical suggestions into their decision making, selection and contract management processes. The policy lessons are apparent, as the critical requirement is a systematic process of public services provision aimed at delivering a high-quality service in a cost-efficient manner.

At the start of the contract management processes, the "market" should be investigated. This investigation includes the comprehensive evaluation of the service provision alternatives, i.e. comparing internalisation and contracting out in terms of achieving the stated objective of the cost-efficient provision of a quality service. This process can be referred to as service testing. The process of testing and comparing internalisation and contracting out would involve information obtained through the analysis of the legislative conditions for service provision, market research, reallocation of indirect costs (through the creation of cost centres), and estimation of transaction costs in the eventual contracting out of the service. This process would, of course, be supplemented by an assessment of the public institution's material, technical, and personnel capacities to provide the service required for internalisation of the service.

Such testing would be a perfect source for high-quality contract management, as it would provide a comprehensive definition of the subject of the public contract, define the subject of the procurement, and provide inputs for the estimation of the value and the price of the public contract based on the results of the market survey and the quantification of the total cost of the internal production of the service after the reallocation of indirect costs.

Regarding the public procurement process the open, transparent, fair, and effective competition should lead to critical savings; the most advantageous bid (MEAT method) should be the principal selection criterion.

Moreover, public organisations must remember that the contract management process goes on after the conclusion of the contract. It continues in monitoring external production and in building relationships with the external supplier. Building these relationships, in combination with properly defined contractual terms, eliminates a risk associated with contracting out services in the public sector: the risk of moral hazard. Such risks influence the final effect of contracting out, and the results regarding the supposed higher efficiency should be the focus of local politicians and administrators who are responsible for selecting the best mode of production and the best contract management for externalised services.

Data availability

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

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Author contributions

BMM: Conception and design of study, revising theoretical framework, acquisition of data, analysis and interpretation of data, Drafting the manuscript, revising the manuscript critically for important intellectual content, Approval of the version of the manuscript to be submitted. JN: Conception and design of study, revising theoretical framework, acquisition of data, analysis and interpretation of data, Drafting the manuscript, revising the manuscript revising the manuscript critically for important intellectual content, Approval of the version of the manuscript to be submitted. NM: Conception and design of study,

revising theoretical framework, acquisition of data, analysis and interpretation of data, Drafting the manuscript, revising the manuscript critically for important intellectual content, Approval of the version of the manuscript to be submitted.

Competing interests

The authors declare no competing interests.

Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

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Additional information

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Correspondence and requests for materials should be addressed to Nikoleta Jakuš Muthová.

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