

Citizens' Attitudes Towards Local Services Accountability and Transparency – The Case of the Sarajevo Canton

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Received: 9. 6. 2021

Revised: 24. 9. 2021

Accepted: 19. 10. 2021

Published: 30. 11. 2021

ABSTRACT

Purpose: The aim of this paper is to evaluate the perceived downward accountability and transparency of two public services – water supply and sewage and local road maintenance – in the Sarajevo Canton in Bosnia and Herzegovina (BiH).

Design/Methodology/Approach: An opinion survey¹ on a sample of 250 respondents and four binomial regressions were conducted to measure the factors that affect the perceived downward accountability and transparency of the two public services.

Findings: The results of binomial logit regressions indicate that in terms of perceived accountability and transparency of water supply and sew-

¹ The authors are grateful to Ms Amra Golic, MA, for collecting the data.

age, significant variables include gender, education, and satisfaction with the price the respondents pay for such service. Significant variables for perceived local road maintenance accountability include satisfaction with regular and winter local road maintenance, while for perceived transparency an additional significant variable is education.

Academic contribution to the field: Although publications and literature dealing with the implementation of New Public Management in developed countries are plentiful, this is not the case in transition countries. The paper examines the case of the Sarajevo Canton and contributes to the research of perceived downward accountability and transparency. It may serve as a basis for further studies on public sector management in other local communities or small transition countries.

Originality/Value: The paper contributes to the limited empirical literature regarding the perceived accountability and transparency and suggests ways to improve such.

Keywords: public services, perceived accountability, perceived transparency, citizens, Sarajevo Canton, binomial logit regression

JEL: H41, H83, L32

1 Introduction

The academic interest in and therefore literature that deals with the public sector performance and public sector management has had an exponential growth among researchers worldwide. The theory under the New Public Management (NPM) behind the empirical testing was first introduced by Hood (1991) in the UK and then in the rest of the world (Osborne and McLaughlin, 2005, p. 19). The theory itself originates from the need to reform the public sector and therefore public administration under Thatcherism that extended into NPM under plural state (Osborne and McLaughlin, 2005, p.19). Even though the theory itself is multi-dimensional and its scope has been expanding ever since its introduction, the overall idea behind it remains the same - the importance of the efficient, equitable, accountable, and transparent provision of public services has been set, measured, and evaluated as government's priority around the world. During the process of evolution of the NPM, the concept itself has been under debates and discussions, which are still prevailing.

Bosnia and Herzegovina (BiH), a small transition country, lags behind the economic and integration process towards the EU and the national statistics is either unavailable or poor in quality. In a study from 2017, authors estimate that there are 650 public companies in BiH (Draganić et al., 2017, p. 77). Based upon the analysis of the availability and contents of a sample of 100 public companies and their web sites, the authors conclude that a significant number of public companies do not have a web site and the websites of those that do are poor in quality of the available data, which implies low levels of both accountability and transparency (Draganić et al., 2017, p. 78). As evidence of

the slow transition process, Cegar and Parodi (2019, p. 7) in their research established that there are more than 550 public companies operating in BiH which inevitably have a significant macroeconomic impact on BiH economy.

Therefore, evaluating the perceived downward accountability and perceived transparency for the first time under such circumstances in the agent-principal setting is of great importance since it builds up to the seminal works of Draganić et al. (2017) and Cegar and Parodi (2019) for the BiH case. Our analysis is conducted in the Sarajevo Canton, which is the capital of BiH and serves as the main administrative, financial, and economic centre of the country. By using a method of a survey, we test the perceived downward accountability and perceived transparency in the provision of water supply and sewage services and local road maintenance in the Sarajevo Canton. Therefore, we set two main hypotheses that we wish to test empirically:

H1: Respondents' socio-demographic factors together with their attitudes towards selected public services affect the perceived downward accountability in their provision.

H2: Respondents' socio-demographic factors together with their attitudes towards selected public services affect the perceived transparency in their provision.

In the next sections, we provide the literature review and brief explanation of the position of the Sarajevo Canton in BiH. Research methodology section presents aims and objectives of the research, research design and data collection with the explanation of the research model and the variables that were used in four binomial logit regression models. The data analysis, main findings, and discussion together with research limitations section serves as a basis for the final chapter conclusions.

1.1 Literature review

The interest in efficient, equitable, accountable, and transparent provision of public goods and services has always occupied the interest of academia and researchers. The theoretical background regarding our research builds on the NPM, which was first introduced by Hood (1991) for the UK case and later disseminated and tested in other countries as well (for example, Hood and Jackson, 1991 for Australia or Osborne and Gaebler, 1992, for the USA). After firstly being introduced and examined in the Anglo-Saxon world, the NPM continues to be re-examined in theory and practice across the world too (Osborne and McLaughlin, 2005, p. 19; Barzelay, 2005, p. 27). An overview of the developments, contributions, and an ongoing debate of the NPM to public management and to public services started in the works of Osborne and McLaughlin (2005), but the discussion regarding the comprehensiveness of the NPM is still evolving and ongoing. The work of McCourt (2005, p. 240) re-examines the actual contribution of the NPM theory to its application in developing countries especially with the idea behind the 'one size fits all' concept introduced by the Washington Consensus.

Accountability and transparency as key concepts under NPM have been defined and discussed in the works of several authors. Hence et al. (2015, p. 347) discuss several important aspects of both accountability and transparency under NPM in the example of English local communities, as well as the inevitable interaction between accountability and transparency in theory and practice. The authors also define accountability as a “relationship where the agent is accountable to the principal (citizens or a community) for its actions” (Ferry et al., 2015, p. 347). They highlight its importance as a two-way agent-principal relationship, which can be exercised upwards (to a higher authority), downwards (to citizens or a community), or sideways (as part of a contract that has been agreed for mutual benefit).

Hood (2010, p. 989) provides a definition of transparency explained as “actions (decisions, rules, and information) undertaken by an agent that are visible from the outside”. Lyrio et al. (2018, p. 518) contribute to the definition of transparency in the public sector by referring specifically to the actions that the government undertakes so that the information is available to the external actors. The works of Ferry et al., (2015) also evaluated and discussed the concept of transparency, which was specifically analysed in its interaction with accountability within different worldviews. According to their findings, the downward accountability and transparency would match the Egalitarian view and the concept of accountability and transparency being ‘Siamese twins’ (Ferry et al., 2015, p. 352).

Hence, these concepts occupy the interest of authors around the world in several different areas, for example:

- The application of Data Envelopment Analysis (DEA) in the example of US school districts to measure input-output efficiency and in turn improving managerial control systems and public sector accountability (Chalos and Cherian, 1995);
- The theoretical discussion regarding the concepts introduced by the NPM, specifically the debate regarding citizen vs. consumer and the following practical discussion applied in the case of two countries – the UK as a developed and Nicaragua as a developing country (Myers and Lacey, 1996);
- The discussion and the debate (as the NPM theory suggests) about public sector performance management and its success in increasing government accountability by using the evidence from the administrative data (Heinrich, 2002);
- The two-case study analysis of the benefits justifying a tailored approach to system dynamics modelling in the public sector. The idea was to improve performance and foster decision makers’ accountability (Bianchi, 2010) specifically applied in the Italian case (Bianchi et al., 2010);
- The analysis and possible contribution of performance evaluation programme ‘Democratic Review of Administrative and Business Style’ (DRABS) in Wuhan in central China that could help build horizontal accountability and enhance vertical accountability (So, 2014);

- The nonparametric analysis of public sector transparency and countries' environmental performance in the sample of 49 countries across 1995-2000 period and an inverted 'U'-shape relationship between countries' public sector transparency levels and their environmental performance (Halkos and Tzeremes, 2014);
- The analysis of an exploration of the drivers and utility of performance reporting in the example of water agency in Australia that implemented a disclosure index to, *inter alia*, contribute to public accountability objectives (Tan and Egan, 2018);
- The analysis of accountability in higher education institutions in Korea in the works of Choi and Chun (2020);
- The analysis of how public accountability fully mediates the relationship between performance management system and organizational performance in Vietnamese public sector (Tran and Nguyen, 2020);
- The analysis of environmental accountability of public sector entities in pursuing internationally funded development projects in Sri Lanka and the following environmental sustainability or continuous environmental degradation (de Silva et al., 2020).

Apart from the aforementioned works, the theoretical concept of the NPM was also empirically tested in seminal works of Andrews and Van de Walle (2013, p. 762) in the sample of English local communities. The authors evaluated the NPM through the lens of citizens' perceptions of local service efficiency, responsiveness, equity, and effectiveness. Since the NPM extensively discusses public-private relationship, the authors found a negative relationship between public-private relationships and citizens' perceptions of efficiency, responsiveness, equity and effectiveness. However, the entrepreneurial strategic orientation and performance management have had positive association in citizens' perceptions of local public services in all four dimensions (Andrews and Van de Walle, 2013, p. 778). After Andrews and Van de Walle (2013) paper, authors around the world started using surveys in the evaluation of citizen's perception of several aspects of public goods and services. The term perceived accountability and perceived transparency were used in the works of Hvidman and Andersen (2016, p. 111) that applied a method of survey to evaluate the perceptions of public regarding the performance of hospitals.

Another interesting dimension of perceiving the concepts of accountability and transparency is linked to their interaction with the concept of corruption, which is an especially important factor in developing and emerging economies (Lyrio et al., 2018, p. 513). The authors provide an exhaustive literature overview of 63 papers over 1984-2013 period and conclude that there is a rise in the academic interest in the topic, but also the requirement regarding greater interaction between the government and the society as well as a need for greater citizen participation. With respect to developing countries that evaluated the concepts of accountability and transparency in the public sector, a survey conducted by the Adeyeye and Adeyeye (2019, p. 318) in the

sample of Nigerian public officials shows that combination of both accountability and transparency has a greater effect on service delivery than either concept individually. A survey among public servants was also used in the works of Šević (2005, p. 582), who analysed the process of performance management and measurement system-building in the public sector in the sample of managers/civil servants in Serbian local communities. Findings confirm the fact that the process of performance management and measurement system-building is still in its early stages in the region.

Similarly, the latest research on online local budget transparency of Croatian and Slovenian local communities (Ott et al., 2019, p. 167) indicates that the interest in assessing the determinants of transparency of public sector operations are gaining prominence in Central and Eastern European countries too. Latest research by Ravšelj and Hodžić (2020, p.125) highlights the fact that public administration's accountability and efficiency contribute towards business R&D activity in the EU. Zankina (2020, p. 89) for the case of Bulgaria assesses the success of public administration reform in the five dimensions where key two relate to accountability and transparency. The results show a delayed process with several identified obstacles.

From the literature review, we can determine that accountability and transparency are multidimensional issues linked with concepts of efficiency. It is known that when economists test and measure the efficiency of provision of public goods and services, two approaches can be implemented (De Borger and Kerstens (1996): single public service efficiency measurement (for example water services in Garcia-Sanchez, 2006 or refuse collection and street cleaning in Worthington and Dollery, 2000; Worthington and Dollery, 2001; Benito-Lopez et al., 2011) and the measurement of the overall (sub central) governments' efficiency from a global perspective (for example, overview provided in Narbón-Perpiñá and De Witte, 2018). In our work, we focus on the former by evaluating the perceived downward accountability and perceived transparency in two public services, water supply and sewage and local road maintenance, both provided as local public services. Bearing in mind the conclusions by Cegar and Parodi (2019) for BiH that the reforms and improvements in the governance frameworks of public companies are crucial to the enhancement of accountability and transparency and could in fact increase the BiH's GDP by three percent annually, we analyse these concepts in detail.

1.2 The position of Sarajevo Canton in BiH

BiH as a former Yugoslav country is currently constitutionally organised into two Entities, Federation of BiH (FBiH) and Republika Srpska (RS), and one district (Brčko District). Its capital has always been Sarajevo, which under FBiH constitution belongs to the Sarajevo Canton. The latest Census data (2013) indicate that there are 3,531,159 persons living in BiH. Sarajevo Canton occupies approx. 4.9% of the territory of FBiH and 2.5% of BiH territory. There are some 420,296 inhabitants living in the Sarajevo Canton (or 11.9% of BiH population), which makes Sarajevo the largest BiH city population-wise (Federal Institute of

Statistics, 2020, p. 13). Sarajevo Canton consists of nine municipalities where four inner-city municipalities (Centar, Stari Grad, Novo Sarajevo, and Novi Grad) form the City of Sarajevo, and the remaining five (Vogošća, Ilijaš, Ilidža, Trnovo and Hadžići) are outer city municipalities. Sarajevo Canton communal structure and the provision of public services are not uniformly organised. They are a combination of Cantonal public service providers, local community public services and/or private sector providers sometimes subcontracted by local community. Water supply and sewage as well as local road maintenance are no exception. As shown in Table 1, both water supply and sewage and local road maintenance are provided by Cantonal public service provider in all inner-city municipalities and Vogošća whereas in other outer-city municipalities they are both a combination of several public and private service providers.

Table 1. Water supply and sewage and local road maintenance service provision in the Sarajevo Canton

Municipality	Water supply and sewage service provision	Local road maintenance service provision
Centar	C	C
Stari Grad	C	C
Novo Sarajevo	C	C
Novi Grad	C	C
Vogošća	C	C
Ilijaš	C; M	C
Ilidža	C; M	C; M
Trnovo	C; M	C; M; P
Hadžići	C; M	C; M; P

Legend: C- Sarajevo Canton public service provider; M-municipal public service provider; P-private service provider subcontracted by municipality.

Source: authors.

2 Research methodology

2.1 Aims and objectives of the research

The research deals with determination of factors affecting the perceived downward accountability and perceived transparency in the case of selected public services in the Sarajevo Canton. We have selected two public services to which we wish to test the perceived downward accountability and perceived transparency: water supply and sewage and local road maintenance.

Therefore, the main objectives of our research are to provide answers to two questions:

Ob1: What factors affect the perceived downward accountability in the provision of public services, namely, water supply and sewage and local road maintenance?

Ob2: What factors affect the perceived transparency in the provision of public services, namely, water supply and sewage and local road maintenance?

2.2 Research design and data collection

In the period January 2020 to March 2020, we conducted a public self-administrated online survey by using social media (Google docs). We acquired 250 responses by using the exponential non-discriminative snowball sampling technique. The relatively small sample size will be used to determine the relationship at the level of the sample as results cannot be generalized at the level of the Sarajevo Canton's population. The situation represents the main limitation of our research, which we plan to conduct when more financial resources are available for such research. The survey was specifically localised to the Sarajevo Canton because we wanted to test citizens' perceptions regarding water supply and sewage and local road maintenance in the largest city in BiH. As indicated in Table 1, water supply and sewage as well as local road maintenance in the Sarajevo Canton are predominantly provided by the Cantonal public service provider in both inner and outer-city municipalities.

The structured questionnaire was divided into three segments: the first part related to socio-demographic characteristics of the respondents; the second part related to respondents' perceptions regarding their (dis)satisfaction with local road maintenance especially during winter; the third part related to the respondents' perceptions regarding their (dis)satisfaction with water supply and sewage maintenance and the price they pay for such service.

As a selected method of testing the perceived downward accountability and the perceived transparency, we have chosen binomial logit regression. We have conducted four binomial logit regressions, two for each analysed public services. In the next section, we provide data analysis and results of the conducted research.

3 Data analysis, main results and discussion with research limitations

3.1 Data analysis and model specification

In Table 2, we provide summary statistics of the observed sample. If we summarize the socio-demographic characteristics of our respondents' sample, we can determine that more than 70 percent of our respondents are relatively young people under the age of 34, mostly females (almost 64.8 percent) living in the outer-city municipalities (54.8 percent), who are employed (56.8 percent) and have completed higher education (at least graduate studies, 53.6 percent, Table 2).

Table 2. Socio-demographic characteristics of the respondents' sample

Variable	in %
Respondents' age by group	
Under 24	34.8
25–34	35.6
35–44	17.6
45–54	10.4
55+	1.6
Respondents' gender	
Male	35.2
Female	64.8
Respondents' municipality of residence	
Centar Sarajevo	9.2
Stari Grad	8.0
Novo Sarajevo	12.8
Novi Grad	13.2
Vogošća	7.6
Ilijaš	10.
Trnovo	2.4
Hadžići	15.6
Ilidža	19.2
Outside Sarajevo Canton	2.0
Respondents' employment status	
Employed	56.8
Unemployed (Unemployed, Student, Pensioner)	43.2
Respondents' education	
Primary and secondary	28.8
Higher education	53.6
Master, PhD	17.6

No. of observations: 250.

Source: authors.

Bearing in mind that satisfaction with public services determines the tendency to emigrate from BiH (Begović et. al., 2020) we asked respondents about the level of satisfaction with public services. The respondents' satisfaction with public services were assessed by using Likert 5-point scale where 1 indicates

-“highly dissatisfied” with service, 2 -indicates “dissatisfied”, 3 “neutral” (neither satisfied nor dissatisfied), 4 indicates – “satisfied” and 5 – “highly satisfied”).

Table 3. The summary of citizens’ responses regarding their satisfaction with public services

Q. No.	Question/ Statement	No. of obs.	1	2	3	4	5	Median	No* (%)	Yes* (%)
Q1	Please indicate your satisfaction level with the local road maintenance in your municipality of residence (maintenance relates to timely repairs and regular cleaning)?	244	20	66	86	54	18	3	54	46
Q2	Please indicate your satisfaction with the local road maintenance during winter times (maintenance relates to timely snow cleaning, removal of ice, etc.)?	245	24	70	77	61	13	3	56	44
Q3	Please indicate your satisfaction with water supply and sewage maintenance?	241	10	19	65	87	60	4	16	84
Q4	Please indicate your satisfaction with the price you pay towards water supply and sewage service?	242	29	41	79	59	34	3	43	57

* Yes/No responses exclude neutral responses (3) and are summarized as follows: 1 and 2 are summarized as ‘no’ and 4 and 5 as ‘yes’.

Source: authors.

From Table 3, in our sample, we can determine that respondents are mostly dissatisfied with local road maintenance in regular terms and during winter times too. However, they are relatively satisfied with the water supply and sewage public service as well as the price they pay for the service.

We have estimated four statements as dependent variables in four binomial logit regressions. The dependent variables were statements regarding respondents' perceptions about the downward perceived accountability and the perceived transparency in two sets of public services: water supply and sewage service, and local road maintenance. Since the dependent variables were asked as yes/no questions, Table 4 summarizes the responses coded as dichotomous variables, with response 'no' was coded as zero, and 'yes' as one.

Table 4. Descriptive statistics and explanation of dependent and independent variables

Q. code	Dependent variables	N. obs.	No (0)	Yes (1)
DAW	Does water supply and sewage service provider conduct its operations accountably?	238	63.9	36.1
DTW	Does water supply and sewage service provider conduct its operations transparently?	244	64.8	35.2
DAL	Does local road maintenance service provider conduct its operations accountably?	241	63.1	36.9
DTL	Does local road maintenance service provider conduct its operations transparently?	237	58.2	41.8

Source: authors.

Independent variables were coded as follows:

- *Education*: dichotomous variable, where respondents with at least university level were coded as '1' and respondents with degrees up to university level by '0';
- *Gender*: dichotomous variable (zero or one), where male respondents were coded by "1" and women coded by "0";
- *Statements*: "Please indicate your satisfaction level with the price you pay towards water supply and sewage service" – Water price and "Please indicate your satisfaction level with water supply and sewage maintenance" – Main water were coded as binary variables used only in two water supply and sewage service related regressions whereby responses "highly dissatisfied" and "dissatisfied" were coded as zero (0), neutral responses were not considered and responses "satisfied" and "highly satisfied" were coded as one (1);
- *Statements*: "Please indicate your satisfaction with the local road maintenance in your municipality of residence (maintenance relates to timely repairs and regular cleaning)?" – Main road and "Please indicate your satisfaction with the local road maintenance during winter times (maintenance relates to timely snow cleaning, removal of ice, etc.)?" – Winter road were coded as bi-

nary variables used only in two local road maintenance related regressions whereby responses “highly dissatisfied” and “dissatisfied” were coded as zero (0), neutral responses were not considered, and responses “satisfied” and “highly satisfied” were coded as one (1).

3.2 Main results of the research

After the explanation of the used dependent variables as well as the set of independent variables, the regression results are provided in Table 5.

Table 5. Regression results for four models with results from sensitivity analysis

		Accountability, water (Model 1)	Transparency, water (Model 2)	Accountability, roads (Model 3)	Transparency, roads (Model 4)
Gender		1.7507**	1.0906*	0.8464	0.7949
Education		-1.2274*	-0.6788*	-0.8436	-1.4029*
Water price		2.7046**	2.6603**		
Main water		2.0503	0.3649		
Main road				1.8130**	1.8048**
Winter road				2.8261**	2.2712**
Const.		-4.0998**	-2.1959**	-2.9426**	-2.2438**
No. of OBS		121	119	121	119
Linktest	LR chi2(2)	58.53	42.16	80.97	67.96
	p-value	0.0000	0.0000	0.0000	0.0000
Hosmer- Lemeshow test	HL chi2	HL(4)=1.45	HL(3)=0.36	HL(6)=4.43	HL(5)=5.02
	p-value	0.8347	0.9484	0.6187	0.4139
Average VIF		3.88	3.85	3.50	3.51

* $p < 0.05$, ** $p < 0.01$.

Source: authors.

Results of logistic regression in Model 1 (at 1 percent significance level) indicate that men are more likely to agree with the statement that water supply and sewage service provider is accountable in its operations than women. At 5 percent significance level, in Model 2, men are more likely than women to agree with the transparency statement in regard to water supply and sewage.

At 5 percent significance level, respondents with higher level of education are less likely to agree with statements that water supply and sewage service

provider is accountable in its operations as well as transparent (Model 1 and 2). Respondents who expressed greater satisfaction with the price they pay towards water supply and sewage service are more likely to agree with statements that water supply and sewage service provider is accountable in its operations as well as transparent (at 0.01 significance level, Model 1 and 2).

Results of Model 4 regarding local road maintenance indicate that respondents with higher level of education are less likely to agree with the statement that local road maintenance service provider is transparent in its operations (at 0.05 significance level). Respondents who expressed greater satisfaction with local road maintenance and with winter road maintenance are more likely to agree with statements that local road maintenance service provider is accountable and transparent in its operations (at 0.01 significance level, Model 3 and 4).

To test the suitability of the specification of our models, we used the Linktest and the Hosmer-Lemeshow test. The results of the Linktest indicate that the selected models are well specified (Table 5). Similarly, the results of the Hosmer - Lemeshow test indicate that the selected models fit the data well (Table 5). We also examined the presence of multicollinearity through the assessment of inflation variance factors (VIF). The results showed that there are no variables that cause a serious problem of multicollinearity ($VIF < 10$). The average VIF values of all explanatory variables are between 3.50 and 3.88 for the considered models (Table 5).

3.3 Discussion and research limitations

Even though our results can only be interpreted at the level of the analysed sample, our results are complementary to the results provided in the works of Andrews and Van de Walle (2013) in the example of English local communities tested on several NPM issues of perceived efficiency, effectiveness, responsiveness, and equity. This especially relates to the scientific contribution in the relationship between perceived accountability and efficiency. Similar to the results of Andrews and Van de Walle (2013), we have confirmed that the respondents' assessment of efficiency (the statement about the price of water supply and sewage service) contributes towards the perceived accountability of the local service provider. Also, in our brief analysis we have discovered that the socio-demographic factors as well as overall (dis)satisfaction of citizens or consumers (Myers and Lacey, 1996) are very important factors in assessing the downward perceived accountability and perceived transparency.

Although the presented research confirmed some former findings that socio-demographic factors as well as respondents' overall (dis)satisfaction with selected public services are very important in assessing the perceived downward accountability and transparency, our results ought to be interpreted with caution. The primary limitation of our research is related to the sample size and the inability for generalization. Further research needs to base the study on a larger sample size in order to acquire more robust and accurate results. Other limitations relate to included variables. Similar to previous academic research (Myers and Lacey, 1996; Andrews and Van de Walle, 2013;

Hvidman and Andersen, 2016), future research might include several other variables, which unfortunately are not publicly available or currently accessible in BiH. These especially relate to financial and economic performance indicators of the selected public services. Also, as in Andrews and Van de Walle (2013), the potential results (and variables) of a survey conducted among employees of several other public services might be added to the research so that it could contribute towards the evaluation of other NPM aspects such as efficiency, responsiveness, equity, and effectiveness. Finally, depending on available financial resources for such research, the questionnaire conducted in local communities across BiH would create more further-reaching results and would substantially contribute towards current perceptions about public service accountability and transparency in BiH.

4 Conclusions

The accountability and transparency concepts developed under NPM umbrella are gaining an increased interest among academics, practitioners, and policy makers. Accountability and transparency are two important pillars of good governance in both public and private companies. Although private companies are not completely without public oversight regarding their efficiency, accountability and transparency, their main responsibility towards successful business operations is aimed at their stakeholders and employees. In the public sector, related reforms and reforms of public companies specifically are, *inter alia*, aimed at increasing citizens' well-being. During this process, questionnaires about citizens' perceptions are used as an important tool in evaluating and assessing the success in providing public goods and services. This is especially important in the (post)transition countries, where accountability and transparency are important tools for tackling corruption.

Our survey was conducted in BiH capital in the example of two public service providers: water supply and sewage, and local road maintenance. The results indicate that respondents are relatively not satisfied with winter road maintenance and relatively satisfied with water supply and sewage maintenance and the price of the corresponding service they pay.

A conducted opinion survey related to water supply and sewage service and local road maintenance has showed very interesting results regarding the downward perceived accountability and perceived transparency. Our research confirmed both of our hypotheses and indicated that socio-demographic factors (primarily the respondents' education) as well as overall (dis)satisfaction with public services are important factors in assessing the downward perceived accountability and perceived transparency. We also find that the respondents' assessment of efficiency (the statement about the price of water supply and sewage service) contributes towards the downward perceived accountability and transparency. Some limitations of our research include the sample size, other possible use of currently unavailable variables as well as geographical reach of the study.

However, the findings show the multi-dimensional nature of the accountability and transparency concepts as well as their coherence with the concept of efficiency. Hence, the reforms in the public companies ought to be comprehensive and multi-dimensional. Apart from the measures that directly lead to increased accountability and transparency (for example, public data availability or legally binding regulation, etc.), it is necessary to introduce measures that will result in improved quality of public (goods and) services that ought to satisfy citizens' needs and expectations and finally bring the efficient use of resources closer to citizens (consumers).

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