

CITIZEN-CENTRED DESIGN OF PARTICIPATORY BUDGETING: A TRANSNATIONAL STUDY IN THE BALTIC SEA REGION

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ABSTRACT

Among the success factors of participatory budgeting (PB), Barbera et al (2016b) discuss responsiveness, in terms of “continuous attention to citizens’ needs” and the capacity to address collective needs. To date, there are diverse PB cases, that follow a managerial, more technocratic (less focused on citizens) logic, whereas others target radical democratic change or good governance improvement (Bartocci et al. 2019; Cabannes and Lipietz 2018). This paper aims to identify contingency factors, such as national, local and individual factors that influence the design of PB. Following the call for more comparative studies (Bartocci et al. 2022), needs of citizens in 17 municipalities in six European countries along the Baltic Sea region from originally 20,000 persons are analysed via a joint questionnaire. Relying on non-parametric tests, this analysis aims to identify links between citizens’ satisfaction, knowledge and expectations of their own involvement in the PB design and how it should be used from their perspective. The contribution of the paper is a critical rethinking of the respective stages and content of the PB creation process from the citizens’ point of view by highlighting which contingency factors drive citizens’ views on PB design stages and drawing managerial implications.

Keywords - citizen participation, citizen satisfaction, needs’ analysis, participatory budgeting, PB design

INTRODUCTION

Participatory budgeting (PB) has evolved as a critical element of public management movements in order to reshape the relationship between local governments and citizens and to increase the transparency of public sector finance (Brun-Martos and Lapsley 2017; Justice and Dülger 2009). It is one of the globally most successful movements in citizen participation in the 2000s. Since then, many different forms of PB around the world have been developed (Sintomer et al. 2010). Accordingly, the investigated Baltic Sea region (BSR) countries have a diverse history of PB as well and different definitions and (legal)

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settings for PB processes and therefore differ in their tendencies for PB design elements (Table 1 summarizes the status quo of all exposed countries below).

Finland: In Finland, PB has been known for around a decade. There is no definition by law, but The Association of Finnish Local and Regional Authorities (AFLRA) defines PB as a method that makes plans for spending joint municipal resources in close co-operation with inhabitants through joint discussion, planning and decision-making.¹ Therefore, PB is voluntary and, accordingly, there is no PB-specific legal framework. PB is often used for upgrading specific residential areas, e.g. for topics related to youth (e.g. Tampere or Espoo).

Germany: With about 80 cases (the first in Mönchweiler in 1998 (Sintomer et al. 2010)), Germany has some PB processes running.² Over time, the implemented process designs and budget sizes differ a lot, due to the fact that PB is voluntary and no uniform guidelines or legal definitions exist. Today, PB is mostly operated as a citizens' budget, where a (fixed) part of the budget is dedicated to the citizens exclusively for proposing projects and voting on them.

Latvia: PB was introduced in Latvia in recent years. In 2018, the city of Riga implemented the first ever PB process. Today, PB has no legal definition in Latvia and therefore it is a voluntary process. Regardless of its short history in this country, a definition of PB will be added to the legal framework in the near future and there is a current discussion about making PB mandatory from 2023 and beyond. But because of the missing experiences, the government tends to prefer the existing voluntary approach.³

Lithuania: In Lithuania, PB was first tested in a school pilot in 2013 before the first municipality, namely Alytus, implemented a PB process in 2018. All city residents from at least 16 years were able to vote for a maximum of five proposals. Other Lithuanian municipalities started to copy and adapt this process. Since its history is very limited, there is neither a legal definition nor a legal framework and, as such, PB is voluntary.

Russia: Russia also has a limited history of PB. There is also neither a definition nor a legal framework and therefore PB is a voluntary participation tool. The PB process design is mainly driven by the work of the European University of St Petersburg (EUSP). The process was adapted to the Russian circumstances and is mostly called "Initiative Budgeting". In this design, a committee of citizens is chosen by lot (Examples: Cherepovets, Sosnovy Bor and two districts of St Petersburg). This committee represents the citizens in the process. It is not common for all citizens to be eligible to vote.

Poland: In Poland since 2018, PB is mandatory for cities with county status with an amount of at least 0.5 % of the annual municipal budget.⁴ PB has no definition in the legal framework, but it is generally defined by the Sejm (parliament of Poland) as an informal phrase defining a separate part of the local government budget (usually the city budget), in which the designated expenditure is allocated to investment initiatives and projects directly reported by local society (individually or through relevant organizations). The idea of a participatory budget is one part of the concept of civil society and public oversight.⁵

Table 1: Budgeting designs in selected BSR countries

Legal characteristics	Finland	Germany	Latvia	Lithuania	Poland	Russia
Legal framework	Voluntary	Voluntary	Voluntary	Voluntary	Mandatory	Voluntary
Legislation of PB	No	No	No	No	Yes	No
Citizens as decision-making actors possible	No*	No*	No*	No*	Yes	No
Possible PB Approach	Consultative*	Consultative*	Consultative*	Consultative*	Collaborative	Consultative

* = Sometimes statutes are issued, that the local government follows the citizens' vote and therefore the citizens have de facto decision-making power.

Inevitably, the environment of the municipality shapes the perception of the PB process and its design. Among the critical success factors of PB, Barbera et al. (2016b, 1095) discuss responsiveness, in terms of “continuous attention to citizens’ needs” and the capacity to address collective needs. Depending on the goal of the PB process different designs exist. Mostly developed and implemented by local governments, often the needs of citizens are considered different in these processes. Just as, in research, a general refocus is requested (Beckett and King 2002) to introduce citizens’ needs into the budgeting process, so vice versa citizen-based information might drive a certain PB process design as well. Following the contingency theory, there is not always a best fit for every PB process design depending on contingency factors, but these factors like citizens’ needs might dictate a fitting PB process type for municipalities (Jorge and Mattei 2016). Hence, we address the citizen needs with respect to the implementation and design of PB. The paper aims to identify contingency factors, such as national, local and individual factors that influence the design of PB. To make a contribution to the PB literature on the process design, this study investigates the interests of citizens in a multinational survey in light of the Financial Management Reform Process (FMRP) model by Lüder (2002). In addition, this research aims to support the municipalities and public management in their creation of effective and efficient PB by providing generalized results of the critical factors and outcomes analysis. Thus, a comparative approach is sought by analysing the needs of citizens in 17 municipalities in six European countries along the Baltic Sea region. Usable data of more than 13,000 persons were collected based on a survey using a joint questionnaire to seek to identify links between citizen satisfaction, topic interests, and involvement in the PB design and use. Our results indicate that the PB process design might be advanced in a number of ways regarding the composition of the citizenry, their environment and the vision of the citizens. That contributes to wider participation goals and a successful PB process implementation by the local council and administration of the municipality.

The paper is structured as follows: The second section sets the scene and explains the background on PB with a brief literature review, an overview on the PB process with its design variables and an adaptation of the FMRP model by Lüder in the context of PB. The third section is devoted to the research design and the sample description, also by explicitly developing the research question and introducing the contingency factors. In

fourth section the findings are presented followed by the discussion, which includes the identified contingency factors and managerial implications, before the final conclusion and potential limitations.

BACKGROUND ON PARTICIPATORY BUDGETING

PB process and interests of citizens in the PB process

Sintomer et al. (2008, 168) define PB as follows: “participatory budgeting allows the participation of non-elected citizens in the conception and/or allocation of public finances”. PB has five cumulative characteristics:

- the financial dimension has to be discussed;
- the city level has to be involved;
- the process has to be repeated;
- there has to be some form of public deliberation;
- some accountability is required (Sintomer et al. 2008).

Sintomer et al. (2010) adopted a systematic well-known categorization on six so-called ‘ideal-types’ of PB with a focus on the European PB landscape. Despite this typology, systematic approaches for categorizing the PB process itself and aiming for a fit for certain conditions are rare (Krenjova and Raudla 2013). Another way to categorize participatory budgets is to differentiate the actors who are active in the process. For example, a study by Coleman and Sampaio (2017) found that different stakeholders pursue their goals through e-participatory budgeting (Kim and Lee 2012). Administrators might want to involve more people, but politicians deal with political ambitions, whereas the citizens have their own goals in the participatory budget (He 2011). Unlike the normal budgeting process, PB requires including citizens in a meaningful way. This inclusion can take place via various mechanisms (Ebdon and Franklin 2006). Possible influences by citizens could be made on resource allocation by proposals and referendums that affect incomes and expenditure in the long run.

We target citizens’ perception and characteristics to obtain information on how they imagine a PB process. Since there are numerous design approaches around the world and the level of information by citizens varies, there is a need to simplify it for the study and define the investigated variables for the PB process and the citizens.

Role of the citizens: Focusing on the citizens, many PB processes allow them to make proposals and/or vote on submitted proposals (Grillos 2017; Ruesch and Wagner 2014). Critics mention that despite the positive image of PB and the potential to have a financial impact, it is an element of a political game with society, a ritual and a form of superficial social participation that gives citizens the illusion of participation and decision-making in real local financial problems. Therefore, the financial impact of decision-making through participation might not be big enough in some PB processes (Poniatowicz 2014). There has to be motivation to share the power to a certain degree by the municipality (Siebers et al. 2021). Thus, regardless of design, citizens are potentially active in two different phases. First, citizens influence the discussion of what could be included in the budget

(Cabannes 2004). The possible projects, new sources of income, expenditures, and investments are proposals for now (therefore: proposal phase). Second, the citizens influence the pre- or final selection of the proposals. This selection is often organized as a kind of vote (therefore: voting phase). The decision-making in the voting phase will be followed by the implementation phase of the project, regardless of whether citizens or the administration will be involved in the implementation (Table 2).

Table 2: PB processes by actors' entitlement

PB-Phases	“Just propose”	“Just vote”	“Propose and vote”
Proposal phase (Who proposes?)	Citizens	Administration / Local government	Citizens
Voting phase (Who votes?)	Local government	Citizens	Citizens

PB topics citizens are interested in / parts of the budget citizens want to influence: Citizens' general interest in politics contributes to participation in political contexts (Mcclurg 2003). In the more specific case of PB, citizens may have different interests also varying with the steps of the PB process as well. For instance, there might simply be topics that may attract citizens more than others (Secinaro et al. 2021). Most academic literature is focused on infrastructure projects, as this is one of the focal points of the Porto Alegre PB process, the cradle of PB (Souza 2001; Wampler 2007). But there is no guarantee that this is also the case in a special European context, although environmental and mobility-related topics most likely are popular around the world (Im et al. 2014; Secinaro et al. 2021).

PB directions citizens want to influence: In all topics where money will be assigned by means of PB, the citizens may have different **interests** in the savings, income and spending of the municipality. In this respect, citizens' interest in investments is well researched (spending money – one direction), whereas their interest in other expenses, savings or income (other directions) is not (Sintomer et al. 2008).

Selected contingency factors that drive citizens' needs for PB process elements: The preferences for the mentioned PB process elements might be affected by citizens' socio-demographic factors and their satisfaction with their living in the municipality. Previous studies showed that sociodemographic and environmental determinants on the individual level influence the introduction of PB and some PB process elements. For the sociodemographic factors, citizens' preferences differ in general on certain topics by age, gender and income situation (Im et al. 2014; Klun and Benčina 2021). The education level itself is mostly positively correlated with the introduction of PB or civic participation (Harrison and Sayogo 2014; Klun and Benčina 2021; Soguel et al. 2020). This study goes a step further and investigates, if not just the education level, but the knowledge of PB is a driver for certain PB process elements. Different age groups (especially younger) have different preferences for topics (Collins et al. 2018). But this could also correlate with the family status, as older citizens tend to have children or live in partnerships and therefore have

other priorities in life (Soguel et al. 2020). Beside the topics, another PB design element could depend on the age of citizens. Younger citizens use other forms of civic engagement (Touchton et al. 2019). These digital natives are more into e-participation, whereas older citizens may experience barriers in pure online settings (Secinaro et al. 2021).

For the environmental factors, organisational structure (Ewens and van der Voet 2019) and the financial capability of the municipality is often analysed (Harrison and Sayogo 2014; Ríos et al. 2017; Zhang and Liao 2011) and in some studies has a positive effect on the introduction of PB. But that relates to the public administration as an organisation (Ewens and van der Voet 2019), not to tendencies of the citizens in such living conditions. Thus, living in a low-income municipality or an above average income environment might lead to other preferences for the PB design.

On the one hand satisfaction of the citizens is one often stated goal of PB (Boulding and Wampler 2010; Buele et al. 2020; Klun and Benčina 2021). On the other hand, satisfaction is rarely analysed as an impulse for PB. Often satisfaction is researched as an outcome of PB processes or during introduction in the light of transparency. If citizens get understandable information, the process was considered as transparent and leads to a higher satisfaction among citizens (Beuermann and Amelina 2018; Buele et al. 2020). Based on that, a possible dissatisfaction of citizens with their situation or an inadequate PB process might drive more than just the presentation of information but some alternative design elements.

Although a lot of the variables analysed in this study are already part of the literature on PB, mostly they are related to the likelihood of PB being introduced. The research focus lies on the public administration, or on a general design aspect of PB process elements like online vs. offline participation. The focus on citizens' view on PB process elements (van der Does and Kantorowicz 2021) and what variables could drive their perception of PB process elements is not studied enough to contribute to missing cause-effect-relationships (Schneider and Busse 2019).

Financial management reform process model and participatory budgeting

Since the successful case of Porto Alegre in 1989, PB has developed into a global participation tool. The literature on PB includes many diverse case descriptions around the world (Sintomer et al. 2008). As it is a process that was developed in practice, general definitions are made for PB (Bassoli 2012; Cabannes 2004; Sintomer et al. 2008), but an overall fitting conceptual definition is problematic regarding process steps, actors entitlement like citizens and administration (Aleksandrov et al. 2018), and implementation (Goldfrank 2007) including legal restrictions.

While some problems like activation (Lim and Oh 2016; Schneider 2018) are the same for all process designs, others depend on individual circumstances as designs differ greatly, from a more citizen-centred approach (Cooper et al. 2006) to more technocratic designs to improve administrative processes (Bartocci et al. 2019; Cabannes and Lipietz 2018). Based on the plethora of possibilities, the literature often aims for practice guidelines for process implementation (Lerner 2011). To evaluate PB processes, enabling factors need to be identified (Barbera et al. 2016b; Kim and Schachter 2013). But as Rosener

stated, effective and successful participation must be related to the goal of a participation process and based on known cause–effect relationships (1978), which are however are not yet fully discovered (Schneider and Busse 2019). Moreover, there is not even an agreement in the literature regarding the overarching objective of PB: enhancing satisfaction and trust or understanding the financial budget and the decision-making process or the like (Franklin et al. 2009).

Regardless of the exact goal, it is safe to say that citizens will get a role in a process, where they previously had no part. The budgeting process itself will undergo a systematic change by including citizens to a certain degree through a form of PB. Therefore, PB can be seen as a potential administrative reform that “is the application of the idea of progress to one area of human activity in a deliberately selective and therefore artificial way” (Caiden 1968, 353). The progress lies in the deliberation of the budgeting process at the local government level, which was not affected by citizens in this way before. Especially noting the transformation from traditional public governance over new public management to new public governance there is a shift for public decision-making from pure regulation, efficiency and financial results to a more effective and citizen-centred approach particularly focusing on citizen satisfaction (Wiesel and Modell 2014). Focusing on such reforms in public financial decision-making, the contingency theory in the Financial Management Reform Process (FMRP) model of Lüder (2002) takes numerous contingency factors into account that influence and impact a certain reform (Figure 1). The application of this model is used to explain, for example, the improvement of financial accounting and reporting (Haldma and Kenk 2014), internal and external drivers (Upping and Oliver 2011) or was used in the field of e-government (Mchran and Pagalung 2018). Therefore, it considers mainly non-financial factors and outcomes and as such is suitable to track not just the financial influence in better resource allocation but changes in public decision-making and perceptions from stakeholders such as citizens. This model gives a framework to sort contingency factors and to identify links and potential tensions when implementing a reform such as a PB process. The FMRP model by Lüder consists of eight different clusters (Jorge and Mattei 2016) and is adapted to the topic of PB:

Stimuli for PB: are contextual variables that influence the need for reforms. Weak financial situations, crisis or movements, maybe even international development programmes can be considered as stimuli. In the context of PB, a call for more deliberation and an increasing political disenchantment will impact such a form of participatory budgeting to include citizens in the financial decision-making. Stimuli have a direct impact on political reform promoters, e.g. PB might be a trend that local governments take into account to please citizens and increase their satisfaction and gain proposals for the community on certain topics. Also, international programmes, like the World Bank, that normally act as reform drivers might be stimuli, as otherwise no PB processes would be implemented in many municipalities.

PB reform drivers: are commissions, standard-setting bodies, consulting firms or scholar networks and international programmes that influence the political reform promoters on a local and national level. Therefore, EU-funded projects or the project of the World Bank act as such reform drivers for PB and support local authorities during the implementation process.

Political reform promoters: are members of the government (local council or administration) or the parliament.

Institutional arrangements: are contextual variables that impact the final reform concept and the implementation before the final outcomes. This could be requirements by the legal system or state and administrative structure. Maybe legal changes are necessary to implement a PB process correctly. If PB is already implemented, the experience in it might be a factor. Also, the culture of the place should be taken into account. Based on that, the social and urban setting in different municipalities might not just influence the process design but also the perception of the design by the citizens.

Stakeholders: are affected by the new concept of PB. Different stakeholders have different influences on reform promoters and are affected by the reform concept differently. In this study, the focus is on the citizens' perception and therefore on the stakeholder group of citizens, as their perception is crucial for the success of such participative reform of the budgeting process. Therefore, characteristics of the citizens, such as their satisfaction with as well as their education or more specific knowledge about the concept of PB in general, their interest in certain topics and their socio-demographics have to be taken into account.

Reform concept: is the final formulation of the planned change of an accounting system. It has a direct impact on the stakeholders and the implementation strategy that follows. Regarding the surrounding factors, a fitting PB design concept will be created. The role of the citizens will be defined (e.g., proposing projects or just voting on projects), what their decision power on the budget will look like and in which topics they will participate in the budgeting process.

Implementation strategy: determines how the reform will be implemented. This will result in different attributes of the different PB design variables (PB topics, role of the citizens, part of the budget and PB directions). For example: if in the reform concept the citizens will have a proposing role, then this will lead to a process with a proposal phase.

Outcome of the reform or a reform stage: the positive or negative result of the reform. For PB, a better resource allocation and increased satisfaction of the citizens are possible goals, or the well-being in general (Campbell et al. 2018). This will depend on the PB design variables and how the PB design variables and the PB results are perceived by the citizens. If citizens do not accept or like the process and the results, they will not participate and there will be no increased satisfaction or a better resource allocation due to the new perspective from the citizens' view.

In this study, a special focus lies on links between citizens as stakeholders and their perception of the concept, implementation and outcome of a reform like PB. The result might be a specific PB process, depending on its contingency factors. The perception of this PB process by the citizens is crucial for their participation and feedback on the process. In order to create a successful PB process, the knowledge of citizens' needs and perception might be useful too (Pandeya 2015). The contingency model is adapted in that way, so that it is not applied to compare different developed processes, but to look at the PB process design, implementation and outcome through the citizens' lense. This paper adapts the FMRP model of contingency theory from a citizen's view to the topics of PB and

investigates the influence of certain variables on different design variables in a PB process (Figure 1 in section 3). Based on the FMRP model, theses for contingency factors are generated for future research.

RESEARCH DESIGN AND MEETHODOLOGY

Explorative research model and research question

As outlined, previous PB research lacks cause–effect relationships and different perspectives on the PB process design. There is neither a common model for a systematic categorization nor a special theory for PB or the process design of PB. Additionally, there is very little knowledge about citizens’ perceptions of PB design and what influences their views. Insights on the perception of citizens might raise the information base for the administration and municipal local councils. The gained knowledge could lead to improved (citizen-centred) PB process designs and increase the acceptance of PB and therefore the participation by citizens in such processes. Therefore, the concept of PB is linked to contingency theory and the following research question (RQ) is addressed:

RQ: Which contingency factors influence citizens’ perceptions of their involvement in the PB process?

As such, potential factors of the citizens’ environment and personal circumstances are linked to PB process design elements. As this is an explorative research design no specific hypothesis can be generated for each potential factor. Nevertheless, we expect that these factors will have an impact on the identified design elements.

National differences are not part of the testing, as national differences have too many causes to elaborate and are mostly not the origin of different designs (Baiocchi and Ganuza 2014). The differences take place at the municipal and individual level as these are the dimensions where PB operates (e.g. national frameworks regarding PB will effectively influence the design at the municipal level).

At the first level are the municipality-related factors, which fit institutional arrangements in the FMRP model. One is the legal framework, which is considered as voluntary or mandatory. The mandatory PB in this sample has existed for many years and is therefore an experienced PB municipality. All voluntary participatory budgets are new adopters of the concept. Living in a municipality with a mandatory participatory budget might lead to different perceptions of the design PB variables. The next factor is rural or urban setting (supplemented by the population density). Living in a more crowded place with a fast accessibility to different services might influence the citizens in their preferences for certain topics. Additionally, the financial situation that citizens live in might call for different design approaches as a municipality with a high net income per citizen in comparison to the national income per capita⁶ (“better” financial situation) provides other circumstances that drives participation.

For the citizen-related factors socio-demographic factors (e.g. age or family status) might lead to differences in participation preferences due to other interests (e.g. citizens with children might focus on education). Additionally, the knowledge of the PB concept might

produce some awareness for the concept and lead to different perceptions of the PB design variables (e.g. what topics are good to address via PB, or a better imagination of a role to influence the process). Satisfaction was previously identified as a potential stimuli and goal of the PB. According to that, the satisfaction of the citizens might also lead the preferences, as dissatisfied citizens wish for a more influential role than satisfied citizens (Dowding and John 2008). On the other hand, more satisfied citizens identify themselves to a higher degree with the municipality and participate more in a co-productive setting like PB (Mok 2020). Because of the possibly contrarian thesis, no directed hypothesis will be generated, but therefore a certain PB design might be preferred by satisfied/unsatisfied citizens and be more suitable to address the goal of citizen satisfaction.

The identified variables are highlighted in grey in Figure 1 and embedded into the FMRP model. They are separately linked to the mentioned PB design variables by using different statistical methods (depending on the variable's measurement type). The independent and dependent variables were mostly drawn from discussions among academic experts and a so-called "PB-type groups' analysis", which is one intellectual output of the EmPaci project.⁷ The variables were not tested as a whole model, because of the explorative nature and therefore are missing existing cause-effect relationships on which to base a reliable model. In the following, significant (individual) relationships of the dependent and independent variables will be discussed to provide potential theses for further research in a more general setting.

Measurement of certain PB design variables

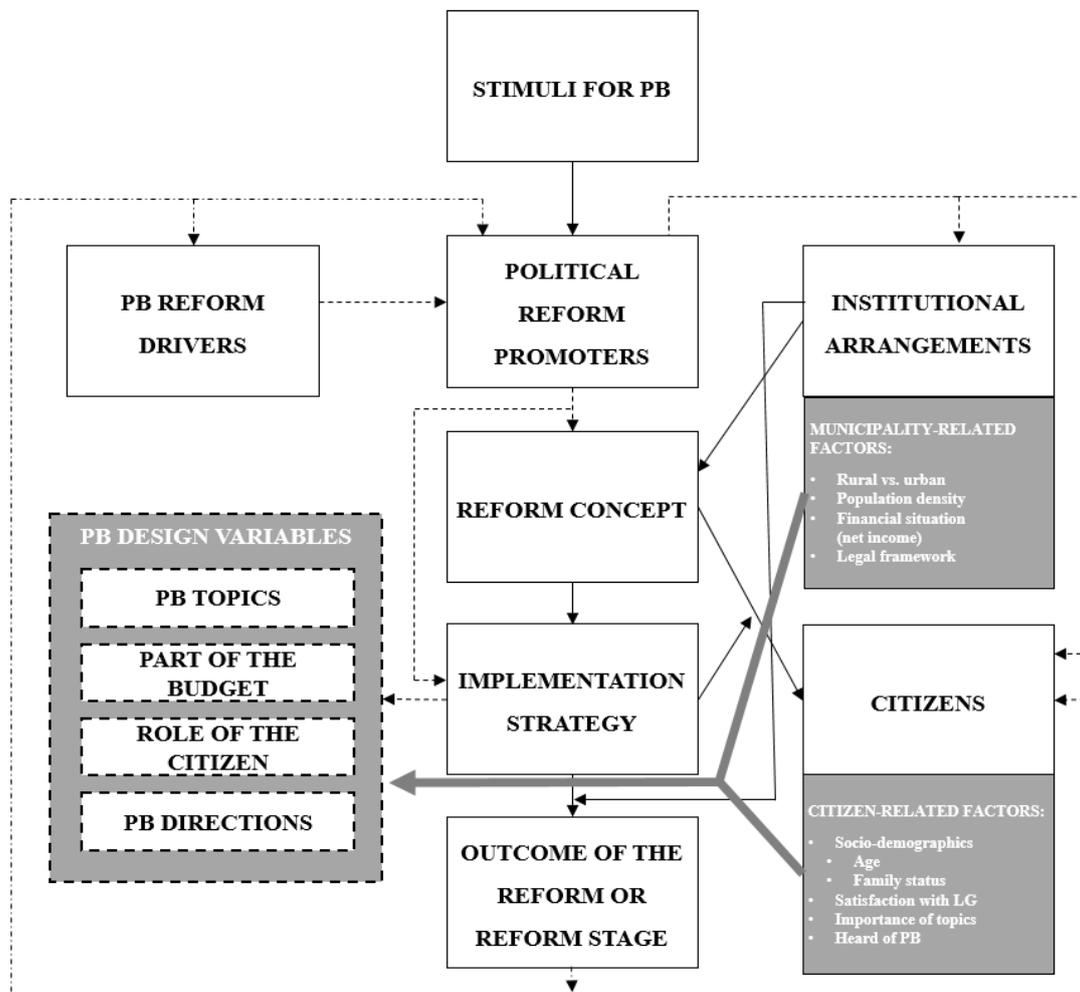
For the testing the two design variables "parts of the budget" and "role of the citizens" were operationalised in the following way. For the budget part analysis, the scale was converted to an ordinal scale from "specific topic" = 1, over "special areas" = 2 and "part of the budget" = 3 to "full budget" = 4. Therefore, the category "no preference" was omitted.

The role of citizens is also transformed in an ordinal scale. The three categories are: "Just propose" = 1, "Just vote" = 2, "Propose and vote" = 3. They are arranged by the entitlement of citizens in the decision-making process, from "Just proposing" influencing the input but not the final decision, through "Just vote" influencing the final decision (not the input), to "Propose and vote" influencing the input and the final decision.

For the PB directions dichotomous variables are used, e.g. "Interested in how the municipalities spend the money: yes or no?"

For the analysis of the model, correlation tests on different variables are conducted to uncover potential impact factors on PB process design components.

Figure 1: Adapted FMRP model – citizens’ view on PB



Source: based on Lüder (2002).

Survey design and sample

This study follows a quantitative approach by conducting a survey in order to explore potential contingency factors of citizens' perception based on the FMRP model (Figure 1). Given the nature of the PB process design, many of the variables are categorical and the scale of the items is therefore nominal or ordinal. Jointly, a questionnaire was developed through several rounds of discussions and tests among the researchers. It was developed in English and later translated into the six national languages by native-speaking members of the research team.⁸ The document consists of four parts: Part I contains mainly questions about political interest as well as the evaluation of different forms of political engagements; Part II collects data about the municipality-related satisfaction with the home municipality and a ranking of several areas of living by importance – measured by a Likert scale. The measurement was based upon the construct used by Zenker et al. (2013). This four-factor model covers the dimensions of “urbanity and diversity”, “nature and recreation”, “job opportunities” and “cost-efficiency”. Additionally, the overall satisfaction is surveyed; Part III consists mainly of categorical questions about PB experience, interest in PB topics, PB process designs and their elements, PB implementation and information; Part IV includes the demographic data like age, family status, and education.

In 2019, the survey was conducted in 17 municipalities in six different Baltic Sea region countries, namely Finland, Germany, Latvia, Lithuania, Poland and Russia (total sample size $n = 20,276$), both as an online and offline questionnaire. To reach as many citizens as possible, the data collection was adapted to the corresponding municipality after a double blind translation. Therefore, the survey process, collection places and time frame differ as presented in Table 3.

Table 3: Data collection in the BSR sample

Country	Timeframe	Offline	Online
Finland	October 2019	paper sheets were sent to citizens with random sampling	link on the website of the municipality
Germany	September 2019	conducted during information events, in schools or the city hall	link on the website of the municipality
Latvia	November to December 2019	paper sheets were distributed via libraries, schools and social associations	via the website and social media accounts of the municipality
Lithuania	November to December 2019	distributed by sending electronic letters to the institutions, organizations and residents of the investigated municipalities	local online platform
Poland	October to November 2019	-	link on the website of the municipality
Russia	December 2019 to February 2020 (multiple municipalities)	paper sheets distributed via administration and local activists or employees e.g. sellers of shops, employees of post offices, public utilities personnel	link on the website of the municipality

The sample countries stem from the EU-funded project “Empowering Participatory Budgeting in the Baltic Sea Region” (EmPaci). The majority of the BSR areas are characterized by a low population density, i.e. a large spatial fragmentation of living areas of the inhabitants. This leads to challenges for public authorities and councils when it comes to involving all citizens in joint projects and to discuss relevant issues with all citizen groups. Instruments are needed here that enable and encourage the entire citizenry to take part in decisions of their municipality, so that the present analysis is devoted to supporting the setting up of PB processes that meet the needs of citizens. A description of the surveyed municipalities and some key data of the sample are shown in the Appendix in Table A and B.

RESULTS

Description of national data

The following sections address national differences and similarities regarding the topics that citizens would like to influence with the help of PB, which part of the budget and direction they would like to influence, and which role citizens would like to play.

PB topics citizens are interested in: In the questionnaire, citizens were asked which of a given list of budget areas/topics they would like to influence and vote about. Multiple answers were possible. Table C in the Appendix shows that the PB topics that citizens want to influence are very diverse in terms of the countries. In five of the six BSR countries (Finland, Latvia, Lithuania, Poland and Russia), citizens find health services to be of high relevance.

For the FMRP model, the legal and historical environment impacts the reform concept and outcomes of a PB process. Certain topics are limited to a lesser influence by the local government (cut by the legal framework) and cannot be addressed in a PB to a large extent (see health or education services). Cultural and social influences might drive citizens to have different priorities on some topics. The difference between what topics are legally possible in the reform concept of a participatory budget and what citizens want to influence due to society triggers tension as the same environment limits the outcomes of PB processes because of a possibly suboptimal process from the citizens’ perspective.

Role of citizens: With respect to the PB design, i.e. the process steps that are asked for by citizens, there are significant differences between the countries at the 1% level ($\chi^2(10) = 611.503$, $V = 0.148$). The relative distribution of the answers to the question whether citizens should just propose, just vote or propose and vote are shown in Table C in the Appendix. Whereas in Poland, Russia and Germany, citizens have a tendency to “propose and vote”, Latvian, Lithuanian and Finnish citizens tend to be more interested in “just vote” for proposals. In total, the “propose and vote” design is far ahead of the “just vote” design. The “just propose” design may be the least attractive to the participants.

The results are of interest from the perspective of co-production of public services (Barbera et al. 2016b; Sicilia et al. 2016). Barbera et al. (2016b) revealed that citizens perceived PB most positively when they were involved in both steps, proposing and voting. Still, one could argue that the opportunity for citizens to design and propose their own

ideas is highest in the proposal phase, so it is interesting that this phase was not ranked higher (Table D in the Appendix). However, the focus seems to be on the final decision right for the voting and thus implementation of projects, so that they perceive their influence (Barbera et al. 2016a).

The reasons for these national differences can be found in manifold explanations. Such historical, cultural and social circumstances could be stimuli and institutional arrangements regarding the FMRP model, influencing the PB design. Additionally, what applies to the PB topics also applies to the role of the citizens. Legal restrictions might reduce a PB process concept and implementation despite citizens' desires.

Part of the budget citizens want to influence: There are significant large differences in the preferences between the countries with respect to the part of the budget citizens want to influence ($\chi^2(15) = 1,603.599$, $p < 0.001$, $V = 0.201$). As the Table 4 below with the relative frequencies shows, Finnish, Lithuanian and Polish citizens want the full local government's budget to be subject to PB. Instead, in Germany and Russia, citizens only want the PB process to cover a specific part of the budget and in Latvia only special topics are asked for. These differences are hard to interpret, as these preferences could be the result of a variety of understandings of PB. For example, in Poland, PB is mandatory and bigger Polish municipalities have to spend 0.5% as a participatory budget. That is, the Polish legislator stipulated that in cities with so-called "powiat rights"⁹ the implementation of the participatory budget is obligatory.¹⁰ Detailed provisions referring to the procedures for the participatory budget procedure will be codified based on the resolution of individual Polish municipalities. Still 0.5% of the budget would be a "part of the budget", but it is indeed a very small part. So Polish citizens may express their wish to have a bigger impact on the budget.

Table 4: BSR sample — Desired PB budget influence

Part of the budget	Finland	Germany	Latvia	Lithuania	Poland	Russia
Special topics	13.5%	24.6%	41.5%	11.7%	6.3%	34.8%
Special areas	28.8%	15.0%	28.7%	33.0%	23.8%	13.0%
Part of the budget	27.1%	43.8%	6.3%	17.5%	31.4%	35.3%
Full budget	30.6%	16.7%	23.5%	37.7%	38.4%	16.9%

Depending on the legal systems, different parts of the budget may not be available for a PB process. The reform concept is determined by the institutional arrangements. Nonetheless, citizens' perceptions differ a lot in the examined countries.

PB directions citizens want to influence: The different countries have different focuses on financial resources. In general, citizens in all countries have the highest preference on what the money is spent on. The exception is Poland, where the participants are highly interested in the incomes of their municipalities. This is notable because Poland is the only country with a mandatory PB. Citizens in this country are more familiar with the concept of PB and, therefore, may be more interested in the financial situations and directions of their municipality. This might translate to the individual level, as citizens with a certain knowledge of PB might desire to get involved in the decision-making of incomes, not just investments (Table 5).

Table 5: BSR sample – PB directions in the countries

Part of the budget	Finland	Germany	Latvia	Lithuania	Poland	Russia	$\chi^2(5)$	V
How to collect money	39.4%	30.0%	25.7%	37.2%	72.2%	10.4%	3,670.64	0.480***
How to save money	43.9%	34.1%	48.8%	52.8%	30.9%	41.9%	169.32	0.103***
How to spend money	92.5%	94.8%	81.0%	75.6%	47.1%	52.9%	1,156.44	0.269***

Municipality-related factor

Following the overview in Figure 1, in this section the influences of factors related to the municipalities' role of the citizens and part of the budget are analysed for differences regarding the topics of PB.

PB topics citizens are interested in

Rural or urban setting¹¹: The national differences were highly significant, with medium and large effects in many cases. These differences could have their origin at the municipality level, as cultural differences are contingency factors in the FMRP model. According to that, we identified the rural or urban setting citizens live in. Only “education” ($\chi^2(1) = 0.188$, $V = 0.010$) and “sport services on a 1% level” ($\chi^2(1) = 0.021$, $V = 0.018$) issues are not significantly influenced, which could mean that these topics are equally (or less) important for citizens regardless the surroundings of the municipality. Otherwise, the differences are significant, but very weak. The biggest effect sizes concern the “Infrastructure”, the “Central administration” and the “Health services”. “Infrastructure” ($\chi^2(1) = 198.697$, $V = 0.065$) and “Central administration” ($\chi^2(1) = 70.289$, $V = 0.066$) is more of an issue in rural regions (biggest difference to urban areas). The local administration might be less available to rural citizens than to their urban counterparts. “Health services” on the other hand, is prioritized slightly higher in urban regions ($\chi^2(1) = 283.631$, $V = 0.049$). Although these effects of living in a rural or urban municipality are negligible ($V < 0.1$ for $\chi^2(1)$), they might give some insight into potential factors that influence citizens' preferences for certain topics. Citizens in rural regions might be more interested in infrastructure, because it is more critical to get to different facilities and places than in an urban setting (e.g. public transport and roads) (Table 6).

Table 6: BSR sample — Environmental impact on PB topics

PB topics	Rural vs urban				Countries	
	Rural	Urban	Sig.	V	Sig.	V
Education	53.1%	54.2%	0.188	0.010	0.000	0.261***
Cultural affairs	34.1%	31.0%	0.000	0.031***	0.000	0.112***
Social affairs	45.3%	42.9%	0.004	0.023***	0.000	0.140***
Youth affairs	35.7%	32.3%	0.000	0.034***	0.000	0.160***
Urban planning	25.1%	22.2%	0.000	0.033***	0.000	0.157***
Health services	54.4%	59.4%	0.000	0.049***	0.000	0.254***
Sport services	19.4%	17.9%	0.021	0.018**	0.000	0.198***
Infrastructure	30.0%	24.0%	0.000	0.065***	0.000	0.107***
Environment	21.6%	24.2%	0.000	0.029***	0.000	0.110***
Ecology	15.9%	13.8%	0.000	0.028***	0.000	0.137***
Tourism	16.8%	14.6%	0.000	0.032***	0.000	0.128***
Central administration	16.0%	11.4%	0.000	0.066***	0.000	0.148***

Legal framework (mandatory vs voluntary PB): If PB is mandatory, citizens might have a different view on topics in the participatory budget. Especially if the PB process has been running for some time (as in this sample), citizens learn what topics can be addressed in a decent way by the administration and the government. As a consequence, they might be more interested to address these topics through this participation tool, whereas citizens in legal systems with no mandatory PB usually have little experience with PB and therefore desire to influence all topics. The survey results indicate the biggest differences between a mandatory and a voluntary PB legal system are seen in the two topics education and health services. These topics are usually the ones citizens wish to change the most but at the same time these topics are least likely to be influenced at the local level in most municipalities. There is a chance that citizens in a mandatory system learn to adapt and focus on other topics in areas that are impacted directly by PB. In addition, social affairs, youth affairs and urban planning attract significantly lower demands from citizens in a mandatory system. In addition, Ecology, tourism and sport services attracted higher interest in the mandatory system, with negligible but significant effects (Table 7).¹²

Table 7: BSR sample – PB topics in different legal systems

PB topics	Rural vs urban			
	Voluntary	Mandatory	Sig.	V
Education	53.1%	54.2%	0.000	0.229***
Cultural affairs	34.1%	31.0%	0.000	0.095***
Social affairs	45.3%	42.9%	0.000	0.118***
Youth affairs	35.7%	32.3%	0.000	0.134***
Urban planning	25.1%	22.2%	0.000	0.122***
Health services	54.4%	59.4%	0.000	0.201***
Sport services	19.4%	17.9%	0.000	0.049***
Infrastructure	30.0%	24.0%	0.493	0.005***
Environment	21.6%	24.2%	0.000	0.047***
Ecology	15.9%	13.8%	0.000	0.032***
Tourism	16.8%	14.6%	0.000	0.068***
Central administration	16.0%	11.4%	0.000	0.037***

Rural or urban setting: Citizens in rural areas have significantly different preferences than citizens in urban settings ($\chi^2(2) = 497.087$, $V = 0.188$). In rural areas, the preference tends more to less influential designs. Rural citizens prefer a pure voting process slightly over a process including proposal and voting. Urban citizens in contrast have a clearer preference for a process including both. The explanation for this has to be further researched, because financial factors and individual characteristics of the citizens might influence that perception (Table 8).

Table 8: BSR sample – Role of citizens in rural or urban setting

Role of citizens	Rural	Urban	Total
Just propose	18.4%	22.0%	20.8%
Just vote	42.7%	24.4%	30.6%
Propose and vote	38.9%	53.6%	48.6%
Total number	4,732	9,268	14,000

Financial situation: Looking at the financial situation¹³ it is negatively correlated with the role of the citizens ($r_s = -0.113$, $p = 0.001$, $n = 8,184$). This leads to the assumption that citizens in a surrounding with a weaker financial situation compared to the rest of the country tend to demand more power in the decision process. That indicates that less than ideal circumstances push the will of citizens to change the current state and prefer PB processes with more participation power for themselves in the process.

Part of the budget citizens want to influence

Financial situation: Citizens in a place with a better financial situation want to influence a greater portion of the budget ($r_s = 0.138$, $p = 0.001$, $n = 7,875$). This might be because in a weak financial situation, smaller parts of the budget already have an impact and single projects will change something, whereas in a better financial environment changes and improvements of citizens' lives require discussions about bigger parts of the budget. Further tests including such environmental factors like the financial situation of the municipality, supported by citizen-related factors like individual income could add more insight to these differences as, to the best of our knowledge, the capture of the surrounding of municipalities has not yet been further empirically researched in the PB literature.

Legal framework (mandatory vs voluntary PB): Living in a mandatory PB framework, citizens have a slightly significantly higher interest in participatory budgets with a bigger part of the budget ($U = 6,072,904.5$, $Z = -19.445$, $p < 0.001$). There is less focus on special topics and more tendency towards the desire to influence the full budget. On the one hand, once citizens are in a matured mandatory legal system and PB is part of their life, citizens might wish for more. On the other, in this special case the Polish municipalities are obliged to provide 0.5% of the full budget. So, this small percentage (although millions of euros) might push this perception of the citizens to influence the full budget even more (Table 9).

Table 9: BSR sample – Part of the budget influenced by legal framework

Part of the budget	Voluntary	Mandatory	Total
Special topics	31.1%	6.3%	28.3%
Special areas	16.6%	23.8%	17.4%
Part of the budget	32.3%	31.4%	32.2%
Full budget	20.1%	38.4%	22.1%
Total number	11,798	1,469	13,367

PB directions citizens want to influence

Legal framework: The PB directions differ for legal frameworks with mandatory participatory budgets. The focus on the income of the municipality is what stands out ($\chi^2(1) = 2,681.82$, $V = 0.410$) as the other influences are too weak. This suits the other results on the mandatory PB in this sample, as this goes back to a longer tradition of providing a PB process and having rules set. Citizens adapt to that and might learn to set new focal points and gain interest in new fields (or directions), which contribute to the citizen-related factors of an increased knowledge of PB. This in the next step might indicate that even for more matured PB processes new design variables could be introduced, as citizens want to influence the directions and therefore the implementation strategy in the FMRP model could be adapted. Nonetheless, this must be interpreted carefully as only one country in this sample has a mandatory PB (Table 10).

Table 10: BSR sample - PB directions depending on legal framework

Part of the budget	Voluntary	Mandatory	V
How to collect money	16.1%	72.2%	0.410***
How to save money	43.0%	30.9%	0.074***
How to spend money	59.7%	47.1%	0.077***

Financial situation: Citizens in a municipality with a higher net income in comparison to the national net income have significantly higher interest in influencing the collection ($d = -0.678^{***}$) and spending ($d = +0.191^{***}$) of the money of the municipality. The higher desire to affect the income could be due to higher taxes/levies for these citizens as they live in better financial situations.¹⁴ They might be interested and motivated to understand the model and maybe influence their taxes and levies. In addition, citizens in municipalities with a higher net income are more educated (above A-level: $\chi^2(1) = 276.115$, $V = 0.146$) and therefore might have a better understanding of financial decision-making in general, which leads to more desire to be involved in the income of the municipality (not just in the first place where the money goes, but where the money comes from). Often the influence of the income is limited in the budgeting process due to responsibilities beyond the remit of the local government. Thus, this is something to address during the reform concept and at least to inform the citizens about.

For citizens, who live in a weaker financial situation, the interest in spending is slightly higher than for those citizens in a better financial situation ($d = +0.191^{***}$). This tendency is very weak but might indicate that in a less than ideal situation the focus is even more on any investment and payment made by the local government.

Citizen-related factors

This section turns to the influence of citizens' individual factors on topics (demographics as independent variables), parts of the budget (by the knowledge of the concept of PB and satisfaction), the role of citizens (by the knowledge of the concept of PB) and the directions citizens want to influence (by demographics, knowledge of the concept of PB and satisfaction).

PB topics citizens are interested in

Age classes: Some topics are not viewed as that interesting across all age classes like “Tourism”, “Ecology”, “Central administration” or “Urban planning” with a maximum of 25%. Sports offers are more interesting for young citizens (under 21 years) and 66–75-year-old citizens (Table 11).

Table 11: BSR sample – PB topics by age classes

PB topics	≤ 18	19–20	21–25	26–35	36–45	46–55	56–65	66–75	76–85	≥ 86	V
Education	37.5%	29.4%	41.7%	60.3%	53.1%	52.3%	56.8%	38.0%	23.5%	22.7%	0.161***
Cultural affairs	33.9%	26.9%	24.9%	27.0%	30.7%	34.1%	37.6%	28.3%	24.5%	25.0%	0.088***
Social affairs	36.9%	29.0%	26.9%	30.8%	46.3%	47.0%	52.4%	42.9%	52.0%	20.5%	0.177***
Youth affairs	34.7%	32.1%	25.6%	26.1%	35.5%	32.7%	36.3%	25.4%	23.5%	6.8%	0.097***
Urban planning	17.9%	11.3%	14.1%	19.0%	23.7%	26.2%	25.7%	20.1%	16.3%	6.8%	0.100***
Health services	32.5%	34.8%	48.5%	61.9%	51.4%	61.4%	65.6%	52.8%	50.0%	29.5%	0.172***
Sport services	28.9%	24.0%	16.8%	17.3%	17.2%	18.7%	18.5%	27.2%	19.4%	13.6%	0.073***
Infrastructure	20.9%	14.0%	17.1%	19.7%	26.9%	32.3%	29.6%	22.4%	19.4%	20.5%	0.121***
Environment	26.7%	19.4%	27.6%	39.5%	20.8%	20.1%	19.4%	25.2%	20.4%	13.6%	0.174***
Ecology	19.3%	16.3%	14.1%	13.9%	14.1%	15.6%	13.4%	24.2%	14.3%	20.5%	0.063***
Tourism	19.8%	20.8%	19.5%	13.7%	14.1%	16.0%	14.7%	18.1%	18.4%	22.7%	0.058***
Central admin.	11.0%	11.0%	8.2%	10.1%	11.5%	14.8%	12.6%	15.6%	13.3%	4.5%	0.059***
Other	1.4%	0.8%	1.1%	1.1%	1.5%	1.9%	1.6%	1.2%	5.1%	0.0%	-
None of the above	16.5%	16.7%	10.6%	5.4%	10.4%	7.5%	4.7%	9.4%	17.3%	34.1%	-

Other than that, the topics seem to be more age-dependent. “Health services” are important for nearly every citizen (but under 50% for citizens of 25 years and younger as well as those over 86 years). In addition, “Education” looks to be important for 26–65-year-old citizens, but this seems to depend more on family status, as this is the age range in which most will raise their children. In a similar manner “Youth affairs” are important for the young citizens under 21 years, too. But also for citizens over 35 years, as their own children might be affected by this topic.

Family status: The family status might further explain the topics that are more dependent on raising children. “Education” and “Social affairs” are to a larger extent mentioned by respondents with children. “Infrastructure” is more important for respondents with adult children. The last significant different subject is the “Health services” which clearly increase over time and peaks in retirement due to age and increasing health concerns (Table 12).

Table 12: BSR sample - PB topics by family status

PB topics	Indepen- dence	Coupling or marriage	Parenting babies through to adolescents	Launching adult chil- dren (empty nest)	Retirement	V
Education	37.7%	33.7%	58.2%	55.3%	55.1%	0.174***
Cultural affairs	32.5%	29.0%	28.6%	34.6%	39.7%	0.077***
Social affairs	39.7%	35.5%	40.6%	55.7%	36.3%	0.139***
Youth affairs	32.0%	29.0%	32.2%	38.7%	24.4%	0.084***
Urban planning	22.5%	22.9%	19.7%	30.3%	16.9%	0.107***
Health services	40.4%	42.3%	56.9%	63.9%	76.1%	0.197***
Sport services	23.9%	23.4%	16.7%	20.2%	14.8%	0.077***
Infrastructure	25.0%	29.5%	21.4%	34.9%	21.9%	0.126***
Environment	22.9%	24.1%	28.1%	21.5%	15.3%	0.095***
Ecology	20.1%	20.1%	13.8%	14.4%	11.2%	0.077***
Tourism	19.2%	21.5%	13.6%	15.2%	13.1%	0.074***
Central admin.	14.8%	12.2%	10.5%	14.5%	9.3%	0.062***
Other	1.2%	1.1%	1.5%	1.6%	1.5%	
None of the above	12.6%	12.6%	8.0%	6.1%	4.2%	

In conclusion, these socio-demographics deliver different preferences of topics in a PB. If there is a topic rotation or limitation in a PB process over the years, this will affect citizens’ perception of the PB process and influence the outcome, as some citizens might be more attracted than others (possibly fluctuating participation rates). Additionally, these perceptions deliver insights on citizens’ needs that in a traditional budgeting process would not be generated. Some of these topics are not addressable in PB anyway, as local governments do not have the power in most cases to directly impact them, e.g. educational topics or health services. Knowing those needs, actions can be undertaken to prevent or mitigate frustration if certain topics cannot be addressed. The information of citizens as a feedback loop in the FMRP model may lower negative outcomes of PB (less frustration by understanding the limits).

Parts of the budget citizens want to influence

Heard of PB before: There is a weak relationship between the knowledge of PB and the desired influence on the budget size ($U = 17,951,403$, $Z = -16.832$, $r = 0.146$, $p < 0.001$). This could indicate that a different approach for differently informed citizens is needed. A municipality and a surrounding where PB is already well-known might choose to handle more budget control to incentivize these citizens. Whereas specific topics/projects could be a focus for citizens that are new to this concept since this makes it easier to understand PB. Additionally, it prevents a potential overload and sets a narrow focus. Furthermore, it could open the possibility of introducing a PB process in multiple steps by raising the part of the budget influenced by PB over time (Table 13).

Table 13: BSR sample – Desired part of budgets by familiarity with PB

“Heard of PB before”	Special topics	Special areas	Part of the budget	Full budget
no	33.6%	17.0%	31.4%	18.0%
yes	21.3%	17.8%	33.4%	27.5%

Satisfaction/Importance: The parts of the budget citizens want to influence might be influenced by the satisfaction of citizens. Dissatisfaction might stimulate the desire to have more power in the process and therefore may lead to a wish to influence more parts of the budget. As a result, a negative correlation with more parts of the budget is expected.

Satisfaction: The overall satisfaction has a moderate negative influence on the desired budget size ($r_s = -0.245$, $p = 0.001$, $n = 13,008$). The more dissatisfied a citizen is, the more influence this person wishes to have on the budget and the distribution of funds. If the satisfaction is divided into different dimensions, the most influence is generated by satisfaction with “Urbanity and diversity” (slightly moderate) ($r_s = -0.190$, $p = 0.001$, $n = 13,053$), followed by satisfaction with “Nature and recreation” ($r_s = -0.153$, $p = 0.001$, $n = 13,148$). Satisfaction with “Cost-efficiency” (like the housing market) ($r_s = -0.049$, $p = 0.001$, $n = 13,093$) and “Job opportunities” ($r_s = -0.030$, $p = 0.001$, $n = 11,993$) have just negligible effects. Therefore, the biggest driver is the quality of living in the municipality with cultural activities, availability of services and atmosphere as well as the availability of public green places and the quality of the (clean) environment. Satisfaction with financial aspects like “Cost-efficiency” and “Job opportunities” are less influential.

Importance: If citizens do not care about the aspects, the satisfaction with these dimensions does not count much. Therefore, the different aspects of life in the municipality have significant influence on the preferences of the budget as well. The “Importance of urbanity and diversity” has a slight moderate negative effect ($r_s = 0.197$, $p = 0.001$, $n = 13,124$). “Importance of nature and recreation” ($r_s = 0.152$, $p = 0.001$, $n = 13,074$) and the importance of “Job opportunities” ($r_s = 0.137$, $p = 0.001$, $n = 12,051$) have significant weak negative effects. The importance of “Cost-efficiency” is negligible ($r_s = -0.075$, $p = 0.001$, $n = 13,156$).

All four dimensions of importance have a negative correlation with the portion of the budget citizens want to influence. That means, if these aspects are very important to the citizens, they want to influence just specific topics and areas of the budget.

Role of citizens

Age: Age has a weak significant effect on the role citizens desire to play in the process ($r_s = -0.097$, $p = 0.001$, $n = 13,205$). Younger citizens prefer a more powerful role much more clearly than older ones. The relative frequency for “Propose and vote” drops to under 50% by the age of 36. Simultaneously, the frequency for “just vote” exceeds 30% at the same age bracket. The third design option “Just vote” is relatively stable at 20% (exceptions are “above 66-year-olds”). The gap between “Just vote” and “Propose and vote” gets smaller with increasing age (over 86 years’ bracket are very few and therefore neglected).

Satisfaction: For satisfaction there is a significant negligible effect ($r_s = -0.038$, $p = 0.001$, $n = 13,835$). As the effect is too weak to be interpreted, the direction indicates that unsatisfied citizens have a stronger desire for more participation power.

Heard of PB before: There is a significant, but negligible relationship between the knowledge of PB and the PB design ($U = 22\,423\,291$, $Z = -5.488$, $r = -0.046$, $p < 0.001$). The relative frequencies are higher for “Just propose” and “Propose and vote” for informed citizens. For uninformed citizens, the relative frequencies are higher for “Just vote”. However, there is a difference in just voting and proposing in the process, as the proposals are a more active involvement than the voting. If the role of the citizens is further simplified to “Just vote” and “Proposing in process”, there is a significant weak effect ($U = 20,762,421$, $Z = -15.197$, $r = -0.129$, $p < 0.001$). Informed citizens have a higher preference for “Just propose” or “Propose and vote” and less informed citizens for “Just vote”. The act of voting might be less resource-intensive than preparing a proposal (e.g. gather information and phrasing). Citizens who know about the concept of PB (and its benefits) might be willing to invest more in such resources. As privileged citizens are the “Usual suspects” and less participating citizen groups should be targeted (Pape and Lim, 2019), information looks like another step to reduce the inequality and encourage citizens not only to vote, but to take on more demanding tasks like proposing (Table 14).

Table 14: BSR sample – Perception of proposing PB process familiarity with PB

“Heard of PB before”	“Just propose” or “Propose and vote”	“Just vote”	Total
yes	76.5%	23.5%	100.0%
no	64.5%	35.5%	100.0%
Total	69.4%	30.6%	100.0%

[PB directions citizens want to influence]

Age: The age classes strongly differ in their desire to influence the PB directions. Younger and older citizens prioritize the collection/income significantly higher than their 26- to 65-year-old counterparts. Arguably, there might be some interdependencies with other citizen-related factors, such as the knowledge of PB. But even for the group of citizens that had never heard of PB, the effect stays significant and has a moderate effect size over the age classes ($\chi^2(9) = 96,037$, $V = 0.115$) (Table 15).

Table 15: BSR sample – PB directions in age classes

PB directions	≤ 18	19–20	21–25	26–35	36–45	46–55	56–65	66–75	76–85	≥ 86	$\chi^2(9)$	V
How to collect money	44.2%	41.7%	31.5%	19.3%	22.5%	25.2%	17.9%	43.7%	40.0%	46.5%	403,026	0.176***
How to save money	34.4%	36.9%	33.6%	34.9%	41.6%	44.6%	45.7%	43.1%	36.8%	34.9%	102,521	0.089***
How to spend money	59.7%	52.5%	62.2%	68.1%	55.9%	61.0%	58.8%	68.8%	63.2%	58.1%	121,496	0.097***
For citizens that heard of PB before												
How to collect money	54.9%	53.0%	55.7%	44.7%	41.9%	43.6%	35.7%	50.0%	46.0%	64.4%	172,288	0.114***

Family status: For all five family statuses, the three directions differ significantly. The desires to influence savings and spendings have weak effect sizes as citizens in retirement have an above-average interest in spendings and citizens with adult children have an above average interest in savings. The collection of the money shows greater differences. Therefore, there is a moderate to strong influence on the desire to influence the income of the municipality. As outlined before, the knowledge of PB might have an impact on the socio-demographic factors, but the influence on the income of the municipality is especially high for independent and coupled citizens (Table 16).

Table 16: BSR sample – PB directions in family statuses

PB directions	Independence	Coupling or marriage	Parenting babies through to adolescents	Launching adult children (empty nest)	Retirement	$\chi^2(4)$	V
How to collect money	44.0 %	42.4%	19.9%	21.4%	10.9%	703,751	0.237***
How to save money	40.7%	42.2%	38.7%	47.0%	34.1%	75,638	0.078***
How to spend money	60.0%	53.9%	60.3%	58.0%	68.1%	54,403	0.066***

Satisfaction/importance: Citizens that want to influence the municipality’s income have significantly lower satisfaction ($d = 0.746^{***}$). The other directions have a negligible lower score than 0.2. This is very interesting as the dissatisfaction is related to the interest in influencing the income of the municipality. Further research must be done to see whether this dissatisfaction can be narrowed down to a certain area (for example, daily life in terms of pollution ($d = 0.478^{***}$) or shopping opportunities ($d = 0.359^{***}$)). Potentially, citizens think the municipality collects money (e.g. taxes) from these narrowed areas.

Heard of PB before: Citizens that had heard of PB have significantly higher interest in the income of the municipality $\chi^2(1) = 944,435$, $V = 0.243$). The other directions had negligible effects. That could mean that knowledge about PB gives citizens another perspective of the financial situation of a municipality. However, interdependencies have to be further researched (see age and family status) (Table 17).

Table 17: BSR sample – PB directions influenced by the knowledge of the PB concept

“Heard of PB before”	How to collect money	How to save money	How to spend money
yes	34.1%	39.2%	55.1%
no	13.6%	43.7%	61.0%
V	0.243***	-0.045***	-0.058***

DISCUSSION AND MANAGERIAL IMPLICATIONS

This study identifies many significant impact factors on the PB process design variables, but most factors have weak effects on the design. Some facets remaining unconsidered and expansion could be possible, as the weak effects could speak for complex multi-factorial relations. For example, the country as one factor does not provide enough insight, as too many factors are involved.

At the **municipality-related level**, the rural or urban setting has an influence on the topics that citizens are interested in. More important, urban citizens prefer to propose and vote on proposals whereas rural citizens slightly prefer a “Just vote”. If citizens live in a relatively wealthy environment, they want to influence bigger parts of the budget and focus significantly higher on the way municipalities collect money. This is debatable, as the net income differs in different parts of the world and therefore further distinctions (e.g. with respect to cost of living) have to be made in the future. Living in a municipality with an already-running mandatory PB scheme changes the perception about certain topics, the PB directions and the portion of the budget to influence. Firstly, these citizens have significantly less interest in topics like education, social/cultural/youth affairs or health services than their counterparts in a voluntary fresh-starting PB scheme. This indicates an adaptation process by the citizens as experienced citizens distribute their interest more evenly and have less interest in topics that are hard to influence by the local government. Secondly, these citizens desire a higher influence on the income of the municipality, which might be due to a learning effects (e.g. influencing taxes). Thirdly, these citizens desire more influence on the budget than their unexperienced voluntary counterparts. But this might be due to the regulation in the investigated experienced municipality: Only 0.5% of the municipal budget is designated to PB (about 1.6 million EUR in 2020). These perceptions might be investigated in a better controlled research design, as citizens in the urban/rural setting differ in this characteristic additionally.

Managerial implications derive from these municipality-related factors. For urban (“propose and vote”) and rural (“just vote”) municipalities, a different integration of citizens might be promising. Another very important implication might be drawn from more PB-experienced citizens, as their focus and demands on the budget size potentially increases over time. That means existing PB approaches will have to change and increase the budget sum, in order to stay attractive for their citizens.

Individual characteristics of the citizens such as age and family status are obvious drivers for certain topics, like health for older citizens and youth affairs for young citizens and education for citizens with children. But we also addressed knowledge about PB. Citizens that know the concept demand influence on bigger parts of the budget than citizens without knowledge. If the part of the budget is limited by law, this desire might carry over to tensions, which damp the goal of satisfied citizens. Additionally, these informed citizens have a higher perception of processes that include a proposing phase. Through the lenses of co-production, “Propose and vote” processes are the most positively rated (Barbera et al. 2016b). Knowing these preferences might avoid the PB process from being marked down as an illusion and prevent frustration. The satisfaction of citizens tends to be the most important factor. The more dissatisfied citizens are, the more budget they want to influence (surprisingly, the demand for more power was significant, but negligibly weak). As previous studies addressed the presentation of information (Buele et al. 2020), this implication this study identifies satisfaction not just as an outcome, but as an influence factor.

Managerial implications based on individual citizens’ characteristics could more accurately address citizens’ needs. Informing citizens about PB concepts might lead to a desire for more financial influence and a proposal phase, which should be addressed in later runs

of the PB process (e.g. starting in a rural area with a “just vote” process that translates over time to a “propose and vote” process with a higher budget). The more dissatisfied citizens are the more budget should be available to provide a serious offer to the citizens. Contrary to this, the budget parts are often capped through institutional prerequisites in legal frameworks by possible budget size and topics. At least, the municipalities have to inform citizens about these institutional limits and increase transparency about the implementation based on citizens’ demands to prevent the PB process from negative effects (Bezerra and Junqueira 2022). The public decision makers have to be responsive and adapt the PB process to citizens’ characteristics and corresponding demands over time. Based on that, administrations can actively build a monitoring system for participation (Pandeya et al. 2016).

In terms of the **contingency model**, the mentioned limited institutional arrangement will hamper the outcomes (frustration and less participation may lead to less satisfaction in the process). The change of citizens’ demands by knowledge and dissatisfaction might lead to a new stimulus as stakeholders influence political decision-makers to adapt the PB process to citizens’ needs. This new link between citizens (as stakeholders) and the implementation strategy and potential stimulus would expand the FMRP model and create a new path for investigating citizen participation, especially for PB processes. Based on the discussion the following table shows theses we have generated for future research paths per country (Table 18 and Table 19).

Table 18: BSR sample – Conclusion of relevant municipality-related factors

PB design variable	Factor	Test Value	Theses	Country-related theses of sample
PB topics (Education)	Rural or urban setting		not significant as Irrespective of a rural vs urban setting of the municipality, education is a highly relevant PB topic for citizens, compared to any other PB topic.	
PB topics (Education)	Legal framework	$\chi^2(1) = 834.965$, $V = 0.261^{***}$	In municipalities new to PB with a voluntary framework, citizens are interested more in Education, Social affairs, Youth affairs, Cultural affairs, Urban planning and Health services.	True for all countries in the sample: if there are restrictions on certain topics, especially health services and education, municipalities have to inform about such limitations.
PB topics (Social affairs)		$\chi^2(1) = 222.530$, $V = 0.118^{***}$		
PB topics (Youth affairs)		$\chi^2(1) = 288.325$, $V = 0.134^{***}$		
PB topics (Urban planning)		$\chi^2(1) = 237.449$, $V = 0.122^{***}$		
PB topics (Health services)		$\chi^2(1) = 644.926$, $V = 0.201^{***}$		
Part of the budget	Net income in the municipality	$r_s = 0.148^{***}$	In municipalities with citizens having a high net income, there is a larger interest to influence larger parts of the budget compared to those with citizens with a low net income.	Finland/Germany: the local government and administration has to offer higher parts of the budget for PB. Russia: Start with lower parts of the budget at the beginning.
	Legal framework	$U = 6.072, 904.5$, $Z = -19.445^{***}$	In municipalities with a mandatory PB framework, citizens want to influence a larger part of the budget compared to those with a voluntary PB framework.	Polish municipalities with a mandatory PB: increase of the PB over the minimum requirement of 0.5 % (signalling).
	Financial situation of the municipality	$r_s = 0.138^{***}$	In better financial situations, citizens want to have higher influence on the budget for improvement	
Role of the citizens	Rural or urban setting	$\chi^2(2) = 497.087$, $V = 0.188^{***}$	In urban municipalities, citizens prefer more influential PB designs (Propose and vote) compared to municipalities in rural settings.	True for nearly all countries in the sample (except a Russian city): at least in the beginning, a simplified PB process with just a voting phase might be more suitable.
	Financial situation of the municipality	$r_s = -0.113^{***}$	In less ideal financial situations, citizens want to have higher influence in the decision-making.	Rather municipality- than country-related: municipalities with lower than good financial situations for their citizens should avoid consultative approaches. Ideally, process designs with decision power for citizens are preferred.
PB directions (How to collect money)		$d = -0.451^{***}$	In municipalities, with citizens having a high net income, there is a higher interest to influence how money is spent and how money is collected, compared to those with citizens with a low net income.	Finland/Germany: use interest to explain spendings. Because of less experience with PB, think about options to influence the income of the municipality later.
PB directions (How to spend money)		$d = -0.489^{***}$		
PB directions (How to collect money)		$\chi^2(1) = 2,681.82$, $V = -0.410^{***}$	In municipalities with a matured mandatory PB framework, citizens have a stronger interest in how to collect money compared to those in a newly voluntary PB framework.	Polish municipalities with a matured mandatory PB: think about discussion with the citizens regarding the income of the municipality (depending on legal restrictions). Latvia/Lithuania: Focus on municipality spendings.

Table 19: BSR sample – Conclusion of relevant citizen-related factors

PB design variable	Factor	Test Value	Theses	Country-related theses of sample
PB topics	Age		Depending on the citizen's age, different PB topics are of relevance.	
	Family status		For citizens who raise children, education is the most important PB topic. For citizens of any other family status, health services is the most important PB topic.	
Part of the budget	Heard of PB before	U = 17,951,403, Z = -16.832***	Citizens who know the concept of PB want to influence a larger part of the budget compared to those who never heard of PB.	Poland: increase of the PB over the minimum requirement of 0.5 % (signalling).
	Satisfaction overall	$r_s = -0.245^{***}$	The more dissatisfied citizens are, the stronger influence on the budget and the distribution of funds they seek, especially if dissatisfied with the dimensions "Urbanity and diversity" and "Nature and recreation".	Poland (lowest satisfaction): despite good participation rates, the minimum requirement of 0.5 % should be increased (signalling). ⁷
	Satisfaction with "Urbanity and diversity"	$r_s = -0.190^{***}$		
	Satisfaction with "Nature and recreation"	$r_s = -0.153^{***}$		
Role of the citizens (just voting or not)	Heard of PB before	U = 20,762,421, Z = -15.197***	Citizens that do not know the concept of PB have a stronger preference for "Just vote" compared to those that have heard of PB.	Poland/ Germany: propose and vote processes should be preferred. Finland/Latvia/Lithuania/Russia: at least in the beginning, a simplified PB process with just a voting phase might be more suitable.
PB directions (How to collect money)	Age	$\chi^2(9) = 403,026,$ $V = 0.176^{***}$	Citizens younger than 25 years and older than 65 years have a stronger interest in how to collect money compared to those between 26 and 65 years.	
	Family status	$\chi^2(4) = 703,751,$ $V = 0.237^{***}$	Depending on the citizen's family status, different PB directions are of relevance.	
	Satisfaction	$d = 0.746^{***}$	The more dissatisfied citizens are, the more interested they are in influencing how the municipality collects money.	Poland (lowest satisfaction): think about options to influence the income of the municipality (watch the legal framework).
	Heard of PB before	$\chi^2(1) = 944,435,$ $V = 0.243^{***}$	Citizens that know the concept of PB are more interested in influencing how the municipality collects money compared to those that never heard of PB.	Poland/ Germany: think about options to influence the income of the municipality (watch the legal framework).

CONCLUSIONS

PB is a trending tool in the participation landscape and aims to provide a way to embed citizens in financial decision-making processes. This paper contributes to the topic of PB by highlighting citizens' perceptions on different PB design variables (namely topics, the role of the citizens, the parts of the budget and spending/saving of financial resources). The contingency model by Lüder might give a different glance at the design of a PB process to provide factors that influence the selection of such design elements. In general, the topics differ a lot between all countries, but voting is the most important aspect of involvement. On behalf of national tendencies, the citizens favour the “propose and vote” role, but not as clearly as one would expect. The majority of citizens want to have influence on the full budget. Upon the general three special findings, there are three results that might be interesting for future research and managerial implications.

First, if citizens are dissatisfied, a greater influence on the budget must be transferred to the citizens to meet their expectations ($d = 0.746^{***}$). A pure consultative approach might fail in these circumstances, because it is not sufficient, while in a more satisfied environment a small supporting role for citizens might be sufficient to make small changes. The dissatisfaction might be a new stimulus in the FMRP model to trigger PB processes and influence reform drivers (e.g. NGOs and associations that foster PB as an option to satisfy citizens) not just an indicator for transparency of the process (Buele et al. 2020).

Second, citizens who heard of the concept of PB desire a process where proposals can be made (significant group differences, $V = -0.129^{***}$) or the income of the municipality is discussed (significant group differences, $V = 0.243^{***}$). Educational level is an often studied factor (Harrison and Sayogo 2014; Klun and Benčina 2021), but informing citizens about the concept of PB (and its restrictions) might be the more special factor to educate citizens in PB and increase their positive attitudes (or limit their frustration) towards such PB processes. Municipal councils and administrations should consider the citizens' perceptions and their possible changing needs over time, bringing a (new) need to the local government to be dynamic in the process design. On a higher level, these inputs might be a stimulus in the FMRP model to make such impacts legally possible (driver/stimulus for future public sector reforms).

Third, citizens in rural areas tend to be less attracted by a process including proposing and voting than those in urban areas and prefer processes with just a voting phase (significant group differences, $V = 0.188^{***}$). Additionally, citizens in a relatively good financial environment prefer larger parts of the budget than citizens in lesser conditions ($r_s = 0.148^{***}$). These results fit with previous research indicating that institutional arrangements, such as legal restrictions, administrative structure by organizational complexity (Ewens and van der Voet 2019) or the financial situation (Zhang and Liao 2011) in the municipalities, influence the PB process. Administrations in an uncertain environment prioritize robust processes, whereas in a more stable environment, quality processes should be established (Hood 1991). Citizens and administrations could be in line. As an example, rural municipalities with economically not ideal conditions for citizens should let the citizens vote on given projects with a small part of the municipalities' budget, as

the process meets citizens' preferences and a manageable workload for the administration.

This study reveals relations between municipality- and citizen-related factors and design elements of PB. These contingency factors could impact decisions on the PB process designs for first time implementations and subsequent runs, as citizens learn about the process and the PB process should be adapted. Future research should investigate further the preference of citizens and how the public administrations and local governments make process design decisions based on that to set up successful PB processes.

LIMITATIONS

Given its quantitative nature, this study is subject to several limitations. Survey research using closed-ended questions might omit some important answers that citizens would have given or could contain questions that the respondent understands differently from the authors. Hence, biases can occur in survey research (Babbie 2012). To partly cope with this issue, most questions also contained a textbox to add further information or a "other" option. The questionnaires were collected using different methods, namely, paper-and-pencil and online; however, this might have helped to tackle common method bias, which was not separately tested here. In addition, the data collection in six different languages required a translation to be made of the questionnaire. This might have implied some loss of the original meaning of the phrases despite double-blind translations and back-translations. Additionally, the data collection was conducted at slightly different time over a time frame of 6 months, due to the communication with administrations and associations involved in the EmPaci project. Also, the findings of this research project rely on a cross-sectional study, only representing an observation of the around 13,000 citizens at one point in time; this was because it was not the authors' intention to prove the causality between citizens' preferences and PB design. In addition, errors in the data could occur during the intensive collection by different institutions.

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Also, there is some theoretical possibility that the true relationships are non-linear, which would need to be addressed in further research. Given the mostly ordinal measurement of the dependent variables (i.e. the PB process design variables), future studies could develop and test constructs of PB design and set up more comprehensive models, as the variables were tested separately here. However, this study is, to the best of the authors' knowledge, the first of its kind to assess citizen preferences on such a large comparative basis. It contributes to the literature on PB design by providing a rich database of which factors (might) influence citizens' preferences regarding PB design. It is of relevance to both academia and practice to inform about what citizens really want.

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NOTES

- ¹ Pihlaja, R. 2017. Osallistuva budjetointi kunnissa ja maakunnissa. Kuntaliitto, Helsinki. URL: http://shop.kuntaliitto.fi/product_details.php?p=3356 (Access date: 28.04.2020), p. 4.
- ² 9. Statusbericht Bürgerhaushalt, 2019, S. 9.
- ³ Cabinet of Ministers, "Par konceptuālo ziņojumu 'Par līdzdalības budžeta ieviešanu Latvijā'" URL: <https://likumi.lv/ta/id/314744-par-konceptualo-zinojumu-par-lidzdalibas-budzeta-ieviesanu-latvija>.
- ⁴ Act of 8th March 1990 on self-government municipal (Journal of Laws of 2019, item 506).
- ⁵ Based on the budget lexicon posted on the website of the Sejm of the Republic of Poland.
- ⁶ Based on exchange rate of the World Bank in 2019.
- ⁷ EmPaci PB-type groups' analysis is accessible here: http://empaci.eu/photo/Files/GoA%202.1%20PB%20type%20groups%20working%20document_final%2024112020.pdf
- ⁸ The full set of questionnaires in English and the six national languages is accessible here: http://empaci.eu/photo/Files/EmPaci%20GoA%202.2%20Output%201%20Citizen%20survey_final.pdf
- ⁹ It describes cities with county/district rights.
- ¹⁰ Act on Municipal Self-Government of March 8, 1990.
- ¹¹ For the analysis of the surroundings, citizens in municipalities with more than 25,000 inhabitants were classified as urban citizens, whereas citizens in municipalities with less than 25,000 were classified as rural citizens. This classification was chosen with

respect to the data as internationally there are different classifications that differ clearly.

- ¹² This has to be further researched, as there are only a few countries, where PB is mandatory yet. In this sample only the Polish municipality has a mandatory PB and therefore national preferences might distract further indications.
- ¹³ The financial situation is reflected by the net income per citizen of the municipality and is set in relation to the net income per capita of the country to include the national context of the municipalities.
- ¹⁴ Here, further research involving the individual income might be interesting.

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APPENDIX

Survey completion and description of the sample

Table A: BSR sample – Overview of the survey

Count- ries	Municipa- lity	Inhabi- tants*	Density (inhabi- tants/km ²)	Total respon- ses**	Mean Age	N	Female (freq.)	Female (n)	Mean No. Children per house- hold	Total No. Children per house- hold
Finland	Lahti	120,013	232	1,213	48.67	1,197	74.8	1,209	1.81	927
Germany	Bützow	7,500	196	303	37.78	246	56.4	291	1.20	287
Latvia	Gulbene	8,057	677	540	47.98	534	73.4	534	1.70	518
Lithuania	Rietavas	7,417	13	202	48.10	202	21.3	202	1.82	202
	Telsiai	40,000	28	1,205	46.78	1,205	32.9	1,205	1.57	1,205
Poland	Bielsko- Biala	171,259	1 375	1,613	40.17	1,613	52.5	1,613	1.46	1,613
Russia	Mos- kovskava Zastava	54,546	5 451	1,670	44.85	1,664	62.2	1,670	1.45	1,623
	Suoyarvi	8,781	976	381	40.73	311	58.3	381	1.58	345
	Gatchina	238,018	84	2 631	39.68	2 628	36.8	2 631	1.66	2 631
	Amderma	623	7	75	46.66	38	39.5	38	1.26	38
	Chagoda	12,823	5	1 539	45.30	410	45.4	410	1.39	410
	Demyansk	4,211	560	620	45.44	219	40.6	219	1.40	219
	Gdov	5,570	1 150	332	44.31	291	50.5	291	1.36	224
	Kola	9,681	930	1 065	46.14	339	44.0	339	1.37	339
	Koryazhma	36,607	1 611	3 015	44.25	987	48.4	987	1.42	987
	Sosno- gorsk	31,880	1 275	1 911	44.78	829	47.4	829	1.40	829
Russia	Svetlog- orsk	19,710	938	1 971	44.67	492	47.6	492	1.43	492
	Total			20,276	43.71**	13,205	50.3	13,206	1.53	12,889

* = basis for classification of “urban” and “rural”

** = Over 66% of the respondents are married or live in a registered partnership (n = 13,228).

*** = age ranges from 12 to 92 (n=13,205; median=43 years; standard deviation = 14.618).

Table B: BSR sample – Knowledge of PB

“Heard of PB before”	Finland	Germany	Latvia	Lithuania	Poland	Russia	Total
yes	34.2%	62.7%	26.1%	29.4%	97.6%	33.6%	39.9%
no	65.8%	37.3%	73.9%	70.6%	2.4%	66.4%	60.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table C: BSR sample – Overview of PB topics

PB topics	Finland	Germany	Latvia	Lithuania	Poland	Russia
Education	48.6%	57.8%	36.8%	46.7%	19.8%	61.0%
Cultural affairs	33.0%	53.7%	34.3%	37.5%	18.9%	32.7%
Social affairs	56.3%	55.1%	33.9%	44.8%	26.3%	45.2%
Youth affairs	37.9%	54.0%	16.9%	34.9%	14.6%	35.9%
Urban planning	37.3%	41.5%	21.2%	27.6%	7.9%	23.2%
Health services	70.8%	28.9%	43.3%	47.3%	28.0%	63.5%
Sport services	37.4%	51.6%	20.1%	22.8%	24.1%	14.4%
Infrastructure	13.1%	47.4%	27.1%	31.8%	25.4%	26.4%
Environment	31.4%	49.1%	25.7%	27.8%	17.4%	22.1%
Ecology	23.4%	30.3%	12.4%	23.8%	17.9%	11.8%
Tourism	18.5%	32.4%	19.2%	22.7%	22.7%	12.5%
Central administration	17.3%	10.5%	17.8%	27.8%	9.2%	11.2%
None of the above	1.9%	1.7%	10.4%	8.4%	19.4%	7.4%

Table D: BSR sample – Desired role of citizens

Countries	Just propose	Just vote	Propose and vote	Total
Finland	33.4%	37.2%	29.5%	100.0%
Germany	20.3%	17.2%	62.5%	100.0%
Latvia	23.4%	41.0%	35.6%	100.0%
Lithuania	26.8%	46.6%	26.7%	100.0%
Poland	27.5%	16.2%	56.3%	100.0%
Russia	18.0%	30.3%	51.8%	100.0%

The role of citizens is surprisingly broadly distributed. The expectation was that citizens would tend to be much more involved in the process. This is something to investigate in the future.

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