



Participatory Budgeting as Democracy Amplifier in Poland and Ukraine. Analytical Report.

Introduction

Participatory budgeting refers to the decision-making process when citizens deliberate and negotiate over the distribution of public resources.¹ Having originated in Brazil in 1989, this direct democracy format was introduced in Poland in 2012 and later was brought to Ukraine via the Polish-Ukrainian Cooperation Foundation in 2015. Since then, hundreds of communities in both countries have adopted it, although with varying degrees of success. The initial model of participatory budgeting in the two countries seemed similar, but political settings were different. This set up perfect grounds for a *comparative inquiry of participatory budgeting in Poland and Ukraine*. The research findings can be useful for scholars of democracy and good governance as well as for civic activists and public officials striving for a more empowered participatory democracy.

Worldwide, participatory budgeting has demonstrated multiple effects stimulating local democracy. And there are studies of participatory budgeting within Poland and Ukraine. Yet, the available inquiries are focused on individual countries and do not allow to estimate and compare the complex impact of participatory budgeting on local democracy in both countries. This raises the following research question: *what is the impact of participatory budgeting on local democracy in Poland and Ukraine?*

To answer this question, this study applied a mixed methods research design. *Qualitative methods* included manual data harvesting and content analysis of municipal websites² and e-participatory budgeting platforms.³ Specifically, conceptual and relational analysis of Internet hypertexts were applied. This allowed to clarify regulations regarding participatory budgeting formats. *Quantitative methods* involved statistical data collection and analysis of statistical yearbooks,⁴ as well as the abovementioned municipal websites, and e-participatory budgeting platforms. In particular, descriptive and inferential statistics were analysed and compared, as well as correlation analysis was conducted. This enabled to identify community-level statistics, participatory budgeting funding, submission, and voting statistics, as well as participatory budgeting regularities. To review participatory budgeting in comparably big and administratively central cities this inquiry focused on centres of regions – voivodships in Poland and oblasts in Ukraine. Consequently, the *sample* was comprised of 18 Polish and 24 Ukrainian municipalities. The studied participatory budgeting *time frame* covered 2017-2020 voting years. Data collection period lasted from 5 May till 11 June 2021.

Further sections present the participatory budgeting impact analytical framework, impact patterns in each area, impact regularities in each country separately and in both countries jointly, and general conclusions.

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¹ Wampler, B. 2007. A Guide to Participatory Budgeting. In A. Shah (Ed.), *Participatory Budgeting* (pp. 21-54). Washington, DC: IBRD / WB. URL: <https://siteresources.worldbank.org/PSGLP/Resources/ParticipatoryBudgeting.pdf>.

² See the 'Appendix' section for more information.

³ EGAP. 2021. e-DEM. URL: <https://e-dem.ua/>; SocialBoost. 2021. Hromadskyi Project, URL: <https://pb.org.ua/en>.

⁴ Statistics Poland. 2021. Demographic Yearbook of Poland 2020. URL: <https://stat.gov.pl/en/topics/statistical-yearbooks/statistical-yearbooks/demographic-yearbook-of-poland-2020,3,14.html>; State Statistics Service of Ukraine. 2020. Number of Existing Population of Ukraine as of January 1, 2020. Statistical Publication. Kyiv, Ukraine: State Statistics Service of Ukraine. URL: http://www.ukrstat.gov.ua/druk/publicat/kat_u/2020/zb/05/zb_chuselnist%202019.pdf.

Analytical framework

The inquiry used a particular framework for participatory budgeting impact. It adopted an earlier model applied for Ukraine⁵ and adjusted it to the data available for both Poland's and Ukraine's participatory budgeting cases.

Table 1: Participatory budgeting impact analytical framework.

Impact areas	Conceptual hypotheses	Empirical indicators
Resident empowerment	City dwellers are more empowered qualitatively	Municipality allows more project types
	Local residents are more empowered quantitatively	Municipality allocates more funds for projects
Community activism	People are more motivated to contribute to community	Locals submit more eligible projects
	Civic participation increases in scale	The share of voters of the total population increases
Civic education	People understand local democracy better	The share of won projects of eligible projects increases
	Civic participation skills improve	The share of e-voting of the overall voting increases

Impact patterns

Resident empowerment: Qualitative change (project types allowed).

Regarding major project types allowed for submission, the principal difference in Poland was between city-wide and district projects, while in Ukraine – between big and small projects. The only case of decreased project types from 3 to 2 was detected in Szczecin. The highest increase in project types from 1 to 5 was discovered in Ivano-Frankivsk. But generally, in most cases the number of allowed project types remained the same.

Table 2: Participatory budgeting major project types in the studied municipalities during 2017-2020.

Measures	Project types change 2017-2020	
	Poland	Ukraine
Min	0.67	1.00
Max	3.00	5.00
Average	1.20	1.42
Median	1.00	1.00
Cases percent	88.89%	66.67%
Sample error	0.09	0.23

Resident empowerment: Quantitative change (funds allocated).

Funding range was rather wide. In 2020 in Poland, it ranged from 6.5 MM PLN in Opole to 83 MM PLN in Warsaw. In 2020 in Ukraine, it varied from 3 MM UAH in Kramatorsk to 161 MM UAH in Kyiv. During 2017-2020, both countries reveal that while some funding was cut (for example, the funding change coefficient equalled 0.76 in Lodz and 0.87 in Chernivtsi), other funding more than tripled (for instance, funding increased by 3.7 in Kielce and by 3.23 in Uzhhorod). Overall conclusion is that while in some cases annual funding decreased, in most cases it increased.

⁵ Khutkyy, D., & Avramchenko, K. 2019. Impact Evaluation of Participatory Budgeting in Ukraine. URL: https://www.researchgate.net/publication/337783495_Impact_Evaluation_of_Participatory_Budgeting_in_Ukraine.

Table 3: Participatory budgeting funding in the studied municipalities during 2017-2020.

Measures	Funds allocated change 2017-2020	
	Poland	Ukraine
Min	0.76	0.87
Max	3.70	3.23
Average	1.50	1.85
Median	1.21	1.75
Cases percent	66.67%	66.67%
Sample error	0.28	0.23

Community activism: Motivation to contribute (eligible projects submitted).

The number of submitted eligible projects also varied significantly. Eligible projects submissions in 2020 in Poland ranged from 42 in Zielona Gora to 1503 in Warsaw. Similarly, eligible projects submissions in 2020 in Ukraine stretched from 36 in Kramatorsk to 1578 in Kyiv. During 2017-2020, in both countries some submissions contracted (e.g., by 0.53 in Wroclaw and by 0.56 in Poltava), while other submissions expanded (e.g., by 3 in Kielce and by 5.65 Ivano-Frankivsk). Still, despite the variation, median eligible project submissions increased only slightly (by 1.1).

Table 4: Participatory budgeting eligible project submissions in the studied municipalities during 2017-2020.

Measures	Eligible projects change 2017-2020	
	Poland	Ukraine
Min	0.53	0.56
Max	3.00	5.65
Average	1.31	1.75
Median	1.10	1.10
Cases percent	72.22%	75.00%
Sample error	0.22	0.33

Community activism: Civic participation scale (the share of voters).

The share of voters for participatory budgeting projects of the total city population demonstrated a wide spectrum too. For instance, in Poland voters share ranged from 1.64% in Torun in 2017 to 31.12% in Olsztyn in 2019. In Ukraine, voters share extended from 0.52% in Uzhhorod in 2019 to 14.33% in Lviv in 2020. During 2017-2020, in both countries, in some cities, voters share has decreased (e.g., tree-fold in Olsztyn and ten-fold in Kramatorsk), while in other – has increased (e.g., by 1.4 in Krakow and by 9.87 in Ternopil). The most striking difference is that the median voters share slightly decreased (by 0.91) in Poland and visibly increased (by 1.45) in Ukraine.

Table 5: Participatory budgeting voters share in the studied municipalities during 2017-2020.

Measures	Voters share change 2017-2020	
	Poland	Ukraine
Min	0.35	0.10
Max	1.40	9.87
Average	0.89	2.42
Median	0.91	1.45
Cases percent	50.00%	62.50%
Sample error	0.17	0.17

Civic education: Understanding local democracy (the share of won projects).

The share of won projects of the total number of eligible projects submitted showed a smaller variation. In 2020 in Poland, the share of won projects ranged from 10.15% in Wroclaw to 50.96% in Torun. Similarly, in 2020 in Ukraine, the share of won projects fluctuated between 13.11% in Uzhhorod to 61.54% in Kharkiv. During 2017-2020, in both countries, some municipalities saw a decrease in the shares of won projects (e.g., by 0.25 in Kielce and by 0.25 in Ivano-Frankivsk), while other observed an increase (e.g., by 2.58 in Bydgoszcz and 3.02 in Cherkasy). Nevertheless, despite the variation, median shares of won projects increased marginally (by 1.14 in Poland and by 1.19 in Ukraine).

Table 6: Participatory budgeting won projects share in the studied municipalities during 2017-2020.

Measures	Won projects share change 2017-2020	
	Poland	Ukraine
Min	0.25	0.25
Max	2.58	3.02
Average	1.15	1.33
Median	1.14	1.19
Cases percent	66.67%	50.00%
Sample error	0.25	0.27

Civic education: Civic participation skills (the share of e-voting).

The share of voters who cast their votes electronically to the total number of voters in a municipality was relatively high. Thus, during the pandemic-influenced 2020 in Poland e-voting share ranged from 72% in Krakow to 100% in Poznan. In the same pandemic year in Ukraine e-voting share oscillated between 48.64% in Zhytomyr and 100% in Kyiv. During 2017-2020, only in one case e-voting share reduced – by 0.96 in Szczecin, while in most cases it raised – e.g., by 2.11 in Bialystok and by 4.18 in Chernihiv. Notably, the growth of e-voting share started before the pandemic. In sum, over the three years median e-voting share increased considerably both in Poland (by 1.61) and in Ukraine (by 1.39).

Table 7: Participatory budgeting e-voting share in the studied municipalities during 2017-2020.

Measures	E-voting share change 2017-2020	
	Poland	Ukraine
Min	0.96	1.00
Max	2.11	4.18
Average	1.51	1.67
Median	1.61	1.39
Cases percent	50.00%	66.67%
Sample error	0.21	0.27

Impact regularities

Regularities of participatory budgeting in Poland.

In Poland, only one statistically significant interrelation between participatory budgeting variables was found. Specifically, that funding increase parallels eligible project submissions increase (during 2017-2020). Pearson correlation coefficient equals +0.74 and is significant at the 0.01 level. This pattern may be attributed multiple explanations: (a) the more funding available the more people submit proposals; (b) the more proposals the more funding authorities allocate; (c) over time both authorities and locals acknowledge the value of participatory budgeting and invest more financial and time resources into it.

Regularities of participatory budgeting in Ukraine.

In Ukraine, three statistically significant connections between participatory budgeting variables were identified.

(1) The introduction of more possible project types is associated with higher eligible project submissions rates (during 2017-2020). Pearson correlation coefficient equals +0.55 and is significant at the 0.01 level. Presumably, the very opening up of opportunities induces participation.

(2) The growth of eligible project submissions mirrors voters share increase (during 2017-2020). Pearson correlation coefficient equals +0.57 and is significant at the 0.01 level. This may mean either of the three: (a) more project campaigns mobilise more residents for voting; (b) higher voter turnout inspires more project submissions; (c) over time, more project authors and voters become aware and engaged.

(3) Longer history of participatory budgeting is linked with e-voting share increase (during 2017-2020). Pearson correlation coefficient equals +0.71 and is significant at the 0.01 level. Most probably, over time more residents use e-voting, while authorities switch to e-voting format completely.

Regularities of participatory budgeting in Poland and Ukraine counted jointly.

Poland and Ukraine counted together have demonstrated as many as four statistically significant correlations.

(1) More population – more participatory budgeting funding (in 2020). Pearson correlation coefficient equals +0.94 and is significant at the 0.01 level. Probably, this demonstrates the 'scale effect': more populous cities with more taxpayers collect more taxes and allocate more funding.

(2) More population – more eligible projects submitted (in 2020). Pearson correlation coefficient equals +0.83 and is significant at the 0.01 level. This also reflects the 'scale effect': more populous cities with a similar share of engaged residents have more active locals in absolute numbers who in turn submit more eligible participatory budgeting projects.

(3) More funds – more eligible projects submissions (in 2020). Partial (controlled for population size) Pearson correlation coefficient equals +0.35 and is significant at the 0.05 level. Evidently, bigger funding motivates people to submit more eligible participatory budgeting projects.

(4) Shorter participatory budgeting years duration – higher voter turnout growth (during 2017-2020). Pearson correlation coefficient equals -0.46 and is significant at the 0.05 level. It may be assumed that earlier stages of participatory budgeting with lower participation baselines have more space for voter turnout growth.

Conclusions

The study illuminated several participatory budgeting patterns – in Poland and in Ukraine separately and collectively.

- Concerning specific patterns *in Polish municipalities*, the stable number or even some decrease of voters share of total city populations can be explained by a longer history of participatory budgeting (7-9 years ago) in the examined cities and possible approximation to the saturation point.
- Regarding particular patterns *in Ukrainian municipalities*, the high increase of voters share in total city populations can be credited to a later start of participatory budgeting (4-6 years ago) in the examined cities and probable reach of the fastest uptake point.
- In relation to common patterns *in Polish and Ukrainian municipalities*:
 - Funding amounts were highly unevenly distributed across cities in both countries reflecting demographic and economic disparities between the communities.
 - Eligible project submission rates and won project rates were quite similar between the two countries presumably indicating analogous civic activism levels.
 - Participatory budgeting demonstrated the 'positive feedback effect': more project types allowed, more eligible project submissions, and higher voting turnout stimulated each other.

Finally, it is reasonable to conclude that participatory budgeting was predominantly successful in enhancing democracy in the observed Polish and Ukrainian cities. Participatory budgeting did empower locals, boost community activism, and develop civic participation skills.

Appendix

Table 8: The studied Polish municipalities and key sources about their participatory budgeting.

City	Website
Bialystok	https://www.bialystok.pl/pl/dla_mieszkancow/bialystok_obywatelski/budzet_obywatelski/
Bydgoszcz	https://www.bdgbo.pl/
Gdansk	https://www.gdansk.pl/budzet-obywatelski
Gorzow Wielkopolski	http://www.gorzow.pl/PL/3333/Budzet_obywatelski/
Katowice	http://bo.katowice.eu/Strony/default.aspx
Kielce	https://budzetobywatelski.kielce.eu/
Krakow	https://budzet.krakow.pl/
Lublin	https://lublin.eu/mieszkanicy/partycypacja/budzet-obywatelski/aktualnosci/
Lodz	https://uml.lodz.pl/budzet-obywatelski/
Olsztyn	http://www.obo.olsztyn.eu/
Opole	https://www.opole.pl/search/node?keys=budzet+obywatelski
Poznan	https://budzet.um.poznan.pl/
Rzeszow	http://rbo.rzeszow.pl/
Szczecin	https://sbo.szczecin.eu/popzednie-edycje-sbo
Torun	https://www.torun.pl/pl/miasto/budzet-obywatelski-w-toruniu
Warsaw	http://twojbudzet.um.warszawa.pl/
Wroclaw	https://www.wroclaw.pl/rozmawia/wroclawski-budzet-obywatelski
Zielona Gora	https://bip.zielonagora.pl/602/Budzet_obywatelski/

Table 9: The studied Ukrainian municipalities and key sources about their participatory budgeting.

City	Website
Cherkasy	http://chmr.gov.ua/ua/sections.php?s=34
Chernihiv	https://chernihiv.pb.org.ua/
Chernivtsi	https://chernivtsi.pb.org.ua/
Dnipro	https://dnipro.pb.org.ua/
Ivano-Frankivsk	http://bu.mvk.if.ua/
Kharkiv	https://portal.city.kharkov.ua/initiatives/
Kherson	https://kherson.pb.org.ua/
Khmelnitskyi	https://khmelnitsky.pb.org.ua/
Kramatorsk	https://kramatorsk.pb.org.ua/
Kropyvnytskyi	https://budget.e-dem.ua/3510100000/
Kyiv	https://gb.kyivcity.gov.ua/
Lutsk	https://budget.e-dem.ua/0710100000/
Lviv	https://lviv.pb.org.ua/
Mykolayiv	https://mykolaiv-budget.e-dem.in.ua/#
Odesa	https://citizen.odessa.ua/projects/
Poltava	https://rada-poltava.gov.ua/people/parcutupator/
Rivne	https://rivne.pb.org.ua/
Severodonetsk	https://budget.e-dem.ua/4412900000/
Sumy	https://sumy.pb.org.ua/
Ternopil	https://ternopil.pb.org.ua/
Uzhhorod	https://rada-uzhgorod.gov.ua/gromadskyj-byudzhhet-2/
Vinnytsia	https://budget.e-dem.ua/0510100000
Zaporizhzhia	http://gb.meriazp.gov.ua/
Zhytomyr	https://zhytomyr-budget.e-dem.ua/#