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APPLICATION OF MCDA METHODS IN THE PERFORMANCE EVALUATION OF PUBLIC BENEFIT ORGANISATIONS

Summary

The paper presents the issue of assessment of efficiency and effectiveness in organisations operating for public benefit. Taking into consideration the important role of those entities in the economy and specific conditions in which they operate, a new type of evaluation tools is needed. Therefore, the main aim of this paper is to propose such a new assessment instrument based on outranking multi-criteria decision aiding (MCDA) methods. The procedure proposed is used in a real-life scenario connected with the appraising process of eleven Public Benefit Organisations (PBOs) from Lodz Voivodeship in Poland, operating in the field of 'Ecology, animals and heritage protection', and eleven charities from Western Australia whose main activity is 'Animal Protection'. Rankings obtained as a result of the presented approach can serve a potential donor as a pointer for making better decisions regarding financial support.

Key words: public benefit organisations, charities, performance evaluation, reporting, MCDA, outranking methods

JEL: C44, C65, L31, M41,

1. Introduction

Organisations established for charitable purposes, such as charities or voluntary organisations, exist almost all over the world. Generally, the main aim of their activity is connected with carrying out certain tasks that are believed to be of general benefit to society. They are usually presented as part of the third sector, next to state (the first sector) and business sector (the second sector) in the economy. The third sector organisations also include non-profit organisations (NPOs) and non-governmental organisations (NGOs). Additional features of organisations classified as non-profit ones include the following elements: they are 1) organised (institutionalized to some extent), 2) private (institutionally separate from government), 3) self-governing (equipped to control their

own activities), 4) non-profit-distributing (not returning profits generated to their owners or directors), 5) voluntary (involving some meaningful degree of voluntary participation) [Salamon, Anheier, 1992, p. 1; Salamon, Anheier, 1996, p. 2]. Nevertheless, it must be emphasised that the issue of charities and NPOs is subject to individual countries' legal frameworks that provide additional and specific characterisation of these entities. In consequence, the presented definition, as a kind of simplified understanding of this set of organisations, becomes more complicated and sometimes incomparable.

NGOs play an important role in the economy. The range of activities they perform is very diverse. According to the International Classification of Non-profit Organisations (ICNPO), which is the classification system recommended by the United Nations, NGOs' activities may be divided into 12 major groups, such as [Handbook on Non-profit Institutions..., 2003]: Culture and recreation; Education and research; Health; Social services; Environment; Development and housing; Law, advocacy and politics; Philanthropic intermediaries and voluntarism promotion; International; Religion; Business and professional associations, unions; Not elsewhere classified.

Not only the range of NGOs' activities, but also their economic impact indicate the significant contribution charities and voluntary organisations make in the economy. Although it is very difficult to analyse the economic effect of NGOs in a worldwide perspective (due to the lack of a unified system of national statistics), it is worth mentioning some findings presented in 2013 by Johns Hopkins University Centre for Civil Society Studies. According to the research results, the average contribution of non-profit institutions to Gross Domestic Product in the 15 analysed countries¹ reached 3.6% for paid workers and 0.9% for volunteers. Whereas non-profit institutions from 13 countries² employed on average 5.2% of total workforce in the examined countries [Salamon et al., 2013, pp. 2-3].

Besides the economic contribution of NGOs, one should also bear in mind their social and cultural contributions to society. They facilitate cooperation of people who share values, interests, and ideas. NGOs operate in the name of discriminated groups in society or those who are incapable of protecting their own rights. They may have an important influence on authorities as well as uphold the common weal [Elementarz III sektora, 2005, pp. 19-20].

Considering the increasing role of NGOs in many countries, there is a great need to work out methods enabling the assessment of efficiency and effectiveness in those entities. NGOs may fund their activities using many sources. The most important ones include payments for services or goods that NGOs provide, government grants, grants from local or state authorities, private donations, legacies, fundraising, membership fees, etc. Consequently, public or private resource providers may as well expect to obtain the proper information on NGOs' performance. In many countries legal regulations introduce a special status for those NGOs which fulfil certain requirements. With such

¹ Australia, Belgium, Brazil, Canada, the Czech Republic, France, Israel, Japan, Kyrgyzstan, New Zealand, Mozambique, Norway, Portugal, Thailand, and the United States.

² Data on Canada and Mozambique were not available.

a status NGOs obtain additional benefits, such as other source of finance or tax exemptions. Taking this fact into consideration, it is even more important to work out an assessment tool for this 'special status' group of NGOs.

The purpose of this article is to present a procedure based on multi-criteria decision aiding (MCDA) outranking methods, i.e. PROMETHEE IIV, EXPROM IIV, modified ELECTRE III and EVAMIX, as a tool suggested to be used in an assessment process of those NGOs which obtained a special status regulated by a country law. As a result of the presented approach, we obtain a kind of ranking of organisations established for charitable purposes. This ranking is based on a set of adjusted measures which may be used to evaluate NGOs effectiveness and reputation. In order to carry out an in-depth study we have analysed and evaluated NGOs from two countries: Australia and Poland. We concentrated on NGOs with a special domestic status: Public Benefit Organisations (PBOs) from one of the Polish provinces, operating in the field of 'Ecology, animals and heritage protection' and registered charities operating in Western Australia whose main activity is 'Animal Protection'.

The article is organised as follows. In section 2 we present the situation of charities in Australia and PBOs in Poland. In next part the steps of the proposed procedure are shown. Section 4 presents the case study and the results obtained due to the application of various MCDA outranking techniques, while section 5 provides a summary and conclusions.

2. Organisations established for charitable purposes in Australia and in Poland

The non-profit sector in Australia has been growing rapidly since the 1990s. In 2012 the Australian Charities and Not-for-profits Commission (ACNC), the national regulator of charities, was established [Cortis et al., 2015]. In Poland NGOs have also been developing intensively since 1990, that is from the transition from a state-controlled economy into a market economy. In 2003 the public benefit status was introduced. Table 1 presents selected characteristics of charities in Australia and PBOs in Poland.

TABLE 1. Certain characteristics of charities in Australia and PBOs in Poland

Characteristics	Australia (Charities)	Poland (Public Benefit Organisations)
Legal base	Charities Act 2013, No. 100, 2013	The Act of law of April 24th, 2003 on Public Benefit and Volunteer Work
Definition	Not-for-profit entities, which have only charitable purposes that are for the public benefit, have not a disqualifying purpose, and are not individual, a political party or a government entity. The Charities Act 2013 indicates definition of charitable purpose (in Part 3) and disqualifying purpose (in Part 2, Division 3).	Non-governmental organisations (understood as corporate and non- corporate entities, which do not form part of the public finance sector and which do not operate for profit, with the exception of political parties, trade unions and organisations of employers, professional self-governing authorities, and foundations formed by political

Registration Legal forms	Charities may register with the ACNC. This registration is required to obtain certain benefits. Main types are incorporated entities,	parties) entitled to perform the activity that is focused on the benefit of society in the area of public tasks, called a public benefit activity. The legislation indicates 37 areas of public activity. PBOs are registered in the National Court Register. Main types are association and
	unincorporated entities, trusts, public company.	foundation.
Benefits	All charities that register with the ACNC can apply for these tax concessions: Income tax exemptions, Refunds on franking credits, Goods and services tax (a tax on transactions) concessions, Fringe benefits tax (FBT) rebates (FBT is a tax paid on any benefits that an employer provides to their employees outside their salary or their superannuation, not all registered charities may apply for FBT rebate, public benevolent institutions (PBI), health promotion charities (HPC), not-for-profit hospitals and some charities advancing religion can access FBT exemptions). Charities can apply for deductible gift recipient (DGR) status – donations made to an organisation with DGR status may be tax deductible. There are also a number of tax concessions available to charities from state, territory and local governments (e.g., concessions on taxes like stamp duty, payroll tax, land tax).	PBOs are granted: Tax exemptions (the corporate income tax, the property tax, the tax on civil law transactions, the stamp duty, court fees), The right to receive 1% of the personal income tax (it may be used only for public benefit activity), Preferential terms while property owned by the State Treasury or by local self-government units, Free of charge promotion in public media to inform the general public of organisations' activities.
Reporting obligations	Registered charities are required to lodge an Annual Information Statement (AIS) with the ACNC. Generally, charities are required to submit their AIS within six months of the end of their reporting period. Medium and large charities are required to submit their annual financial report as well as the AIS.	PBOs prepare an annual performance report and annual financial statement. Accepted reports must be published in the Internet database of the Ministry of Labour and Social Policy. PBOs are required to present the information in how the 1% is used.

Source: [Act of law of April...; Charities Act 2013...; Żak, 2012; Cortis et al., 2015; Charity tax concessions available ...].

Australian Charities Report as at 2014 presented main facts concerning charities registered with the ACNC which reported the obligatory Annual Information Statement (AIS) [Cortis et al., 2015, pp. 10-11, 42, 46, 53-54, 62]:

- The number of registered charities might be estimated taking into consideration the number of charities which reported the AIS: that was 37,798 charities in 2014 and 49,293 charities in 2013.
- In 2014 Australia's charities reported income totalling \$103.4 billion. Although
 the mean income per charity was \$3.4 million, half of all charities reported
 income of \$138,000 or less.
- Australia's charities reported expenses totalling \$95 billion in 2014. The mean total expenditure equalled \$3.2 million, but the median was much lower and reached \$116,400.
- In total, registered charities that reported workforce data employed 1,117,781
 paid staff (55.7% of all charities that reported workforce data), including 443,270 full time staff, 402,011 part time staff, along with 272,500 casual workers.
- 83.4% of all charities engage volunteers. Around 1 in 3 charities had from 1 to 10 (33.3%) and from 11 to 50 (33.1%) volunteers. 16.6% of charities reported that they had no volunteers during the reporting period. Large organisations were least likely to use volunteers (25.3% used no volunteers), compared with 16.9% of medium charities and 13.8% of small charities.

In Poland, the latest report prepared by the Central Statistical Office refers to the non-profit sector and public benefit organisations as at 2014 [Sektor non-profit..., 2016, pp. 54-55, 76, 234, 236, 241-243, 247]:

- According to the National Court Register data, at the end of 2014 there were 8.7 thousand organisations registered with a public benefit status (8.6 thousand in 2013).
- 8.6 thousand of PBOs (99% of all registered PBOs) that took part in a research conducted by the Central Statistical Office reported income totalling PLN 7.4 billion. The mean income per charity equalled PLN 863.3 thousand whereas median was much lower and reached the level of PLN 101.7 thousand.
- PBOs in Poland reported total expenses of PLN 6.6 billion. On average, organisation's expenses accounted for PLN 763.2 thousand, however, the median expenses equalled PLN 88.1 thousand.
- In 2014 PBOs received PLN 507 million from 1% of the personal income tax (the special benefit for organisations with a public benefit status). On the one hand, almost all PBOs obtain income from this source, on the other hand, however, it was not a relevant source of income (8% of all income).
- As at the end of 2014 PBOs reported 52.6 thousand of paid employees, which
 accounted for 34% of all employees in analysed organisations from the nonprofit sector (154.1 thousand employees) and 1.3% of all people hired on the
 basis of employment in Poland.

 Volunteers were involved in 94% of PBOs and comprised 20% of all people working in examined organisations. On average 92 volunteers were engaged in one PBO, but half of PBOs engaged 17 volunteers or less.

The information presented above illustrates the differences between Australian and Polish organisations which have a national special status for non-profit entities. Despite the fact that both legal regulations and the size of the non-profit sector is dissimilar in the analysed countries, the general idea of the non-profit sector's role in society is the same. Bearing this fact in mind, we hope that the assessment tool proposed in the next part of the paper may be regarded as a universal method that could be applied to evaluate charities in many countries.

3. The proposed performance appraisal procedure

Meeting the need to develop the instrument of evaluation and ordering of organisations of public benefit (for example to help donors decide where to give their money or to determine the best and the worst entities for public co-financing), and taking into account advantages and disadvantages of different MCDA methods [Górecka, 2010; Górecka, 2011; Górecka, 2012], the procedure composed of the following steps has been proposed [cf. Chojnacka, Górecka, 2016]:

- Identification of the participants of the decision-making process;
- Selection of the performance evaluation criteria and measures for them;
- Determination of weights for evaluation criteria:
 - arbitrarily;
 - with the help of Hinkle's method [Hinkle, 1965; Rogers, Bruen, 1998];
 - with the help of revised Simos' procedure [Figueira, Roy, 2002]);
 - using Hokkanen and Salminen's approach, version 1 or 2 [Hokkanen, Salminen, 1994; Hokkanen, Salminen, 1997];
 - using Mousseau's method [Mousseau, 1995]; (depending on number and preferences of the decision-makers);
- Establishing indifference, preference and veto thresholds for each criterion;
- Building a table of assessments (evaluation matrix) of organisations taken into consideration;
- Application of:
 - PROMETHEE IIv method [Górecka, Muszyńska, 2011; Górecka, Pietrzak, 2012; Górecka, 2014];
 - EXPROM IIv method [Górecka, Szałucka, 2013; Górecka, 2014; Górecka, 2015];
 - modified ELECTRE III method [Górecka, 2009];
 - EVAMIX method [Voogd, 1982];

(depending on the expectations and preferences of the decision-makers);

Taking final decision.

4. Empirical example

Let us assume that there is a decision-maker (DM) who loves animals and would like to give her money to charitable organisations rescuing and taking care of them. She would like to select two such organisations to support: one in Western Australia (where she, for instance, live now), and one in Lodz Province, Poland (where she, for example, comes from).

Hence, the procedure recommended in the previous section was employed in the process of appraising and ranking of eleven Public Benefit Organisations from Lodz Voivodeship, operating in the field of 'Ecology, animals and heritage protection', and eleven registered charities from Western Australia whose main activity is 'Animal Protection'.

Criteria affecting the choice of the organisations of public benefit for donation and measures for them were identified through the literature review as well as based on the authors' own ideas. They are presented in Table 2.

Analysis was carried out on the basis of the official and publicly available annual reports (from 07.2014 - 06.2015 in Australia and from 2014 in Poland) of the organisations considered as well as information from their websites. Criteria f_{11} - f_{14} were assessed by the DM. She also determined (arbitrarily) weighting coefficients for the evaluation criteria as well as indifference (q_k) , preference (p_k) and veto (v_k) thresholds for them.

The model of preferences for the decision-making problem and measurement data are presented in the table included in Appendix. In turn, Table 3 provides a summary of the results obtained by means of four multi-criteria techniques enumerated in the previous section of this paper.

The rankings presented in Table 3 show the sensitivity of the solutions to choice of the decision-aiding technique since the orders of the public service organisations in the rankings are not in complete agreement. Despite that, however, it is possible to determine the set of organisations which are 'good' (charities K, D, E and C in Australia; PBOs K, H and J in Poland) since the values of their appraisal scores are non-negative, and the other one containing organisations which are 'bad' (charities G, F, I and J in Australia; PBOs B, D and E in Poland) since their appraisal scores are negative regardless the MCDA method. The best entities for donation, taking into account their effectiveness and reputation, are charity K in Australia and PBO K in Poland. They will be recommended to the DM.

TABLE 2. Assessment factors (evaluation criteria and measures)

	Criterion	Measure – calcu	lation formula
$\mathbf{f_k}$	(min/max/value of); (earlier studies)	Australia	Poland
f_1	Average amount of aid per beneficiary (max)	costs directly connected with charitable activities/number of beneficiaries	cost of unpaid statutory activities/number of beneficiaries
f ₂	Average revenue generated by people involved in organisation's activities (max)	total revenue/number of people involved in charity activities (employees, volunteers, board members)	total revenue/number of people involved in PBO's activities (employees, volunteers, members)
f ₃	Labour cost in relation to total revenue (min)	gross salaries/	
f_4	Change in revenue (max); (a)	(total revenue in current year – t total revenue in	previous year
f_5	Financial stability ratio (value of 73); (b, c)	(cash at bank and in hand + other short-term investments (in previous year) *365)/total cost (in current year)	cash and other short-term investments (in previous year) *365/total cost (in current year)
f ₆	Private revenue concentration ratio (% of private financing) (max); (b, c)	(donations and bequests + fundraising)/total revenue	(1% of PIT + incomes from private sources including individual and institutional donations)/total revenue
f ₇	Administrative costs ratio (% of administrative costs) (value of 6,5%); (b, c, d, e)	costs qualified as administrative costs/total cost	administrative cost/total cost
f_8	Activity scope (value of 36); (b, c)	number of beneficiaries/nur organisation	1 1
f ₉	Alternative labour costs (max); (b, c)	(number of volunteers*gr	
f ₁₀	Organisation's age (max); (e)	the number of days an organisation has been active	the number of days an organisation has PBO status
f ₁₁	Statutory goals and activities or projects (max); (c)	Do annual statements of an organi define precisely statutory goals and to achieve those objectives? (app	l activities or projects undertaken praisal of the DM on scale 0-3)
f ₁₂	Effects of activities (max); (c)	Do annual statements of an organi disclose accurately effects of activiti in the recent period? (appraisa	es undertaken by the organisation l of the DM using scale 0-3)
f ₁₃	Beneficiaries of activities (max); (c)	Do annual statements of an organic characterise thoroughly beneficiar organisation in the recent period? (a	ies of activities conducted by the
f ₁₄	Organisation's image (max); (c)	Does the web-site of the organisation of the PBO? (appraisal or	n help to produce a positive image

a) [Charity Navigator...]; b) [Dyczkowski, 2015a]; c) [Dyczkowski, 2015b]; d) [Frumkin, Kim 2001]; e) [Trussel, Parsons, 2008]

Source: [Dyczkowski, 2015a; 2015b; Waniak-Michalak, Zarzycka, 2012], own elaboration.

TABLE 3.
Rankings of public service organisations obtained using different MCDA methods

		Aust	ralia			Pol	and	
	(Organisatio	on (Charity)		Organisat	ion (PBO)	
No.	PROMETHEE IIv	EXPROM IIv	Modified ELECTRE III	EVAMIX	PROMETHEE IIv	EXPROM IIv	Modified ELECTRE III	EVAMIX
1	AUS K	AUS K	AUS K	AUS C	POL K	POL K	POL K,	POLJ
2	AUS D	AUS D	AUS D,	AUS B	POL H	POL H	POL H	POL K
3	AUS E	AUS E	AUS E	AUS K	POL C	POL C	POL A,	POL A
4	AUS C	AUS C	AUS A,	AUS A	POLJ	POLJ	POL C,	POL F
5	AUS A,	AUS A,	AUS C,	AUS H	POL G	POL G	POL G,	POL H
6	AUS H	AUS H	AUS H	AUS E	POL I	POL I	POL I,	POL B
7	AUS B	AUS B	AUS B,	AUS D	POL A	POL A	POL J	POL G
8	AUS J	AUS J	AUS F,	AUS G	POL F	POL F	POL B,	POL E
9	AUS G	AUS G	AUS G,	AUS F	POL D	POL D	POL D,	POL I
10	AUS F	AUS F	AUS J	AUS I	POL B	POL B	POL E,	POL C
11	AUS I	AUS I	AUS I	AUS J	POL E	POL E	POL F	POL D

Source: own elaboration.

5. Conclusions

In the article we have proposed a universally applicable tool, based on the outranking MCDA methods, which can support charitable givers all over the world in making clever and confident donation decisions. Furthermore, it may be used by authorities (self-governments or central administration) in the process of selecting organisations which are to be delegated certain tasks financed with public funds. Last but not least, it may help non-profit organisations to monitor themselves more effectively and to verify their own attractiveness as fundraisers.

It should be emphasised that the results obtained with the presented approach depend on assumptions made as well as on data quality. In the assessment process, we used both financial and non-financial data acquired from financial statements, additional reports (such as AIS in Australia or performance report in Poland) and organisations' websites. In the analysed countries, the data quality was subject to short experience in reporting (in Australia 2014 was the second year of obligatory reporting for charities registered with ACNC, in Poland there were changes in legal regulations in 2013 and 2014). Moreover, in Australia there are no standards or guidelines for financial statements reported to ACNC. According to Australian regulations, charities have to prepare their financial reports in accordance with the Australian Accounting Standards and present a true and

fair view. Though, one charity may present information in a different form than another charity presents its information. For example, some charities may concentrate on program allocation of costs but other charities may group costs according to their nature (such as 'employee expenses', 'administration' and so on) [Information on the Register...]. In consequence, it is hard to compare selected financial data when information is disclosed in different forms. However, taking into consideration the trend of promoting accountability and transparency in the third sector organisations, above mentioned challenges may be minimized in the future.

Statement of Authorship

Ewa Chojnacka, Ph.D. – conception and design of the work, data collection, drafting the article, final approval of the version to be published – 50%

Dorota Górecka, Ph.D. – conception and design of the work, conception and application of the performance appraisal procedure, drafting the article, final approval of the version to be published – 50%.

Bibliography

- Act of law of April 24th 2003 on Public Benefit and Volunteer Work, Ustawa z dnia 24 kwietnia 2003 r. o działalności pożytku publicznego i o wolontariacie, Dz. U. 2003 nr 96, poz. 873 z późn. zm.
- Charities Act 2013 No. 100, 2013. An Act to Define Charity and Charitable Purpose, and for Related Purposes.
- Charity Tax Concessions Available, Australian Government, ACNC, https://www.acnc.gov.au/ACNC/Register_my_charity/Why_register/Reg_Tax_conc/ACNC/Edu/Char_con_avail.aspx (access: 15.11.2016).
- Charity Navigator Your Guide to Intelligent Giving, http://www.charitynavigator.org/index.cfm?bay=content.view&cpid=2181 (access: 10.10.2016).
- Chojnacka E., Górecka D., 2016, Evaluating Public Benefit Organisations in Poland with the EVAMIX Method for Mixed Data, "Multiple Criteria Decision Making", 11, 36-50, doi: 10.22367/mcdm.2016.11.03.
- Cortis N., Lee I., Powell A., Simnett R., Reeve R., 2015, *Australian Charities Report 2014*, Centre for Social Impact and Social Policy Research Centre, UNSW Australia, 13.
- Dyczkowski T., 2015a, Mierniki dokonań organizacji pożytku publicznego. Możliwości i ograniczenia stosowania, "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", 398, 146-158.
- Dyczkowski T., 2015b, Financial and Non-Financial Information in Performance Assessment of Public Benefit Organizations, "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", 398.
- Elementarz III sektora 2005, (ed.) Gałązka A., Klon/Jawor, 19-20, http://www.ngo.pl/files/biblioteka.ngo.pl/public/ksiazki/Klon/elementarz_III_sektora.pdf (access: 29.11.2016).

- Figueira J., Roy B., 2002, Determining the Weights of Criteria in the ELECTRE Type Method with a Revised Simos' Procedure, "European Journal of Operational Research", 139(2).
- Frumkin P., Kim M.T., 2001, Strategic Positioning and the Financing of Nonprofit Organizations: Is Efficiency Rewarded in the Contributions Marketplace?, "Public Administration Review", 61(3).
- Górecka D., 2009, Wielokryterialne wspomaganie wyboru projektów europejskich, TNOiK "Dom Organizatora", Toruń.
- Górecka D., 2010, Zastosowanie metod wielokryterialnych opartych na relacji przewyższania do oceny europejskich projektów inwestycyjnych [in:] Metody i zastosowania badań operacyjnych'10, (ed.) M. Nowak, Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, Katowice.
- Górecka D., 2011, On the Choice of Method in Multi-Criteria Decision Aiding Process Concerning European Projects [in:] Multiple Criteria Decision- Making'10-11, (eds.) T. Trzaskalik, T. Wachowicz, Publisher of The University of Economics in Katowice, Katowice.
- Górecka D., 2012, Applying Multi-Criteria Decision Aiding Techniques in the Process of Project Management within the Wedding Planning Business, "Operations Research and Decisions", 4(22).
- Górecka D., 2014, Metody PROMETHEE [in:] Wielokryterialne wspomaganie decyzji. Metody i zastosowania, (ed.) T. Trzaskalik, PWE, Warszawa.
- Górecka D., 2015, Zastosowanie metod wielokryterialnych w procesie ubiegania się o akredytację międzynarodową AACSB [in:] Badania operacyjne. Przykłady zastosowań, (eds.) J.B. Gajda, R. Jadczak, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Górecka D., Muszyńska J., 2011, *Analiza przestrzenna innowacyjności polskich regionów*, "Acta Universitatis Lodziensis. Folia Oeconomica", 253.
- Górecka D., Pietrzak M.B. 2012 Zastosowanie metody PROMETHEE II w procesie rankingowania projektów europejskich w ramach Regionalnego Programu Operacyjnego Województwa Kujawsko-Pomorskiego na lata 2007-2013, "Studia Ekonomiczne, Modelowanie Preferencji a Ryzyko'12, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach".
- Górecka D., Szałucka M., 2013, Country Market Selection in International Expansion Using Multicriteria Decision Aiding Methods, "Multiple Criteria Decision Making", 8, 31-55.
- Handbook on Non-Profit Institutions in the System of National Accounts, 2003, United Nations, Studies in Methods, Series F., No. 91, http://unstats.un.org/unsd/publication/seriesf/seriesf_91e.pdf (access: 01.12.2016).
- Hinkle D., 1965, *The Change of Personal Constructs from the Viewpoint of a Theory of Construct Implications*, Ph.D. Dissertation, Ohio State University, Ohio.
- Hokkanen J., Salminen P., 1994, The Choice of a Solid Waste Management System by Using the ELECTRE III Decision-Aid Method [in:] Applying Multiple Criteria Aid for Decision to Environmental Management, (ed.) M. Paruccini, Kluwer Academic Publishers, Dordrecht.
- Hokkanen J., Salminen P., 1997, *Choosing a Solid Waste Management System Using Multicriteria Decision Analysis*, "European Journal of Operational Research", 98(1).
- Information on the Register: Understanding Financial Information, Australian Government, ACNC, http://www.acnc.gov.au/ACNC/Reg/understanding_financial.aspx (access: 06.12.2016).

- Mousseau V., 1995, Eliciting Information Concerning the Relative Importance of Criteria [in:] Advances in Multicriteria Analysis, (eds.) P.M. Pardalos, Y. Siskos, C. Zopounidis, Kluwer Academic Publishers, Dordrecht.
- Rogers M., Bruen M., 1998, A New System for Weighting Environmental Criteria for Use within ELECTRE III, "European Journal of Operational Research", 107(3).
- Salamon L.M., Sokolowski S.W., Haddock M.A., Tice H. S., 2013, *The State of Global Civil Society and Volunteering: Latest Findings from the Implementation of the UN Nonprofit Handbook*, Working Paper No. 49, March, The Johns Hopkins Center for Civil Society Studies, Baltimore.
- Salamon L.M., Anheier H.K., 1992, In Search of the Nonprofit Sector II: The Problem of Classification, Working Papers of the Johns Hopkins Comparative Nonprofit Sector Project, no. 3, The Johns Hopkins Institute for Policy Studies, Baltimore.
- Salamon L.M., Anheier H.K., 1996, *The International Classification of Nonprofit Organizations: ICNPO-Revision 1*, Working Papers of the Johns Hopkins Comparative Nonprofit Sector Project, no. 19, The Johns Hopkins Institute for Policy Studies, Baltimore.
- Sektor non-profit w 2014 2016, Główny Urząd Statystyczny, Studia i Analizy Statystyczne, Warszawa, http://stat.gov.pl/obszary-tematyczne/gospodarka-spoleczna-wolonta riat/gospodarka-spoleczna-trzeci-sektor/sektor-non-profit-w-2014-r-,1,5.html (access: 27.10.2016).
- Trussel J.M., Parsons L.M., 2008, Financial Reporting Factors Affecting Donations to Charitable Organizations, "Advances in Accounting", 23.
- Voogd H., 1982, Multicriteria Evaluation with Mixed Qualitative and Quantitative Data, "Environment and Planning B", 9.
- Waniak-Michalak H., Zarzycka E., 2012, Performance Measurement of Public Benefit Organizations on the Basis of Information from Financial Statements and Its Influence on Their Results, "Zeszyty Teoretyczne Rachunkowości", 68(124).
- Zak P., 2012, Public Benefit Status in Poland, Ogólnopolska Federacja Organizacji Pozarządowych, Public Benefit Status in V4 countries and Germany conference in Prague 21.09.2012, http://ofop.eu/sites/ofop.eu/files/biblioteka-pliki/pzak_ public_benefit_and_ngo_in_poland_20120921.pdf (access: 15. 06.2016).

Model of Preferences and Input Data

"	Į.	\mathbf{f}_{2}	f3	\mathbf{f}_4	\mathbf{f}_5	\mathbf{f}_6	f ₇	\mathbf{f}_8	f ₉	\mathbf{f}_{10}	\mathbf{f}_{11}	\mathbf{f}_{12}	f_{13}	\mathbf{f}_{14}
ai/Ik	[MAX]	[MAX]	[MIN]	[MAX]	[goal: 73]	[MAX]	[goal: 0.065]	[goal: 36]	[MAX]	[MAX]	(scale 0-3)	(scale 0-3)	(scale 0-3)	(scale 0-3) (scale 0-3) (scale 0-3) (scale 0-3)
weight	0.124	0.124	0.095	0.029	0.057	0.057	0.014	0.057	0.014	0.057	0.057	0.124	0.095	0.095
qk	0.2 f _k (a _i)	$0.2 f_k(a_i)$	0.1	0.2	30	0.1	0.1	0.3 f _k (a _i)	$0.3 f_k(a_i)$	1825	_	1	1	1
	$0.65 f_k(a_i)$	$0.65 \text{ fk}(a_i)$	0.7	9.0	150	0.7	0.7	0.5 f _k (a _i)	$0.5 f_k(a_i)$	3650	2	2	2	2
$\mathbf{v}_{\mathbf{k}}$	$0.95 f_k(a_i)$	$0.95 f_k(a_i)$	0.9	1	360	0.9	0.9	$0.95 f_k(a_i)$	$0.9 f_k(a_i)$	18250	3	3	3	3
						Aust	Australia - Charities	sa						
Charity					$f_k(a_i) - eva$	duation of	$k(a_i)$ – evaluation of the alternative a_i (charity) on the criterion f_k	ai (charity)	on the crit	erion f _k				
AUS A	7077.64	14251.52	0.0920	-0.1429	153.75	0.6220	0.0502	1.83	109149.52	7822	1	1	1	2
AUS B	11.76	335436.67	0.1358	0.1110	302.47	0.9362	0.0298	22082.17	212808.99	6361	2	2	2	С
AUS C	571.02	254849.07	0.0000	0.1834	41.59	0.9609	0.0471	423.60	22217.87	1742	2		2	С
AUS D	606.25	114830.78	0.4839	0.0997	81.96	0.5389	0.0912	140.49	197743.75	3804	3	3	8	6
AUS E	189.71	381898.80	0.4477	0.4009	221.02	0.4458	0.0700	1365.69	727458.40	19875	_	1	_	2
AUS F	398.89	66519.64	0.5458	-0.0584	633.32	0.5317	0.0778	127.96	1702363.39	29737	_	1	_	2
AUS G	44.09	12854.30	0.3711	0.2078	517.75	0.1063	0.1445	85.74	5967888.89	7457	Τ.	2	1	3
AUSH	7060.27	140420.67	0.3079	0.2516	1373.47	0.7053	0.0490	10.00	370544.29	13666	_	0	1	2
AUS I	429.02	46819.10	0.4917	-0.3039	54.84	0.9009	0.1660	77.42	0.00	8918	Τ.	0	1	1
AUSJ	1259.38	11902.46	0.2688	-0.4245	153.05	0.1936	0.3518	7.70	1472041.67	3804	Τ.	1	1	2
AUS K	881.45	107923.37	0.5305	0.1745	12.21	0.6863	0.1652	79.94	3544850.01	37407	3	3	3	3
					\mathbf{Pol}	land – Pub	Poland - Public Benefit Organisations	ganisations						
PBO					$f_k(a_i) - ev$	aluation of	$f_k(a_i)$ – evaluation of the alternative a_i (PBO) on the criterion f_k	e ai (PBO)	on the crite	$rion f_k$				
POL A	86.06	26694.42	0.0457	0.3024	41.41	0.8865	0.2815	204.26	14319.54	4117	3	8	3	3
POL B	89.44	29855.98	0.4663	0.4078	106.32	0.0322	0.0625	231.50	19640.25	4171	3	3	8	3
POL C	572.95	21367.02	0.0000	-0.0718	14.04	0.0000	0.0007	35.56	0.00	4318	2		_	1
POL D	0.00	37448.55	0.3462	-0.0788	66.73	0.2625	0.7341	4243.43	82577.78	4151	2	2	2	2
POL E	71.95	30175.27	0.0597	0.1709	30.30	0.0676	0.9723	11.76	0.00	3456	3	2	7	3
POL F	6.93	58578.88	0.1074	-0.0311	29.99	0.9255	0.3605	3386.49	30640.66	3110	3	3	8	3
POL G	104.97	8645.69	0.0000	-0.0928	0.00	0.9943	0.0000	84.58	277200.00	2794	2	1	2	2
POL H	37.98	40155.69	0.0000	1.1761	54.74	0.4237	0.1478	1100.92	132396.92	120	3	3	8	2
POL I	670.70	39624.44	0.0217	-0.5438	0.00	0.1287	0.0000	48.94	0.00	519	2	2		2
POLJ	1039.83	217163.46	0.0740	0.4368	12.32	0.9998	0.0000	192.00	3350.00	1450	2	2	1	1
POL K	1003.37	22893.19	0.0687	0.1520	76.48	0.8096	0.0715	17.65	30319.50	1427	2	2	1	2

Source: own elaboration