

Ondřej Kročil*
Richard Pospíšil**

JEL Classification L31, M10
Review article

COMPREHENSIVE MEASUREMENT OF SOCIAL ENTERPRISE IMPACT

The theory of enterprise financial management offers number of methods used in practice which serve as basis for investment decision making and as a mode of feedback on its effectivity and impacts. Most of these methods are appropriate mainly for enterprise financial management whose main objective is market value maximisation or profit maximisation. But important elements of present-day economy are also enterprises pursuing a higher objective than profit. In European Union countries this role is played particularly by social enterprises in the form of profit-making or non-profitmaking organizations which quite often obtain public-budget-based support. Undoubtedly, social enterprise as a whole may be viewed as so-called social investment. Measuring of real impact of this type of investment is important not only for social entrepreneurs but also for public authorities or bodies and it requires application of different methods. Research objective of this article is to propose a set of methods which can be used to measure social enterprise contribution effectively and comprehensively by social entrepreneurs or public authorities.

Keywords: social enterprise, impact, measurement, SROI, Local Multiplier, Balanced Scorecard.

* O. Kročil, Assistant Professor, Department of Applied Economics, Palacký University Olomouc, Olomouc, the Czech Republic (E-mail: ondrej.krocil@seznam.cz).

** R. Pospíšil, Ph.D., Associate Professor, Department of Applied Economics, Palacký University Olomouc, Olomouc, the Czech Republic (E-mail: richard.pospisil@upol.cz).

The paper was received on May 4th, 2018. It was accepted for publication on July 20th, 2018.

1. Introduction

The current world economy is facing a number of serious problems. With the rise of globalization, there are widening social inequalities, the differences between the rich and the poor within national states and across the continents. In view of the constant pursuit of economic growth, logically we are struggling with the loss of natural resources. Climate change also plays a major role. One of the most pressing problems is the long-term drought and lack of water, previously perceived as something obvious, but now with the potential of not only the production factor. These and other changes in society and the natural environment create an effort to change economic thinking, to quit constant growth and to focus on sustainability.

One of the approaches to fulfilling the ideas of responsible business is social entrepreneurship. This is a phenomenon at the heart of which is the effort to solve social problems. The most common types of these companies are so-called integration social enterprises, which focus on the employment of disadvantaged persons in the labor market. It is evident that their existence is very important. Although, for example, in the Czech Republic there is generally very low unemployment at this time, the situation for disadvantaged groups is different. In April 2018, 2919 persons with disabilities were applying for work in the Czech Republic, but there were only 762 job vacancies for these persons. The situation could be even more difficult without demand from integration social enterprises.

Social enterprises that solve these problems can be considered a so-called social investment. Measuring the real impact of this type of investment is important not only for social entrepreneurs but also for public authorities or bodies, as social enterprises often use public finance resources for their activities and their allocation should depend on the effectiveness of this investment. Measuring the impact of these investments requires different methods than traditional corporate investments. Research objective of this article is to propose a set of methods which can be used to measure social enterprise contribution effectively and comprehensively by social entrepreneurs or public authorities when social enterprise is viewed as social investment relevant to public economy and society.

For the purposes of this research, two research questions are set:

RQ1: Is it possible to find a combination of methods by which the impact of social enterprises can be comprehensively measured?

RQ2: Are these methods realistically implementable? (in terms of data availability)

This research is oriented to the needs of the forthcoming Law on Social Entrepreneurship in the Czech Republic. This law defines the principles and indicators that a social enterprise must fulfill and which will also need to be measured.

The paper is further divided into several chapters, namely on literary review, presentation of methods, results of research and conclusion, which outlines other possible opportunities for research and its limits.

2. Literature Review

Social enterprise may be defined as an enterprise producing or selling goods or services, having high degree of autonomy, taking economic risks, aiming at a socially beneficial objective under restriction of redistribution of profits (Nyssens, 2006). Social business is one of the possible approaches to responsible business. In addition to social business, CSR is a very widespread concept, which is analyzed by many experts, for example from the perspective of attractiveness for different types of businesses (Vincek, Dvorski, Novak, 2017). Because every European Union country specifies term social enterprise in its national legislation differently, criteria that social enterprises should comply with are quite often different. Although there are differences, it is possible to state that a social enterprise is an entity that could make a profit (and making a profit is desirable in the case of a social enterprise) but a social enterprise has to pursue its main objective – engaging in beneficial activities for society as a whole, or for a part of society. Definition of social entrepreneurship stated in forthcoming Law on Social Entrepreneurship in the Czech Republic was used for research purposes of this article.

Nicholls (2007) highlights the importance of impact assessment of social enterprises on their surroundings. Ridley-Duff and Bull (2016) describe methods of establishing social enterprise impact and practical management techniques. Clifford, Markey and Malpani (2013) also analyse social impact measurement in detail. Ebrahim and Rangan (2010) were concerned with development of social enterprise impact framework.

Numerous authors analyse application of specific methods designed for public benefit investment evaluation. Millar and Hall (2012) used SROI Analysis. Potma (2016) focused on use of research methods by social entrepreneurs. Bellucci, Franchi, Nitti and Testi (2017) also provide practical application of SROI Analysis. Shaw, Schneirer, Beatty, Baird (1995) described use of a strategic management analysis called Balanced Scorecard. Somers (2005) and Bull (2007) focused on Balanced Scorecard adapted to social enterprises in the United Kingdom. Sacks (2002) or Wilkinson (2009) explain Local Multiplier 3 created by New Economics Foundation which is used to measure benefits from investment for local economy. One of a few social enterprise impact researches on economy in the Czech Republic was presented by Štátná who used SROI Analysis in her research (2012).

Vyskočil (2014) also covers social impact measurement issues. Turner (2007) or Boardman, Greenberg, Vining and Weimer (2017) focus on CBA Analysis which is used to evaluate public projects. Djukic, Jovanoski, Ivanovic, Lazic and Bodroza (2016) apply CBA Analysis to the environment. Koroljova and Voronova (2007) present Eco-mapping tool for SME. A number of studies focuses on SIA – Social Impact Assessment (Vanclay, 2015; Grieco, Michelini, Iasevoli, 2014).

Based on the literature search, it is possible to state that there is a number of technical and scientific studies focusing on different methods applicable to social enterprise impact assessment and impact of other social investments. In our opinion, none of these methods may be used to provide a comprehensive assessment of this impact because frequently these methods are not in competition with each other but they may be seen as complementary. Because of this, the objective of our research is to devise a set of methods which can be used by social entrepreneurs or public authorities or bodies to measure social enterprise contribution effectively and comprehensively as social investment relevant to public economy and society.

3. Methodology and Data

Our early-stage research was based on comprehensive literature search of technical and scientific studies focused on application of methods designed to measure social enterprise impact and impact of other social investments. Based on this research, three methods were selected to cover different impact areas.

Table 1.

METHODS SELECTED FOR DETAILED ANALYSIS

Method indication	Method name
M1	Social Return on Investment (SROI)
M2	Local Multiplier 3 (LM3)
M3	Social Enterprise Balanced Scorecard

Social enterprise principles and indicators established by forthcoming Law on Social Entrepreneurship in the Czech Republic were converted to criteria written in the left column of Scheme 2. Then for each criterion it was recorded in the right part of Scheme 2 if methods M1, M2 and M3 fulfil its specifications.

In the second part of the research, data sources which social enterprises must use to measure their actual impact were analysed, taking into the account the availability of such information and difficulty of their use.

We briefly present the analysed methods:

SROI Analysis

SROI Analysis (Social Return on Investment) serves to evaluate socio-economic and environmental impacts of investment by changes which arise for all stakeholders when the investment is realised. The advantage of this method is that it is based on a principle under which identified non-financial benefits are monetized, therefore converted into money, which enables comparison between different investment options.

SROI Analysis may be realised as predictive or evaluative, depending on whether the examined investment is in a planning stage, or it has already been realised. SROI Analysis is divided into several phases which can be seen in Table 2.

Table 2.

SROI PHASES

Order of phase	Description of phase
1	Determination of the scope of analysis
2	Definition of stakeholders
3	Identification of investment inputs
4	Monetization of inputs
5	Identification of result of investment
6	Determination of result indicators
7	Determination of duration of results
8	Monetization of results
9	Gross impact calculation
10	Gross impact adjustment
11	Net impact calculation
12	Net present value calculation
13	SROI indicator calculation

Source: Ministry of Regional Development CZ (2015)

When determining the scope of the analysis, it is necessary to determine the objective of the analysis, its type (evaluative or predictive), and the time period which is to be examined. Stakeholders are all entities who notice positive or negative changes as a result of realization of investment. Inputs are all contributions which stakeholders invest into investment. Results are changes which occur among each individual stakeholder as a result of realization of investment. Net impact is calculated based on so called gross impact adjustment, i.e. deducting zero investment variant which represents result quantity even in case that investment would not be realised. In the case when predictive type of SROI Analysis is used, it is necessary to use net present value method to convert future impacts of investment to their present value.

Local Multiplier

Local Multiplier, following Keynesian Multiplier Effect, is a method enabling monitoring and evaluating cash flows in local economy. The method is realized in three subsequent phases:

Table 3.

LM3 METHOD PHASES

Indication of phase	Description of phase
LM1	Income of an examined social enterprise
LM2	Expenditure of an examined social enterprise within local economy (entities such as suppliers, employees)
LM3	Expenditure of local entities within local economy

Source: Sacks (2002)

LM3 is calculated on the basis of these three phases.

Social Enterprise Balanced Scorecard

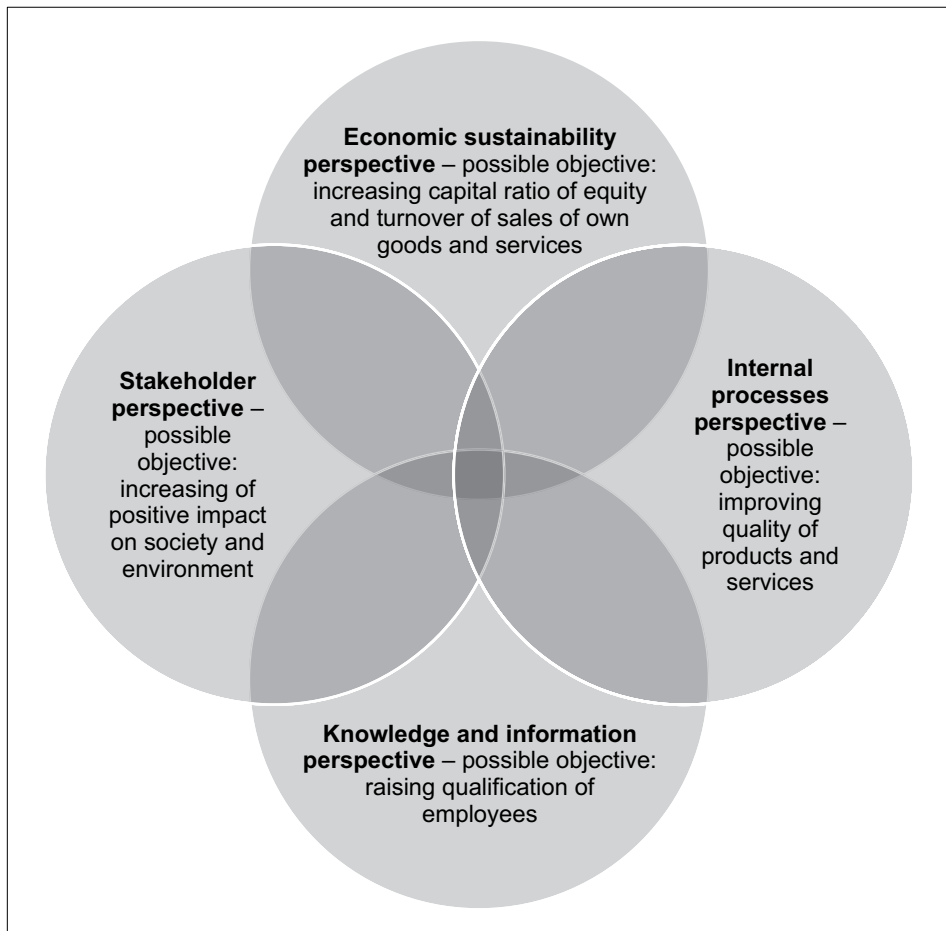
Social Enterprise Balanced Scorecard is a strategic management tool used to evaluate long-term enterprise objectives. This method is based on a creation of visual presentation of enterprise strategy key elements which in case of a social enterprise

should be within social, environmental and economic area. It helps to identify key factors of a social enterprise which lead to achieving of objectives in all perspectives.

SEBS Method is realized in two basic phases. In the first phase, a strategic map with four levels that are the most important for the company is created. Within these levels enterprise objectives are pursued. A strategic map of a social enterprise may contain following perspectives and objectives:

Scheme 1.

POSSIBLE PERSPECTIVES AND OBJECTIVES OF A SOCIAL ENTERPRISE



Source: Authors.

As shown in Scheme 1, all four perspectives and objectives are interconnected and influence each other. Raising qualification of employees leads to improving quality of provided products and services, thereby customer satisfaction is increased, customers being one of stakeholders. When customer satisfaction increases, turnover and equity increase as well.

In the second phase, indicators used to measure individual objectives are established.

Because this research is oriented to the needs of the forthcoming Law on Social Entrepreneurship in the Czech Republic, we introduce the principles and indicators defined by this law that a social enterprise must fulfill and which will also need to be measured.

Table 4.

SOCIAL ENTERPRISE PRINCIPLES

Principle	Meaning
Social impact	Implementation of activities beneficial for society or for a specific group of disadvantaged people
	Employing of disadvantaged people in the labour market (in case of WISE ¹)
Economic impact	Eventual profit is used primarily on further development of an enterprise
	Autonomy in management decision-making
	At least a part of revenue must be made of turnover of sales of own products and services
	Ability to manage economic risks
Impact on environment and local society	Consideration of environmental impacts of enterprise activities
	Cooperation of a social enterprise with local entities

Source: Law on Social Entrepreneurship in the Czech Republic, TESSEA

The principles presented in the table 4 are specified by the indicators that a social enterprise must fulfil.

¹ WISE (Work Integration Social Enterprise) is a type of social enterprise that focuses on employment and integration of disadvantaged people in the labour market

Table 5.

SOCIAL ENTERPRISE INDICATORS

Area	Indicator
Social	Employees are regularly and systematically informed about activities of an enterprise, its revenue and its implementing of activities which are in the public interest
	People from disadvantaged groups make up at least 30 % of all employees (in case of WISE)
Economic	More than 50 % of profit is used on further development of an enterprise and fulfilling an objective which is in the public interest
	When making decisions, management is independent on surrounding entities
	Turnover of sales of own products and services make up at least 30 % of total enterprise revenue
	An enterprise uses one of standard methods of economic management or risk management
Environment and local society	An enterprise formulated environmentally friendly principles and implements them in practice
	An enterprise communicates and cooperates with local entities

Source: Law on Social Entrepreneurship in the Czech Republic, TESSEA

Principles and indicators set the direction the social enterprise should take. However, in order to determine the real impact of a social enterprise on society, public budgets and the environment, it is necessary to measure the benefits in these areas much deeper. It is insufficient to evaluate a social enterprise only on the basis that 50% of the profit is used on further development, that an enterprise employs 30 % of disadvantaged people and that turnover of sales of own products and services make up at least 30 %. We must be able to calculate the real impact of an enterprise reaching these numbers.

4. Results

Research Question 1

We have decomposed the principles and indicators that are now expressed in the table 6 as areas in which it is necessary to measure in detail the impacts of social enterprises. Impacts in areas which must be measured in social enterprises and other social investments are recorded in the left column of the table. Given impacts in these areas are tested if they can or cannot be effectively measured by one of selected methods. If more methods could be used when measuring one impact, only one method is preferred, the one which is the most suitable for measuring of given impact.

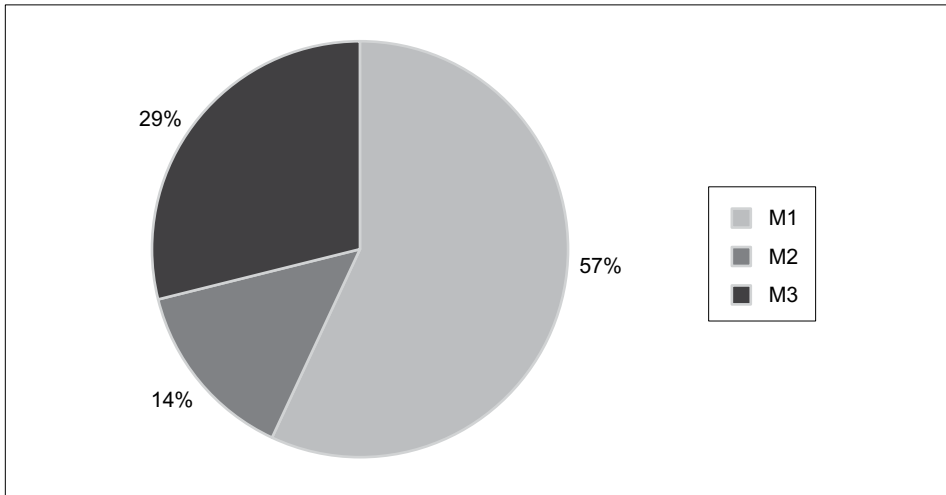
Table 6.

POSSIBILITY OF MEASURING OF NECESSARY IMPACTS BY SELECTED METHODS

Impact	M1	M2	M3
Benefit for public economy	✓		
Benefit for disadvantaged groups of people	✓		
Impact on environment	✓		
Benefit for local economy		✓	
Economic sustainability of an enterprise (profit, turnover)			✓
Ongoing development and improving of an enterprise			✓
Stakeholder involvement into measuring	✓		

Source: Authors.

As is evident from Table 6, all three methods can be used to create a complex set of tools which can be used to effectively measure benefit of a social enterprise or other social investment in all relevant areas. M1 and M2 methods are characterised by the possibility to convert their input and output to money – and thus monetize them. Benefit ratio of different methods in the whole set of tools is stated in Graph 1.

*Graph 1.***BENEFIT RATIO OF METHODS M1, M2 AND M3
ON MEASURING OF ALL IMPACTS**

Source: Own research

Research Question 2

In the final part of the research, we focused on the question, whether M1, M2 and M3 methods can be realistically implemented by a social enterprise, that is, whether data necessary to apply these methods are accessible for the enterprise. We focused on sources which a social enterprise should use when applying these methods.

Table 7.

DATA SOURCES

Method	Data source
M1	Interviews with all stakeholders
M2	Financial accounting of an examined enterprise, supplier and employee cash outflow data
M3	Financial accounting of an enterprise, financial analysis information, environmental and social accounting

Source: Own research

M1 method is the most demanding for an enterprise in terms of time and organization. When applied correctly, it requires involvement of all stakeholders (or more precisely representatives of all stakeholders) who are influenced by realization of social investment or other activities. Of course, demanding character of this method depends on the scope of the analysis and given objectives. Meeting representatives of all stakeholders is feasible. Since M1 method has the largest share on measuring of all criteria, we recommend to implement it as a primary method.

For the first two phases of M2 method, financial data are sufficient. Their analysis is not problematic for an enterprise. Realization of the third phase is more complicated because the enterprise must acquire data from its local suppliers and its employees. Because it is improbable that in particular employees would keep statistics about their expenses in local economy, we recommend to implement this method in longer time intervals, e.g. one or twice a year, and measuring would be applied to a shorter time interval, e.g. 1 month. Employees and suppliers should always be requested to record their data in advance.

M3 method draws on financial accounting data and subsequently on financial analysis data in some of its perspectives. For some other perspectives, we recommend to implement so called environmental accounting or social accounting which extends traditional financial accounting information to include social effects of business decisions and environmental impacts by keeping statistics about employing disadvantaged people, using recyclable materials and other areas which form part of social and environmental sphere.

Based on analysis of necessary data, it is possible to conclude that all three methods can be realistically implemented by a social enterprise. Methods differentiate from each other by time and resources needed. We believe that M3 method is the easiest one to implement. It is appropriate to implement it periodically and by doing this evaluate fulfilling of social objectives of an enterprise. M2 method

is more complicated. Obtaining external data is its main limit. While respecting above mentioned recommendation, we recommend using this method as well because it is the only one that can evaluate and monetize impacts into local economy. M1 is the most challenging but also the most fundamental method from perspective of measuring of each criterion. From our perspective, it should be implemented at least once a year to evaluate what changes have taken place and to what extent in case of all entities influenced by activities of a social enterprise or social investment.

For the appropriate combination of the M1, M2 and M3 methods with respect to the requirements of the Law on Social Entrepreneurship, we propose to define the following perspectives within the SEBS method and their measurement methods.

Table 8.

SUGGESTION OF A SUITABLE COMBINATION OF SELECTED METHODS

Perspective	Method of measurement
1. Stakeholder perspective	
<i>1. a) disadvantaged groups of people (for WISE)</i>	SROI
<i>1. b) public authorities</i>	SROI
<i>1. c) other entities of society</i>	SROI
2. Local economy perspective	LM3
3. Economic sustainability perspective (profit, turnover etc.)	Financial analysis
4. Environment perspective	SROI

Source: Own research

The use of this process will also ensure ongoing development and improving of an enterprise and stakeholder involvement into measuring, which are the other conditions that the Law on Social Entrepreneurship requires.

5. Conclusion

The objective of our research was to propose a set of methods which can be used to measure social enterprise contribution effectively and comprehensively as social investment relevant to public economy and society by social entrepreneurs or public authorities with respect to the requirements of the Law on Social

Entrepreneurship in the Czech Republic. Two research questions are set in this paper, namely if it is possible to find a combination of methods by which the impact of social enterprises can be measured and if are these methods realistically implementable? Based on the literature search, three methods were selected for our final analysis, namely Social Return on Investment (SROI), Local Multiplier (LM3) and Social Enterprise Balanced Scorecard. After the analysis, we can say that the combination of these three methods is suitable for the comprehensive measurement of the social enterprise impact. At the same time, we have suggested how to apply these three methods to the needs of the Law on Social Entrepreneurship in the Czech Republic.

The proposed combination of methods for measuring the impact of a social enterprise can be useful especially if the enterprise is in the position of an applicant for financial resources for its further development (for example, financial resources provided by the municipality or by The European Social Fund). In this case, the assessment of the investment will be evaluative. These methods can also be used as a predictive one, for example, when a new enterprise will be in the position of an applicant for financial resources, however its real impact is not yet known.

This research provides scope for further exploration. An interesting example could be a case study focused on a particular company applying the proposed impact measurement procedure. We realize that our research has some limitations - the proposed combination of methods for measuring the impact of a social enterprise should be adjusted if we apply it to a specific type of social enterprise, for example so called energy enterprise that is included in Law on Social Entrepreneurship in Slovakia.

References:

- Bellucci, M., Franchi, S., Nitti, C., Testi, E. (2017). Analýza SROI – Domy Ronalda McDonalda v Itálii. *Action Research for CO-Development*
- Boardman A. E., Greenberg D. H., Vining A. R. a Weimer D. L. (2017). Cost-Benefit Analysis: Concepts and Practice. *Cambridge University Press*
- Bull M. (2007). “Balance”: the development of a social enterprise business performance analysis tool. *Social Enterprise Journal*. 3(1), 49-66
- Clifford, J., Markey K., Malpani N. (2013). Measuring Social Impact in Social Enterprise: The state of thought and practice in the UK. London. *E3M*. Dostupné z: http://ec.europa.eu/internal_market/social_business/docs/expert-group/social_impact/presentation-e3m_en.pdf

- Djukic M., Jovanoski I., Ivanovic O., Lazic M., Bodroza D. (2016). Cost-benefit analysis of an infrastructure project and a cost-reflective tariff: A case study for investment in wastewater treatment plant in Serbia. *Renewable and Sustainable Energy Reviews*, 59, 1419-1425
- Ebrahim A. S., Rangan V. K. (2010). The Limits of Nonprofit Impact: A Contingency Framework for Measuring Social Performance. *Harvard Business School General Management Unit Working Paper No. 10-099*
- Grieco C., Michelini L., Iasevoli G. (2014). Measuring Value Creation in Social Enterprises. A Cluster Analysis of Social Impact Assessment Models. *Nonprofit and Voluntary Sector Quarterly*, 44(6), 1173-1193
- Koroljova, A., Voronova, V. (2007). Eco-mapping as a basis for environmental management systems integration at small and medium enterprises. *Management of Environmental Quality: An International Journal*, 18(5), 542-555
- Millar, R., Hall, K. (2012). Social Return on Investment (SROI) and Performance Measurement. *Public Management Review*, 15(6), 923-941
- Ministerstvo pro místní rozvoj ČR (2015). Metodická příručka pro žadatele o dotaci k vypracování analýzy společenské návratnosti investice (SROI). Dostupné z: <https://www.mmr.cz/getmedia/108270ee-0d00-4b2f-80e6-2412af3386b9/Metodicka-prirucka-SROI-analyza.pdf>
- Nicholls, J. (2007). Why measuring and communicating social value can help social enterprise become more competitive. *Office of the Third Sector*.
- Nyssens, M. (2006). Social Enterprise: At the Crossroads of Market, Public Policies and Civil Society. *Routledge*, pp. 6. ISBN 0-203-94690-1
- Potma, L. (2016). Social impact measurement methods. University of Amsterdam. Dostupné z: https://www.social-enterprise.nl/files/2914/7508/0154/Scriptie_Lisa_Potma.pdf
- Ridley-Duff, R., Bull, M. (2015). Understanding Social Enterprise: Theory and Practice. *SAGE*.
- Sacks, J. (2002). The money trail. Measuring your impact on the local economy using LM3. *New Economics Foundation*. Dostupné z: <http://nefconsulting.com/wp-content/uploads/2017/05/TheMoneyTrail.pdf>
- Shaw, D. G., Schneirer, C. E., Beatty, R. W., Baird, L. S. (1995). The performance, measurement, management and appraisal sourcebook. *Human Resource Development Press*.
- Somers A. B. (2005). Shaping the balanced scorecard for use in UK social enterprise. *Social Enterprise Journal*, 1(1), 43-56
- Šťastná, J. (2012). Sociální ekonomika jako nástroj komunitního rozvoje v současné společnosti. Disertační práce. *Univerzita Karlova v Praze, Filozofická fakulta, Katedra sociologie*.
- Turner, R. K. (2007). Limits to CBA in UK and European environmental policy: retrospects and future prospects. *Environmental and Resource Economics*, 37(1), 253-269

- Vanclay F. (2015). Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. *Fargo ND: International Association for Impact Assessment*.
- Vincek, Z. L., Dvorski, S., Novak, E. (2017). The Comparison of Corporate Social Responsibility in the Manufacturing and Service Companies of the Republic of Croatia. *Ekonomski pregled*, 68(3), 267-296
- Vyskočil, M. (2014). Podklad pro koncepci politiky vlády vůči NNO do roku 2020. Sociální podnikání. *Centrum pro výzkum neziskového sektoru, Ekonomicko-správní fakulta Masarykovy Univerzity*. Dostupné z: https://www.vlada.cz/assets/ppov/rnno/dokumenty/studie_vyskocil_pro_web.pdf
- Wilkinson, A. (2009). Measurement of Sustainable Procurement. *East Midlands Development Agency*

SVEOBUH VATNO MJERENJE UČINAKA SOCIJALNOG PODUZEĆA

Sažetak

Teorija financijskog upravljanja nudi brojne metode koje se koriste u praksi, a koje služe kao osnova za donošenje odluka o ulaganju te kao povratna informacija o učinkovitosti i učincima investicijskih odluka. Većina tih metoda prikladna je uglavnom za financijsko upravljanje poduzećem čiji je glavni cilj maksimiziranje tržišne vrijednosti ili maksimiziranje profita. Ali važni elementi današnjeg gospodarstva jesu i poduzeća koja imaju viši cilj od dobiti. U zemljama Europske unije tu ulogu igraju socijalna poduzeća u obliku profitnih ili neprofitnih organizacija koje često dobivaju potporu iz javnog proračuna. Bez sumnje, socijalna poduzeća u cjelini mogu se promatrati kao tzv. društveno ulaganje. Mjerenje realnog utjecaja ove vrste ulaganja važno je ne samo za socijalna poduzeća, već i za javna tijela i zahtijeva primjenu različitih metoda. Istraživački cilj ovoga članka je predložiti niz metoda kojima se učinkovito i cjelovito mogu mjeriti doprinosi socijalnog poduzeća od strane socijalnog poduzetnika ili javnih tijela.

Ključne riječi: socijalno poduzeće, utjecaj, mjerenje, socijalni ROI, LM, uravnotežena tablica rezultata.

