

# Perception of Citizens of the Benefits of Public Services – MLP Case

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*Abstract:* - Public services are an important part of every economy. Because the providing of this type of services is financed from public budgets, it is important to evaluate the benefits which may flow from them to the society. Evaluation of benefits is quite difficult, because it needs the huge empirical survey which is made among the consumers of the services, who are asked for their individual benefit from the services.

This paper presents the results of empirical survey which has been realized during the year 2012 among public services consumers which are provided by the Municipal Library of Prague. The contribution of the paper consists on determining the exact value of benefit from the public library services providing to their users.

*Keywords:* - effectiveness, public services, public libraries, benefit, evaluation, public libraries, public finance

## 1 Introduction

Public services, their method of production and their efficient delivery, are an important part of every economy, since the cost of their providing significantly affects the range of public budgets [7]. Perception of the importance of public services lies in the difficulty of determining the benefits of these services for society and the economy as a whole. Valuation of the benefits of public services and the effectiveness of the provision are realized ex-post, i.e. based on subjective assessment services consumers.

Areas of investigation into the perceived benefits of public services and subsequent valuation of the benefits are provided in the context of this paper by public libraries. Research has taken place in the past (British Library, Florida), whose objective was to evaluate library services and to evaluate their contribution to society and the economy as a whole. In the Czech Republic, similar research was conducted in 2011 and 2012. The initiator of this research is the Municipal Library of Prague sponsored by the Ministry of Culture. Because the research is highly demanding, the library also collaborates with the University of Pardubice.

In the context of the research it is necessary to first define the concept of service. This term is defined in Article 57 of the Treaty on the Functioning of the European Union defines: "Services shall be considered to be 'services' within the meaning of the Treaties where they are normally

provided for remuneration, in so far as they are not governed by the provisions relating to freedom of movement for goods, capital and persons [4]."

According to the above-mentioned Article 57, the term service shall include:

- a) activities of an industrial character,
- b) activities of a commercial nature,
- c) activities of craftsmen,
- d) activities of the professions.

Subsequently, the concept of services is defined by Directive 2006/123/EC of the European Parliament and of the Council of the 12 December 2006 on services in the internal market. This definition is based on the above-mentioned Article 57 of the Treaty on the Functioning of the European Union. Paragraph 1 of the directive states that the term services means any self-employed economic activity normally provided for remuneration within the meaning of the aforementioned Article 57 of the Treaty [5].

In the context of this paper, services will not be understood as an economic activities provided for remuneration, but as one of the key activities of the public sector, i.e. performance of the public sector. The definitions of the public sector [8], [12] show that this sector provides public goods and services. Services in this context, as a rule, are not provided for remuneration but their provision is financed from public funds, either at the central, provincial or municipal levels.

The main objective of public service is to satisfy the needs of society and to maximize the benefits of users from those services. The general trend is to create a model scheme, in which the state creates conditions for public services systemic delivery where local government is responsible for the appropriate delivery of public services according to set parameters with the optimal use of local conditions including specific funding [1].

Currently, public services are divided into three types [1]:

- I. material public services,
- II. administrative activities,
- III. financial support.

The classification of public services allows the public sector division into blocks according to needs [13]. These areas are: social services, health, education, employment, culture, transport, defense, home affairs, communications, environment, infrastructure, technical services, and information services.

A key area in the context of this paper is culture as it includes the activities of libraries which are the theme of the following case study. In the Czech Republic, libraries are mainly financed from public budgets of lower territorial self-governing units namely towns and cities. Libraries provide citizens with a wide range of services that are considered as public services.

Given the situation that the activities of libraries are funded from public funds, it is necessary to analyze the cost-effectiveness of this funding. Since the benefits of this funding are difficult to measure directly, these analyses are often very expensive and time consuming. However, in this context, there are a number of studies focusing on measuring the benefits and in this relation the effectiveness of public funding [11], [10].

The aim of this paper is to analyze the perception of individual services benefits provided for clients of Prague municipal library. Subsequently, based on the results, the aim is to show whether Prague library services brings benefits for their clients and whether or not they are able to appreciate these benefits. The result of this paper will define the most widely used library services and the value of the benefits which the library brings to its clients.

The paper is divided into several parts. The introduction includes a theoretical basis and defines the basic concepts and issues of public services and subsequently a definition of the services of the Municipal Library of Prague is made. The second part describes the methodology and a case study including the conclusions that arise from this study.

## 2 Library services

A definition of library services provided by public libraries can be found in the law and recommendatory documents that define a basic set of services. Some of the main documents defining library services are: Library Act, IFLA/UNESCO Guidelines for Development, IFLA/UNESCO Manifesto on Public Libraries<sup>1</sup>, Glasgow Declaration on Libraries, Information Services and Intellectual Freedom, Recommendation No. R(99)14 of the Council of Europe and Methodological guideline of the Ministry of Culture to the standard definition of public libraries and information services provided by libraries established and/or operated by municipalities and regions in the Czech Republic.

Library services can be defined as services used to meet the needs of citizens in the area of knowledge, information and culture. The role of Library services is also mentioned in [9]. These are services that fall within the category of public services and are provided to all citizens regardless of their gender, race, religion, nationality, physical and mental health, political and cultural beliefs, etc.

It can be generally argued that library services have the following features [2]:

- they fall within the area of public services - library services are defined as services to the public;
- they are based on the principle of equality, continuity, priority (public interest takes precedence over private interest) and adaptation.

The basic services that should be provided by a library, according to the above-mentioned IFLA/UNESCO guidelines for development are as follows [14]:

- loan of books and other media;
- provision of books and other materials for use in the library;
- information services using print and electronic media;
- readers' advisory services including reservation services lending of books and other materials;
- community information services;
- user education including support for literacy programs;
- programming and events.

<sup>1</sup> IFLA/UNESCO Manifesto is an extensive document on library services, which was established in 2002.

This is not an exhaustive list but an indication of some of the key services of public library. The range and depth of provision will depend on the size of the library and the size of community it serves. Service provision should not be confined to the library building but also provided directly to users who the access to library is not possible.

A classification of services provided to the public by the Municipal Library of Prague is based on these concepts. These services will be described in more detail in the case study, which is elaborated in the following chapters.

Prague municipal library is a universal public library. Its mission is to obtain process, store and provide information, literature and other cultural values. The composition and definition of library services correspond to its mission.

### 3 MLP Case

#### 3.1 Definition of Prague municipal library services

A definition of the individual services and their classification into different categories is based on the main mission of the library and a detailed condition survey of the various services provided by the Municipal Library of Prague. Due to the fact that it is a universal public library with a mission to obtain, process, store and provide information, literature and other cultural values, the structure and definition of the individual library services correspond to this mission. These services are classified into nine groups based on their orientation. In addition, individual services have been assigned a unique identifier that is listed in parentheses and is then used in the analysis of the research results.

- **Charge out loan services - home lending**
  - Loan of books, magazines, CD retrieved without the assistance of a librarian (P15A [1])
  - Loan of books, magazines, CDs from stock, retrieved with the assistance of a librarian (P15A [2])
- **In-house loan services - in the library**
  - Reading books, newspapers or magazines, etc. studying documents etc. in the library - retrieved without the assistance of a librarian (P15B [1])
  - Reading of books, newspapers or magazines, etc. study of documents etc. in the library – retrieved with the assistance of a librarian (P15B [2])
- **Copying and printing**
  - Copying or printing documents (with or without the assistance of a librarian) (P15C [1])
- **Digital services - in the library building**
  - Catalogue search in the library - Konias (P15D [1])
  - Use of specialized electronic databases (e.g. Proquest, EBSCO, Anopress, Newton) on computers inside the library or in the library building (except for use of the library catalogue Konias) (P15D [2])
  - Reading e-books and other electronic documents on computers in the library or in the library building (P15D [3])
  - Use of computers in the library for Internet access or for office applications, image editing, etc. (not for work with catalogues and databases) (P15D [4])
- **Digital services - outside the library**
  - Catalogue search on the MLP website (P15E [1])
  - Downloading e-books from the MLP website (P15E [2])
  - Downloading/viewing articles and other electronic documents from professional databases (e.g. Proquest, EBSCO) via the website (except for use of the library catalogue Konias) (P15E [3])
- **Information, retrieval**
  - Catalogue search in the card or paper catalogues in the library (P15F [1])
  - Requesting assistance from a librarian in finding information in the library or on the Internet, fact finding (except for questions on the library services and the books in the library) (P15F [2])
  - E-mail or telephone requests for assistance in finding information, fact finding (except for questions on the library services and the books in the library) (P15F [3])
- **Cultural and educational events**
  - Participation in educational or cultural programs in the library or programs held by the library outside the library (e.g., World of Books, Bambiriada etc.) (P15G [1])
- **Technical and other services**
  - Use of electrical plug sockets for your own computer, tablet or similar device (P15H [1])
  - Use of Wi-Fi connection in the library (P15H [2])

- Use of other technical equipment of the library - players, digital piano, game consoles, etc. (P15H [3])
- Use of MLP for City Opencard related services (P15H [4])
- **Spending time in the library**
  - Spending time in the library for personal relaxation, study of documents or other than library materials, meeting and talking with friends, etc. (i.e., time spent in the library more than the time required for processing the loan and the other above mentioned library services) (P15I [1])

### 3.2 Methodology and aims of the research

The research was conducted in July and August 2012 using an online CAWI-type questionnaire. The questionnaire was created from questions piloted in the fall of 2011 and June 2012. A pilot study was conducted using both online questionnaires and face-to-face interviews with MLP users. The aim of the pilot study was to verify the proposed method of determining the empirical data between respondents and compiling the final form of the questionnaire, which was then sent via email to the respondents.

The initial background material for the creation of the questionnaire was an extensive and well-documented set of questions published in studies undertaken by the British Library [3] and Florida [6]. Subsequently, these questions were modified based on the above-mentioned piloting and supplemented by new questions that reflect the Czech conditions.

The resulting questionnaire comprised 55 questions that were divided into several groups, crucial for the current study:

- Socio-demographic data,
- Reading behavior,
- Questions about the calculation of costs and appreciation of benefits (Cost/Benefit).

The basic set included MLP readers who in May 2012 met the following criteria:

- age over 15 years,
- borrowed at least one item in 2012,
- gave an e-mail address.

Based on the reader definition, a basic set in which readers fulfilled the criteria was generated from the reader database. Simple random sampling was made from the database of readers who fulfilled the criteria. The total return of questionnaires was 20 %, from 11 397 polled

readers 2 227 respondents completed the questionnaire.

The basic set for conducting the questionnaire survey can be described using the features listed in Table 1.

Table 1 Population descriptive characteristics

<b>Gender</b>		
Female	1 645	73,87 %
Male	534	23,98 %
No response	48	2,15 %
Total	2 227	100 %
<b>Age category</b>		
19 and less	162	7,27 %
20-24	298	13,38 %
25-29	252	11,32 %
30-34	210	9,43 %
35-39	285	12,80 %
40-49	343	15,40 %
50 and over	602	27,03 %
No response	75	3,37 %
Total	2 227	100 %
<b>Frequency of visits</b>		
Daily	7	0,32 %
Several times per week	62	2,78 %
About once per week	168	7,54 %
About once per fortnight	396	17,78 %
About once per three weeks	336	15,09 %
About once per month	835	37,49 %
About once per 2 months	287	12,89 %
About once per 3 months	92	4,13 %
About once per half year	21	0,94 %
Less than once per half year	6	0,28 %
No response	17	0,76 %
Total	2 227	100 %
<b>Loans per month</b>		
1 to 2	566	25,42 %
3 to 4	635	28,51 %
5 to 6	500	22,45 %
7 to 9	143	6,42 %
10 and more	338	15,18 %
Less than 1	25	1,12 %
No response	20	0,9 %
Total	2 227	100 %

Source: own work based on the final report of the survey

The research questions were then compiled in accordance with the main aim of the paper. The basic question is to determine which of the services of the library are considered as the most important by its customers. Then we will determine whether the library provides benefits to its clients. This will be verified through the analysis of the questionnaire, which asks whether the absence of the library would cause the clients problems and whether obtaining services not provided by a public library by an alternative method would be more expensive.

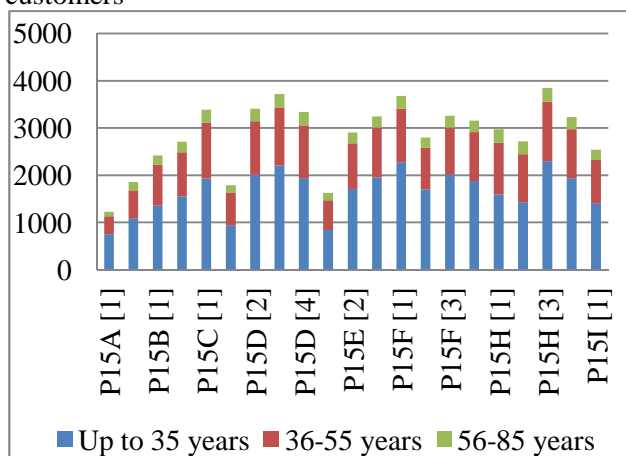
By analyzing these responses from the questionnaire it will be possible to define which library services are used the most and, consequently, the value of the benefits that the library brings to its customers.

### 3.3 Research results

#### The importance of the individual library services

In the first stage an analysis of the benefits/importance of library services for its customers was performed. Figure 1 shows that the respondents were divided into three groups according to age. A scale from 1 to 5 was used to value the significance of individual services, where 1 means very important and 5 unimportant. Thus, the most important service was awarded the lowest value.

Fig 1 The significance of library services for its customers



Source: own work based on the results of the research

Almost identical results were observed in all age categories, so we can say that age has no effect on the perception of the significance of the individual services. The figure shows that customers perceived the following services as the most important:

- P15A [1] - Loan of books, magazines, CD retrieved without the assistance of a librarian,
- P15E [1] - Catalogue search on the MLP website,
- P15D [1] - Catalogue search in the library.

From the responses it is clear that traditional library services are the most used. These are essentially the basic services for which public libraries are established. The least popular services are shown in Table 2

Table 2 The least popular library services

Age group	The least popular services		
	1.	2.	3.
Up to 35 let	P15H [3]	P15F [1]	P15D [3]
36 – 55 let	P15H [3]	P15D [3]	P15C [1]
Above 56 let	P15H [3]	P15H [1]	P15D [4]

Source: own work based on the results of the research

Table 2 shows that differences can be observed among the age groups for the least popular libraries services. In the table, there are three commonly cited least important services in the corresponding order, which is shown above the relevant column. The least important service is the same for all age groups i.e. P15H [3] - Use of other technical equipment of the library - players, digital piano, game consoles, etc.

As for other services, there are clear differences. For age category up to 35 years they are P15F [1] - Catalogue search in the card or paper catalogues in the library and P15D [3] - Reading e-books and other electronic documents on computers in the library or in the library building.

Again for ages 36 to 55 years the service P15D [3] - Reading e-books and other electronic documents on library computers or in the library building, and also P15C [1] - Copying or printing of documents (with or without the assistance of a librarian).

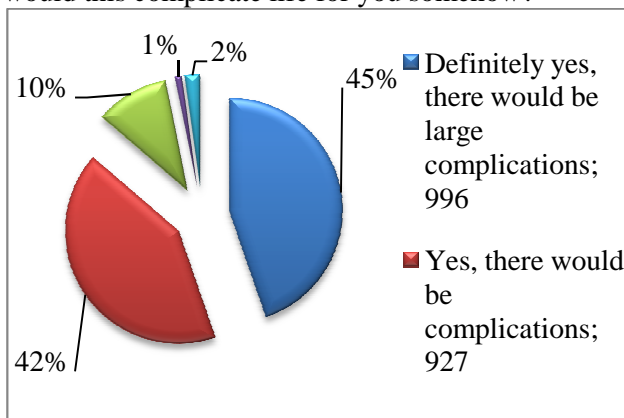
In addition to the above-mentioned service P15H [3], the last age category over 56 years least preferred the service P15H [1] - use of electrical outlets for your own computer, tablet or similar device. This reply is to be expected based on the composition of this age group, because all of the customers are in the retirement age, so there is an assumption that this group does not own a laptop or tablet and therefore the service is less importance for them. Related to this, the third least popular service in this age group, is P15D [4] - Use of computers in the library for Internet access or for

office applications, image editing, etc. (not for work with catalogues and databases).

**Customer valuation of library benefits**

Questions regarding the perception of the benefits from the existence of the public libraries for their users provide key data for assessing the perceived value of the benefits of the services provided by public libraries. It is therefore necessary to pay due attention to them. Firstly, respondents were asked: If you did not have access to the library, would this complicate life for you somehow? This question can help to decide whether the library is important for its users. Responses are shown in Figure 2

Fig 2 If you did not have access to the library, would this complicate life for you somehow?



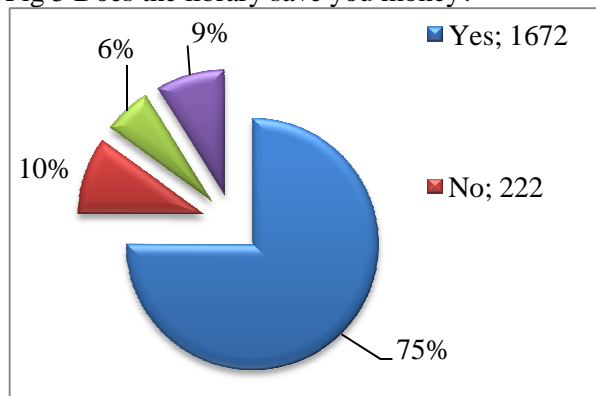
Source: own work based on the results of the research

Figure 2 above clearly shows that the library has a positive meaning for its customers, as 87 % of respondents said that if they did not have access to the library it would complicate their life. Of which, 45 % of the respondents stated that there would be large complications. Thus, based on the results of this question it can be argued that the existence of the library provides benefits to its customers.

The following research questions were used to quantify these benefits: Does the library save your money? How much money does the library save you? A final question concerning the quantification of benefits relates to the possibility that the library would stop providing services to its customers. And then if customers are ready to accrue their costs for acquiring an alternative to library public services. The question therefore aims to quantify these costs.

The first question concerns whether library users are able to evaluate the benefits from library existence. The following question will provide specific values for the benefits perceived by its customers (see Fig 3).

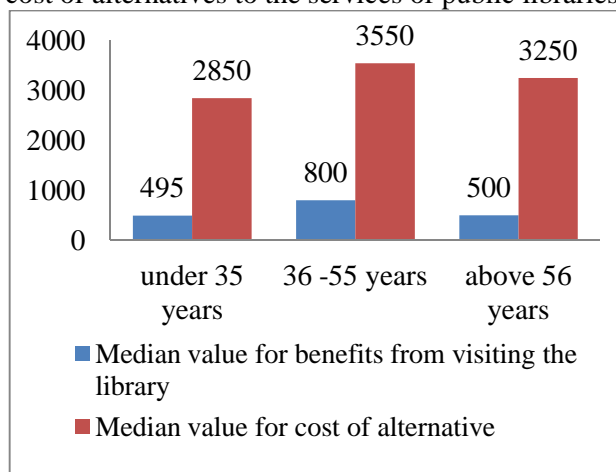
Fig 3 Does the library save you money?



Source: own work based on the results of the research

From this figure it is clear that for three-quarters of the respondents (75 %) the library provides quantifiable benefits. It is therefore possible to continue with the question directed to a specific evaluation of the benefits of the existence of public libraries and subsequently a question on the overall cost of alternatives to the public services provided by the public library. Both of these questions are shown in Figure 4.

Fig 4 Expression of the benefits of the library and cost of alternatives to the services of public libraries



Source: own work based on the results of the research

The respondents most often answered the question “how much does the library save you?” (based on their last visit) with values of 300 CZK, 500 CZK and 1 000 CZK. The median of these values for each age group of respondents is shown in Figure 4, and ranges between the values of 495 CZK and 800 CZK. If we consider all of the users as a single group, then the median value is 500 CZK, so as a result the value of the benefit can be considered 500 CZK. This question was, however, only related to the last visit to the library.

If we took into account that the public libraries ceased to exist, then the current users would accrue cost for the acquisition of an alternatives to library public services. How customers are able to valuate these costs is also illustrated in Figure 4.

Figure 4 shows that the median value for an alternative is significantly higher than the value of the median size of the benefits that the library brought to the user on their last visit. It is also clear that in the age group 36 - 55 years the median value of both is the highest in comparison between two neighboring groups with lower median value. The overall median value for all users in the case of alternative costs is equal to the value of 2 000 CZK.

The question thus arises whether there is a relationship between the question of saving money by the library users and the question of accruing costs. This relationship was tested using the Spearman's rank correlation coefficient, which is shown in the following Table 3.

Table 3 Spearman's rank correlation coefficient

Variable	Spearman's rank correlation ChD omitted in pairs Correlations are significant at <0,05	
	P6	P7
How much does the library save you? (P6)	1,000000	0,508262
Cost of alternative (P7)	0,508262	1,000000

Source: own work based on the results of the research

Because of this positive relationship in Table 3, we can conclude that if the library user calculates high financial savings from one visit to the library (question P6 in the questionnaire), then we can assume that the cost of an alternative to the services of public libraries will be high. Hence, it can be argued that the value of the customer's benefits arising from the existence of the public libraries 2 000 CZK.

## 4 Conclusion

The aim of this paper was to determine both the importance of individual library services for their customers and to analyze the perception of the benefits of the public services provided by the Municipal Library of Prague. The ability of customers to valuate the benefits from the existence of public libraries was analyzed. The analysis was based on data obtained through an extensive survey

which was carried out by means of an electronic questionnaire sent to randomly selected library readers with a return of 20 %.

The results of the survey confirmed that the most used and therefore most important for customers was the services of loan of books, magazines, CD retrieved without the assistance of a librarian and online catalogue search either in the library or from home. On the contrary, the least important services to customers are the use of other technical equipment of the library - players, digital piano, game consoles, etc. and reading e-books and other electronic documents on library computers or in the library building.

The results of this analysis can assist in the further development of library services. Based on this analysis, it is possible to decide which services should be further developed, which can be considered as being merely supplementary, or which should no longer be offered.

Subsequently, the benefits for customers arising from the existence of public libraries were evaluated. The analysis shows that if users have not access to the library this would cause complications. Almost half of the respondents stated that it would mean large complications. It is therefore possible to say that the library has a great importance for society. In connection with this question, citizens also perceive the financial savings resulting from the existence of the library. Therefore, it is possible to perform a valuation of the benefits of the existence of the library.

The analysis was conducted by an evaluation of questions directed to the valuation of a single visit to the library "how much you may save by using library services?" and valuation of alternative costs in the case that library does not exist. Among these questions was demonstrated a significant positive correlation relationship. The resulting value of benefits that clients stems from the existence of public libraries was therefore set at 2 000 CZK.

Defining the value of benefits from public library existence, will help in further analysis of the type of cost/benefit in which this value is needed. The results and methodology of this research can be used to analyze the benefits of similar types of public services. The research will be further enhanced with an empirical survey among users of public libraries in other cities than Prague. It will therefore be possible to assess whether the size of the catchment area has an impact on the perception of the value of benefits of the existence of public libraries.

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*References:*

- [1] Analysis of public services. In: *Ministry of the Interior* [online]. 2003 [cit. 2012-09-12]. Available at [www: http://aplikace.mvcr.cz/archiv2008/odbor/moderniz/koncepce/v\\_sluzby/analy\\_vs.html](http://aplikace.mvcr.cz/archiv2008/odbor/moderniz/koncepce/v_sluzby/analy_vs.html)
- [2] E. Bazalova. Public libraries and their services. [online]. [cit. 2012-07-25]. Available at [www: <http://www.knihzdar.cz/kzv/04-2003/bazalova\\_Sluzby.htm>](http://www.knihzdar.cz/kzv/04-2003/bazalova_Sluzby.htm)
- [3] British Library. Measuring the economic impact of the British Library. [online]. [cit. 2009-09-14]. Available at [www: http://www.bl.uk/aboutus/stratpolprog/increasingvalue/publicvalue/confpres/quest.pdf](http://www.bl.uk/aboutus/stratpolprog/increasingvalue/publicvalue/confpres/quest.pdf)
- [4] European Union. Consolidated version on the treaty of the functioning of the European Union. In: *The Official Journal of the European Union*. 2008. Available online at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0047:0199:en:PDF>
- [5] European Union. Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006. In: *The Official Journal of the European Union*. 2006. Available online at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:376:0036:0068:en:PDF>
- [6] J.-M. K. Griffiths, A study of taxpayer Return on Investment (ROI) in Florida public libraries: detailed result & study methods - Part II. Tallahassee. [online]. [cit. 2009-09-14]. FL: State Library and Archives of Florida, Sept. 2004, s. 272. Available at [www: <http://dlis.dos.state.fl.us/bld/roi/pdfs/FLR\\_OIpartii.pdf>](http://dlis.dos.state.fl.us/bld/roi/pdfs/FLR_OIpartii.pdf)
- [7] P. Kotatkova Stranska, Analysis of selected financing the public goods by municipalities. In *Recent Research in Business & Economics*. Proceedings of the 4th WSEAS World Multiconference on Applied Economics, Business and Development (AEBD 12) 1. – 3. 7.2012, Porto, Portugal, pp. 140-145. ISBN 978-1-61804-102-9.
- [8] R. Musgrave, *The Theory of Public Finance*. London: McGraw-Hill Book Company, Inc., 1959.
- [9] S. Panetsos, K. Makropoulos, J. Psyhogiyos, Lifelong Learning and Library Services. In Proceedings of the 5th WSEAS International Conference on Engineering Education (EE'08), Heraklion, Greece, July 22-24, 2008, pp. 427-431, ISBN 978-960-6766-86-2.
- [10] L. Pauna, L. V. Sacal, B. Sacal, Cost – Benefit Analysis for Public E-services Investment Projects. In Proceedings of 12th WSEAS International Conference on Mathematics and Computers, Brasov, Romania, April 11-13, 2011., pp. 264-269, ISBN 978-960-474-293-6
- [11] J. Stejskal, Kotatkova P. Stranska, K. Matatkova, P. Hajek, Public Services Value Determining – Case of Public Libraries. In *Recent Research in Business & Economics*. Proceedings of the 4th WSEAS World Multiconference on Applied Economics, Business and Development (AEBD 12) 1. – 3. 7. 2012, Porto, Portugal, pp. 140-145 ISBN 978-1-61804-102-9.
- [12] J. E. Stiglitz, *Economics of the public sector*. Prague: Grada Publishing, 1997. ISBN 80-7169-454-1.
- [13] Y. Streckova, *Theory of the Public Sector*. Brno: Faculty of Public Administration, Masaryk University, 1998. ISBN 80-210-1737-6.
- [14] The Public Library Service. IFLA/UNESCO guideline for development. Prague, Association of Library and Information Professionals 2002. p 127. Available online at: <http://www.ifla.org/VII/s8/news/pg01-cz.pdf>