

EFFICIENCY MEASURES OF CULTURAL MONUMENTS IN THE CZECH REPUBLIC

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Abstract

This paper is focused on the issue how to measure efficiency of cultural monuments in the Czech Republic. Majority of the cultural monuments (culture businesses in a wider sense) works as non-profit organizations whose performance objectives are not financial. These organizations are often set up as contributory organizations by public authorities. On one hand these entities absorb public money, on the other hand the money should not finish there like in a black hole without any usage. There is a general consensus that culture should be supported and maintained for future generations but fulfilling aims should be valued and controlled. According literature review there are detected approaches how to evaluate efficiency of non-profit organizations. Not all approaches are directly transferable for cultural entities in the Czech Republic and the second restriction is caused by the data availability. Selected efficiency measures will be calculated for the data sample containing the Czech cultural monuments. The Czech Statistic Office collects the data on an annual basis and therefore we are able to analyse annual data. Data samples are available for years 2009 and 2010. Our analysis will contain the time development of selected efficiency measures.

Key words: culture, finance, success, Czech Republic

JEL Code: Z10, L39, M20

Introduction

Cultural organizations can function as different business units according current legal framework in the Czech Republic. The specifics are connected with the organizations' aim and founder. The basic dividing criteria can be detected as the principle of profit or non-profit organization. Cultural organizations or creative economy cover many branches as advertising, architecture, art, crafts, design, fashion, film, music, performing arts, publishing, R&D, software, toys and games, TV and radio, and videogames (Howkins, 2001). Describing cultural businesses together is not the good way to be followed because the units are heterogeneous because of their aim, cultural focus, founder and possibilities of financing.

Scholleová and Čámská (2012) proved that there are significant differences in the cost structure or the share of self financing due to organization cultural focus (theatre, cinema, observatory, museum etc.) in the case of organizations set up by regions in the Czech Republic. This paper is primarily focused on the cultural monuments. The cultural monuments represent one field of culture organizations whose data are collected by the Czech Statistical Office or NIPOS (The National Information and Consulting Centre for Culture). Thanks to the deep cooperation between NIPOS and Faculty of Business Administration of University of Economics, Prague we are able to analyse these unique collected data.

1 Paper purpose

Many of cultural entities work on the principle of contributory organizations which are set up and support by public authorities and budgets. These organizations are not able to create profit and even they are not able to cover their costs by revenues from ordinary activities. Czech culture organizations in general are not able to exist without public contributions how it is proved by the table 1. On the other hand, they should not only absorb money but also provide services for general public and fulfilling their aims. The next sub-chapter will detect possible approaches measuring efficiency of non-profit or contributory organizations according literature review.

These approaches will be applied on the data describing cultural monuments in the Czech Republic. Gained results will be discussed further. The basic limitation for our research can be the data range because we use secondary data which are collected only for statistical purposes.

Tab. 1: Financial sources for basic operation in the cultural sector

Sources of finance (%)	Central government	Local government	Expenditures of households	Firms and donations	NGOs	Other world
Culture 2009	7.00	17.10	42.70	25.60	7.40	0.20
C. monuments 2009	30.20	4.09	63.78	1.59	N/A	0.34
C. monuments 2010	27.44	4.12	66.68	0.89	N/A	0.87

Source: Results of Accounts of Culture (2011) and authors' computation based on NIPOS data

1.1 Literature review

Performance goals and missions of cultural organizations are not comparable with classic business units. Majority of these organizations is set up as contributory units and functions as non-profit units. Boukal (2012) characterizes the objectives of competitive non-profitable organizations as specific, measurable, acceptable, achievable and with time constraint. Boukal (2009) even defines effectively functioning non-profitable organization from the donor's or contributor's point of view. Effectively functioning non-profitable organizations should provide activities recognized by public as significantly beneficial, improve donor or contributor image, use sources economically, keep accurate and transparent accounting, have charismatic management and a good relationship with local government.

Investigation of utilizing sources and keeping transparent accounting has a sense from the business economics point of view. One tool could be presented by the financial analysis which helps evaluate the financial position and forecast future trends. According to Kraftová (2002) or Boukal (2009) classical methods of financial analysis have to be modified because of specifics. The main reason is the absence of profit. Kraftová (2002) also names public sources, cyclical cash inflows from public budgets and strict legal framework defined allowed and not allowed moves in case of municipal companies. The modified indices contain ratios of costs, liquidity, indebtedness, autarchy (alternative name for share of self financing). We can even use groups of ratios - pyramidal decompositions (Boukal, 2009) or methods BAMF or KAMF created by Kraftová (2002) which are similar to the Altman formula. Scholleová (2013) came up with monitoring long-term stability using measures as utilization of assets or developing deviation of costs. Boukal (2009) also uses development of absolute indicators such as the number of clients, amount of sources needed, number of employees or volunteers. Kraftová (2002) and Boukal (2009) suggest completing financial analysis with indicators of performance which are focused on quantitative as well as qualitative aspects.

Researches focusing on cultural entities usually work only with one area such as theatres, museums or radios and they examine characteristics which are highly specific for the examined field. Therefore we are able to find a paper (Čámská, 2012b), which describes museums as education institutions, or Kostihová (2012), who proved a role of public radios in the education process of the society. The efficiency of theatres in Germany was valued by Last and Wetzl (2010).

2 Methods

The subchapter 1.1 Literature review came up with several approaches how to measure stability and efficiency of non-profit organizations. Table 1 shows that the Czech culture monuments depend on the public sources and they are not able to provide all services without donors' help although their share of self financing is higher than in the case of culture itself.

The data reflecting Czech cultural sector are collected by the Czech Statistical Office or NIPOS (The National Information and Consulting Centre for Culture). Thanks to the deep cooperation between NIPOS and Faculty of Business Administration of University of Economics, Prague we are able to analyse these unique collected data. In spite of this cooperation the research is limited by the time availability and data range because the main purpose of this collection is only statistical purpose and there are unfortunately other incentives. This leads that complex methods as pyramidal decompositions, KAMF or BAMF could not be used. We have to look for ways which we are able to follow taking into account our constraints.

At the end absolute indicators as revenues, costs and number of visitors have been selected. Relative indicators are represented by autarchy ratio or importance of employees. Revenues from ordinary activities show the basic organizations' ability to create positive cash flow. Number of visitors reflects the primary organization's aim that culture monuments should be open for public and visited by them. Autarchy ratio is defined as revenues from ordinary activities divided by costs and it shows the share of self financing whose time development is crucial especially in time of public budgets pressure and responsibility. The ratio which is above called importance of employees is defined as wage costs divided by total costs. It shows the share of wage costs and indirectly the importance of employees which is in this globalized world much more important than even before (Krause and Javor, 2007). Čámská (2012a) proved that employees were very often the source for crisis surviving in the corporate sector. In the case of cultural monuments many employees are in direct contact with visitors/customers. Their behaviour influences if customers will repeat the visit and positive word of mouth. On the other hand, during analysed years the unemployment increased which has had negative impact on the number of visitors. The issue of long term unemployment is described by Pavelka (2011) and Čadil et al. (2011) detail discussed the impact of unemployment on fiscal budget perspectives.

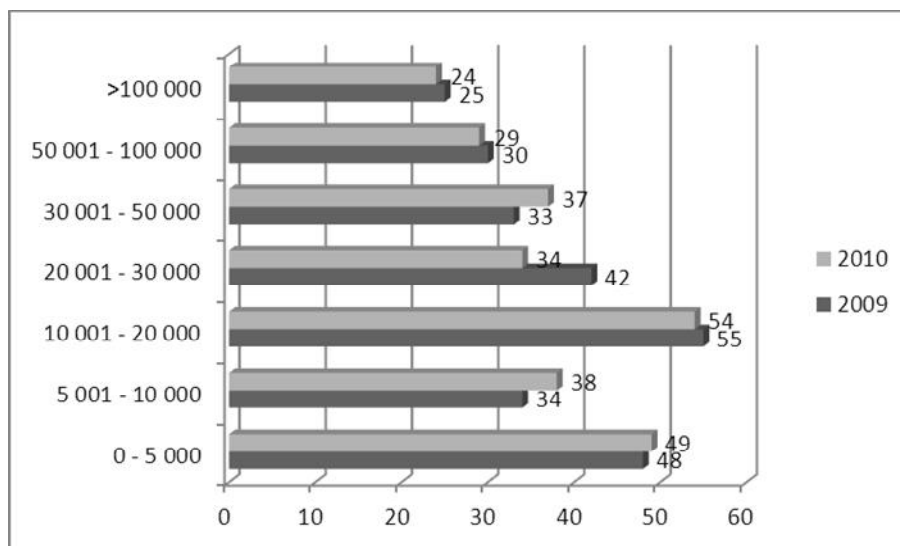
In the following chapter data sets including 267 (year 2009) and 265 (year 2010) units will be analysed with the use of basic descriptive statistics.

3 Results

This chapter includes results of data analysis for which NIPOS data samples are used. It is necessary to take into account that the sample has its own limitations because there are not included all units which can be called as cultural monuments in the Czech Republic. The samples consist only of units which filled in forms required by Czech Statistical Office. This should be obligatory for units set up by government but the obligation for private entities is not required. The second limitation is caused by the data which are filled in by the unit itself and they are not checked by any authority. Therefore the gained data are in some ways inconsistent but other data source is not available right now in this range. This slightly changes our aims and the analysis will be dominantly focused on the description of the environment.

Figure 1 displays how the cultural monuments are divided according to the number of visitors. The sample 2010 contains 265 monuments which is 2 units less comparing 2009. Probably 2 units go on functioning and they did not only fill in the forms because they are part of the group which can be called as business. The samples contains 202 units which are set up as non-businesses and 65 (respectively 67 in 2009) which are set up as business units. According results displayed by figure 1 it seems that there is not significant danger in decreasing number of visitors. The changes were slight and cultural monuments were fulfilling their aim in 2010 same as in 2009.

Fig. 1: Division of cultural monuments according to the number of visitors



Source: calculated by authors with NIPOS data

Further analysis is unfortunately focused only on the year 2010 because the provided data are not consistent. Comparison between years 2009 and 2010 would be not possible and gained results could cause misunderstanding.

Revenues from ordinary activities (most ticket selling) and total costs have been chosen as main absolute indicators characterizing economic performance of cultural monuments. Table 2 contains main descriptive statistics of revenues and costs in 2010. Majority of cultural monuments is not able to cover their costs how it is discussed later. When we compare revenues and costs, the cultural monuments are more heterogeneous in costs than in revenues. According to results gained by statistics as median, mean and percentiles the entities are small with several big size cultural monuments. The same is valid in the case of costs as well as revenues.

Tab. 2: Main descriptive statistics of revenues and costs 2010 (in thousands CZK)

		Revenues 2010	Costs 2010
Mean		4286.21	7981.63
Median		1222.59	2918.32
Mean variation		16684.21	39641.91
Minimum		0	0
Maximum		255367	633014
Percentiles	25	269.87	487.20
	50	1222.59	2918.32
	75	3076	6743.50

Source: calculated by authors with NIPOS data

Table 2 proves that majority of cultural monuments is not able to cover their costs by revenues from ordinary activities and they have to find also other sources. Details are shown in table 3. 25% of organizations are creating profit in the case of ordinary performance and 50% of monuments are not able to cover half of their costs. Investments are excluded because conservation and reconstructing of monuments is highly capital-intensive. One of the main cost items are wages and employees costs how it is displayed in table 3. 40% of costs of half analysed organizations are created by wages and other employee costs which show the importance of employees in the cost structure as well as one factor which can influence visitors. Employees can have positive and also negative influence on visitors. The result is based on their quality and personal characteristics.

Tab. 3: Main descriptive statistics of autarchy and employees' importance in 2010

		Autarchy 2010	Employees' importance 2010
Mean		0.9155	0.4148
Median		0.5342	0.3999
Mean variation		1.4024	0.2500
Minimum		0	0
Maximum		14.4385	1.5888
Percentiles	25	0.2732	0.2477
	50	0.5342	0.3999
	75	1.0012	0.5710

Source: calculated by authors with NIPOS data

Text above introduced characteristics which we are able to evaluate and analyze in the case of performance and efficiency of Czech cultural monuments. Many limitations and restrictions were mentioned as well. This opens a space for a gaining primary data because we have worked with secondary data gained for government statistical purposes. On the other hand there would be no need for getting new primary data if the government form for cultural monuments was changed. Collecting already all data on one level would be quicker, economic and even more comfortable for persons who are responsible for filling forms in the cultural monuments. The statistic itself could help entities in following years to plan prices of tickets, attract new visitors etc. This needs a high cooperation among monuments, government or touristic centers. In this area there are still things which can be improved.

Conclusion

The main focus of the paper was performance of Czech culture monuments. According to literature review we have detected several approaches, tools and methods which could be used for analysing non-profit organizations providing services for general public in the cultural sector. On one hand there are approaches recommended by literature, on the other hand we are restricted by the available data. Although there is a deep cooperation between the research team and official authorities we have not been able to use all methods and approaches and we had to shorten our analysis.

The main gained results are that majority of cultural monuments are non-profit and they highly depend on the support from public budgets and donations. It has to be pointed out that more than half of organizations is not able to cover their costs (even if investment costs

are excluded) and similar case is connected with wages (or generally employees' costs) because they are one of the main cost items. Employees are very often in the direct contact with customers and therefore their high quality outcome should be a priority which should be also reflected in the wages.

The restriction of this research is caused by the data range which should be wider if we prefer to use all approaches and not only simplicity. It opens a space for a further discussion in the field of the collected data and cooperation among authorities, entities themselves and other connected subjects.

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