

Considerations regarding the Valuation and Valorization of Cultural Heritage

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Abstract. *This paper presents the theoretical framework for the valuation of cultural heritage and of the economic effects produced by investments in the preservation and restoration of cultural heritage. The following methods are considered: impact studies, hedonic pricing method, contingent valuation method and travel cost method. The paper focuses on methodological issues, difficulties encountered when implementing the methods, as well as on their specific limitations. Moreover, each method is illustrated through the results of quantitative studies in the field.*

Keywords: cultural heritage; economic value; hedonic pricing; contingency value; travel cost method.

JEL Code: Z20.

REL Code: 5Z.

1. Cultural heritage and cultural economics

In time, the concept of cultural heritage has received numerous definitions and interpretations. The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) presents no less than 60 definitions of cultural heritage, or cultural property⁽¹⁾, the oldest of them dating back to 6 AD. According to UNESCO, “cultural heritage may be defined as the entire corpus of material signs – either artistic or symbolic – handed on by the past to each culture and, therefore, to the whole of humankind. As a constituent part of the affirmation and enrichment of cultural identities, as a legacy belonging to all humankind, the cultural heritage gives each particular place its recognizable features and is the storehouse of human experience” (UNESCO, 1989, p. 57). Vecco (2010) analyzed the evolution of the concept of cultural heritage and observed that, in Western Europe, it was characterized by expansion and semantic transfer, resulting in the generalization of its use. According to her, the concept extended in three directions, as follows:

- a typological and thematic extension, meaning that objects which were not included in the traditional concept of heritage are now considered to be a part of it. Therefore, this extension concluded in an integrative approach of cultural heritage;
- the selection criteria of cultural heritage have been also extended by including new factors (apart from historic and artistic values), such as cultural value, identity value or the capacity of the object to interact with memory;
- the change from a normative approach to one based on the capacity of an object to generate certain values and meanings. Heritage is no longer defined from a material perspective, making it possible to recognize intangible cultural heritage.

We may conclude that cultural heritage is a concept that experiences continuous extension and development, making it difficult to identify clearly its components. From a practical point of view, every change in the concept may result in the reevaluation of the assets considered to be a part of cultural heritage. This is a major obstacle which must be overcome when assessing the economic impact of cultural heritage.

Topics, such as the valuation of cultural heritage, fall at the border between economics and culture in a relatively new field of science: cultural economics. Its beginnings are associated with the publishing of J. K. Galbraith’s book “The Liberal Hour”, in 1960 (Ritenour, 2003, p. 103). A major issue in cultural economics is the discrimination between economic and cultural value. Throsby (2001) considers that economic value is strongly

connected to the marginal utility of an asset, while cultural value comes from the following sources: aesthetic value, spiritual or religious value, social value (giving people the sense of membership to humankind), historical value, symbolic value (acting as a depository of meaning) and authenticity value. Using cultural value as a starting point, Throsby defines a new concept, the cultural capital, as “an asset which embodies, stores or provides cultural value in addition to whatever economic value it may possess” (Throsby, 2001, p. 46). Applying the theory of sustainable development to cultural capital, Throsby formulates the principle of intergenerational equity (also called “intertemporal distributive justice”). According to it, if the stock of cultural capital is diminished, or even consumed (due to lack of investments, for example), the future generations will not be able to benefit from it because their interests are not reflected on the current market (Sache, 2009, p. 6).

On the other side, Ritenour (2003) criticizes many of the ideas expressed by Throsby (2001) because, in his opinion, they lack substance or validity. For example, he considers that Throsby fails to make a meaningful distinction between cultural and economic value because there isn't any objective methodology for determining the level of cultural value in an object. Moreover, he criticizes the principle of intergenerational equity because, in his opinion, not every piece of culture deserves to be passed on to the future generations. Ritenour also rejects Throsby's idea that the right of the future generations to culture is a matter of social justice. He continues by drawing attention to the fact that it is not fair to ask the productive economic agents to pay for the cultural experiences of future generations.

Klamer (2002) observes that the possession of cultural capital is gainful for individuals and organizations and shows the need to assess the contribution of cultural assets to economic profit. In his view, cultural capital is defined as “the capacity to inspire and be inspired” (Klamer, 2002, p. 467) because it is able to give meaning to objects and, ultimately, to human life. Klamer points out that, unlike economic capital, most of the cultural assets (such as cultural heritage, for example) are collective possessions and they need to be shared in order to be meaningful. He concludes by stating that economic goods are only instrumental because the ultimate goal of human beings is to obtain social and cultural goods. However, he admits the absence of indicators for measuring social and cultural capital.

Thompson (1999) approaches the subject from an accounting perspective and shows the need to cater for the impact of cultural capital on human resources. On the other hand, Thompson highlights the main problems that are encountered in the process of identifying and valuating investments in cultural capital.

In conclusion, many researchers in the field of cultural economics certify the importance of cultural capital, its impact reaching far beyond the economic sphere. Therefore, investments in the preservation and development of cultural capital should represent a priority for individuals, organizations and public authorities. Taking into account that, according to Klamer (2002), cultural capital is mainly a collective possession, some may think that investments in this area should be conducted only by public authorities. However, keeping in mind that cultural assets generate economic advantages, private investments in this area should be also encouraged. Perhaps the most important problem is the elusive character of cultural capital which makes it very difficult to value cultural capital and assess the economic impact of investing in it.

From now on the paper will focus on cultural heritage, which is a very important component of cultural capital. Section 2 presents the complex network of economic effects induced by investments in cultural heritage. In Section 3 we discuss the main methods used for the valuation of cultural heritage, while Section 4 gives the conclusion of this study.

2. The economic impact of investing in cultural heritage

Grefe (2004) examines if heritage acts as an asset or as a liability. To begin with, he notices that the valorization of heritage leads to creating new jobs. Grefe identifies four types of jobs which owe their existence to heritage:

- direct jobs refer to people employed in heritage institutions;
- indirect jobs refer to people who work in the fields of conservation and restoration of heritage;
- induced jobs refer to people who use heritage as a source of activity and inspiration (mostly in cultural industry);
- jobs in the tourism sector as a result of heritage tourism development.

Grefe illustrates his rationale with the example of France, where he estimates that cultural heritage has created 525,250 jobs (approximately 2.4% of the active employed population).

Grefe continues by assimilating heritage system to an ecosystem. Thus, he formulates a public policy in the heritage domain which aims to generate positive dynamics in the heritage ecosystem. The main characteristics of this policy are as follows:

- heritage must be well preserved in order to attract public's interest, which will result in more resources allocated for its conservation and development;
- the design of projects for the development and valorization of every heritage site;

- entrance fees should be fixed taking into account the quality of services offered to visitors (not only on a cost basis);
- the implementation of an effective marketing policy;
- the deterioration costs, which result from over-consumption of heritage, should be internalized by imposing them on the non-cultural businesses that benefit from heritage sites, such as hotels, restaurants, transport companies etc.

After studying the heritage ecosystem, Greffe arrives to the conclusion that investments in heritage are more sustainable if they are made in areas where heritage plays a secondary role and the level of economic integration is high.

Bowitz and Ibenholt (2009) investigate if investments in cultural heritage are beneficial for local economies and, for this purpose, they formulate a theoretical framework for estimating the economic impact of cultural heritage. Taking into account the increasing political focus on cultural heritage, because it is perceived as a way to stimulate economic activity in areas with economic problems, Bowitz and Ibenholt draw attention to the fact that many studies exaggerate the economic impact of cultural heritage. As a consequence, they plead for a sober and prudent analysis of the matter which must consider the short term, as well as the long term effects. Building their theoretical framework, Bowitz and Ibenholt propose the following classification of the economic effects produced by investments in cultural heritage:

- direct effects are a straightforward result of the implementation of the investment project. Usually, these effects are measured through sales, value added or employment. Because sales tend to be inflated and are exposed to shocks in the short term, the authors recommend the use of the other two indicators for a more realistic assessment of direct effects;
- indirect effects are categorized as follows:
 - input/output effects derive from the fact that the investment project may require deliveries of goods and services from the local economy. This demand will generate an increase in local production and local revenues only to the extent of the existing capacity;
 - multiplication effects refer to the fact that higher local revenues will generate an increase in the demand for local goods and services;
 - acceleration effects are short term effects which occur only in the investment phase. In this phase, the project may require increased deliveries from local suppliers which will boost the input/output effects and the multiplication effects;

- ancillary spending refers to the fact that visitors to a cultural heritage site will spend money in the local area for food, accommodation, retail goods etc. This spending will further increase the input/output effects and the multiplication effects;
- derived effects can be attributed, to a certain extent, to the investment project. For example, cultural heritage may be an important factor for organizing festivals and cultural events which will attract tourists from other areas. Also, it may trigger an increase in the export of local goods and services to other areas, even acting as a brand;
- gravitation effects refer to the fact that investing in culture may increase the attractiveness of the area, resulting in an increased number of inhabitants and an increased number of companies established there. If cultural heritage is associated with a positive image of the area it could be used as a marketing tool, making the region more attractive to invest in. However, gravitation effects can be observed only in the long run and it is quite difficult to assess them;
- counteracting effects refer to the costs generated by investing in cultural heritage that are borne by the local economy. There are three main types of counteracting effects: the displacement effect (imbalances on the regional labor market, reduced profitability for some of the local companies), the deterioration of cultural heritage, due to opening it to the public, and the need for investments in infrastructure (in order to provide cultural tourists with adequate public services).

Based on the above classification, we conclude that the main obstacles, which are encountered when assessing the economic effects of investing in cultural heritage, are the complexity of these effects and the difficulty to quantify them. Nonetheless, the literature in this area offers numerous studies on the economic impact of cultural heritage investments. Unfortunately, some of these studies use precarious methodologies and seriously overstate the economic impact of such investments, leading certain researchers (for example, van Puffelen, 1996) to recommend that impact studies should not be made.

Here we summarize the results of a few quantitative studies in this area:

- Hansen et al. (1996) compared two investment projects in Danish cultural heritage with regard to employment. The first project, concerning the extension of an old textile factory so that it could host three museums, generated 50 full-time jobs in the area. The other project, concerning the memorial house of the writer Hans Christian

Andersen, generated 27 full-time jobs with a much smaller initial investment than the first project. The higher efficiency of the second project was attributed to the international reputation of H.C. Andersen which attracted numerous tourists from outside the region and even from outside the country;

- Strauss and Lord (2001) estimated the regional economic effects of investing in 13 heritage sites in Pennsylvania, USA. They concluded that the initial investment of 88 million USD generated, in a period of 13 years, 289 million USD: 169 million USD representing direct effects and the rest coming from indirect effects. Bowitz and Ibenholt (2009) consider that this study overestimates the economic impact of the investment because, on one hand, all the effects were measured thorough sales and, on the other hand, all increases in the number of tourists in the area were attributed to the investment project;
- Bowitz and Ibenholt (2009) assess the local economic impact of the cultural heritage of Roros, a historical city in Norway. They arrive to the conclusion that the cultural heritage of the city (represented by its historical centre with well-preserved timber houses and specific architectural style) contributed, directly and indirectly, to the creation of 200 jobs (approximately 7% of the local labor force).

To sum up, in this section we presented the main components of the theoretical framework for assessing the economical effects of cultural heritage investments. Also, in order to illustrate the methodology, we reviewed the results of a few quantitative studies which seemed relevant for this subject. In the following section we examine the methods used for estimating the economic value of cultural heritage and we exemplify them with results from previous studies in this domain.

3. Methods for the valuation of cultural heritage

Following the work of Bănaçu (2007), Sache (2009) describes the valuation methods of cultural heritage used for reporting purposes. In this case, the reported value of cultural heritage fulfils two jobs: on one hand, it helps establishing the preservation and restoration costs, as well as the revenues obtained from the exploitation of cultural heritage; on the other hand, it helps establishing the market value of cultural heritage which is necessary for insurance contracts. Sache presents the following valuation methods which are mostly used for reporting the value of built heritage:

- the comparison of selling prices approach requires the valuator to identify a property with similar characteristics to the heritage that is

valuated (this property is called “comparable property”). The selection criteria for the comparable property refer to location, architectural style, size, historic and cultural characteristics. Heritage valuation will be made by comparison with the selling price of the comparable property, making the necessary adjustments in case the heritage needs restoration works or if it is subject to contracts with restrictive stipulations;

- the revenue approach is recommended for heritage which is able to produce commercial revenues or rent and this represents the most efficient use of the respective heritage. In the valuation process there are certain situations that should be taken into account: if the heritage needs restoration works in order to qualify for commercial use, the period of time required to obtain the authorization for the commercial use of the heritage (if necessary) and the additional maintenance and preservation costs caused by the use of the heritage in commercial activities;
- the cost approach is based on the hypothesis that heritage has intrinsic value (due to its appearance, to certain characteristics or to its symbolic status). This value is established taking into account the production cost of a replica to the heritage or, if this is not possible, the production cost of a modern building with similar purpose. When applying this method there should be taken into account the maintenance and preservation costs, as well as the fact that it may not be possible to adjust the built heritage to tenants’ needs.

However, the valuation of cultural heritage for reporting purposes is rather a matter of implementing the regulations and practices in this area than a scientific pursuit. Most of the existing research focuses on estimating the economic value of cultural heritage.

Ruijgrok (2006) defines the economic value of cultural heritage as the amount of welfare that heritage provides for society. Plaza (2010) also states that the economic value of cultural heritage is connected to the benefits generated by it, both commercial and non-commercial. These benefits refer to two types of value: use value (derives from the use of cultural heritage) and non-use value. The non-use value presents itself as an option value (for individuals who have never visited the cultural heritage site but wish to do it in the future), an existence value (for individuals who have never visited the site and do not wish to visit it in the future but perceive the existence of the site as a good thing) or a bequest value (the value of the knowledge comprised by cultural heritage that will generate benefits for future generations).

On the other hand, Ruijgrok (2006) analyzes why is it necessary to value cultural heritage though it is obvious that its real value cannot be expressed in monetary terms. From this perspective, he notices that the economic valuation of cultural heritage makes it possible to evaluate investments in this sector through cost-benefit analysis and to estimate the losses incurred by society through the destruction of cultural heritage. Ruijgrok concludes that economic valuation could influence certain economic decisions which, otherwise, would generate a heritage loss.

Bedate et al. (2004) draw attention to the fact that economic valuation of cultural heritage is a difficult task that mostly relies on methods used for the valuation of environmental goods (because they present certain similarities to heritage goods, such as uniqueness and irreversibility; Sache, 2009, p. 16). They identify three main methods used for the valuation of cultural heritage: hedonic pricing method, contingent valuation method and travel cost method. Bedate et al. point out that, while all these methods are far from being perfect, they are the only valid means of obtaining information for the rational administration of heritage goods. In the following subsections we present the three valuation methods mentioned above.

3.1. Hedonic pricing method

Hedonic pricing method assumes that the selling price of an asset is determined both by its intrinsic characteristics and the particularities of its environment (Bănaçu, 2004, chap. 7, p. 8). This method is employed mainly in real estate industry and explains why the value of two comparable properties will vary depending on the characteristics of their environments. The method allows for positive externalities (e.g. buildings that have higher prices due to being located in an area with low pollution) as well as for negative externalities (e.g. buildings with lower prices due to being located in the proximity of waste sites) (Alberini, p. 1).

Bănaçu (2004) presents the two steps employed by this method:

- the estimation of the hedonic price function which establishes the link between the subject of the analysis (the building/land price) and the variables that define the environment (structural elements, neighborhood, intangible ecological variables). Hedonic price function takes the form of a regression where the estimated coefficients for environmental variables determine their marginal value. In theory, all the effects of a public policy could be measured through the changes in property values (Alberini, p. 1);

- the estimation of the demand curve for intangible ecological assets (e.g. air quality), intangible social assets (e.g. the safety in the area) or, in the context of our topic, for cultural assets.

Ruijgrok (2006) used the hedonic pricing method for assessing the economic benefits of preserving Dutch heritage in Tiel and Culemborgerwaard areas. The area contains remnants of Celtic, Batavian and Roman civilizations, ruins dating back to the Middle Ages, as well as historical buildings (e.g. windmills). Using hedonic pricing method, Ruijgrok assessed the impact of preserving cultural heritage on housing comfort value. In this respect, he included in the regression of the building price a number of variables to express the historical and cultural value of the building such as: monumental status (national, municipal, potential or none), year of construction, architectural style (three main styles with a total of 24 substyles), authenticity (original, partially adapted or totally adapted) and the number of historical façade elements. On the basis of a sample of 591 houses, Ruijgrok estimated that the Cultural Heritage Conservation Plan has generated an increase in the housing comfort value of approximately 21.6 million EUR. Also, the results of the study showed that authenticity increases the price of a house with about 30,000 EUR, while an extra historical façade element increases the price with 3,777 EUR.

3.2. Contingent valuation method

Contingent valuation method aims to value those goods which, due to the absence of a trading market, cannot be valued through the selling price. It is a direct stated preference method where respondents express their willingness to pay (WTP – the maximum amount of money that a consumer would be willing to pay in order to increase his welfare or to prevent the loss of it in relation to the consumption of the cultural heritage under assessment; Plaza, 2010, p. 156) or their willingness to accept (WTA) compensation for their loss of welfare. Contingent valuation method is widely used for the valuation of cultural heritage and is the only valuation method that is able to capture the non-use value (Tuan and Navrud, 2008, p. 326).

Bănaciu (2004) describes the following steps employed by the contingent valuation method:

- the market of the goods that are valued has to be delimited. In this stage, the questionnaires are prepared (using logical, concise and non-interpretable questions) and the data collection method is established;
- the method used for determining WTP has to be established. In this respect, there are several choices, such as the closed referendum

(yes/no questions) and the open questions, for estimating the amount that respondents would be willing to pay for the preservation of cultural heritage;

- statistical analysis of the answers concerning WTP;
- graphical representation of the answers in relation to relevant indicators for the respondents of the questionnaire (such as age, income and education);
- interpretation of results and improvement suggestions. WTP for cultural heritage approximates the individual demand function and is used as a basis for determining the consumer surplus and the economic value assigned by the respondents (Plaza, 2010).

Ruijgrok (2006) considers that the most important ingredients of the contingent valuation method are the description of the heritage under valuation, the delimitation of the hypothetical market, the questions concerning WTP (including the payment method), as well as the questions concerning the characteristics of the respondents (age, income and education). Taking into account that people are not used to pay for cultural heritage, he emphasizes that the questions must not be misleading or guiding the respondents. Ruijgrok considers that filter questions should be included in the questionnaire in order to prevent WTP overestimation.

Plaza (2010) believes that contingent valuation method is used excessively when it comes to valuating cultural assets, without taking into account their mission. Even though WTP can prove useful for estimating the non-market value of a museum, she considers that the method is not accurate and will not produce valid results, especially for museums whose mission is to act as economic engines. In this case, Plaza recommends the use of market-oriented methods such as impact studies or the net present value.

Tuan and Navrud (2008) mention a variant of the contingent valuation method: choice modeling. While contingent valuation method estimates WTP for an entire project, choice modeling estimates the marginal WTP for certain attributes of the respective project. The advantage of the method relies in the fact that respondents are not restricted only to accept or reject the project, but they can customize the attributes of the project according to their own options. Possible difficulties associated with this method refer to respondent's lack of patience (to answer a detailed questionnaire), as well as to the cases where no alternative is favored by the respondent or the expected values for certain attributes of the project are not credible.

Below are summarized the results of several quantitative studies concerning the valuation of cultural heritage using contingent valuation method:

- Ruijgrok (2006) estimated the recreational and bequest value generated by the preservation of Dutch heritage in the areas of Culemborgerwaard and Tieler (see also Section 3.1). The questionnaire sought to determine respondents' WTP under the assumption that public authorities would abandon heritage conservation. Also, given the adverse attitude of the Dutch people towards taxes, the questionnaire asked the respondents to indicate the payment method of their choice. The questionnaire was completed by a representative sample of the Dutch population consisting of 380 respondents. Survey results showed that 85.2% of them were willing to pay for the preservation of cultural heritage in the respective areas. Based on their WTP, Ruijgrok estimated the recreational value of the heritage at about 36,000 EUR per year and its bequest value at 33.8 million EUR per year. Comparing these values with the Cultural Heritage Conservation Plan developed by local authorities, which spans over 10 years and requires investments in built heritage, landscape and archaeological remains estimated at 36.4 million EUR, Ruijgrok concludes that the benefits of this project greatly exceed the costs;
- Tuan and Navrud (2008) evaluated the economic effects of preserving the ruins of the Hindu temple complex at My Son, Vietnam. The study assessed the benefits of both visitors and non-visitors to the site and distinguished between foreign and Vietnamese visitors. The questionnaire was applied to 967 respondents, of whom 243 were foreign tourists, and proposed two methods of payment: increasing the entry fee for visitors and increasing taxes for non-visitors. Survey results showed that approximately 50% of the respondents agreed to pay for the preservation of the site, the average payment being almost 10 USD for foreign tourists and about 2 USD for Vietnamese people. Thus, the annual benefits were estimated at approximately 4.5 million USD. Furthermore, Tuan and Navrud proposed the maximization of revenues by increasing the entry fee because, within certain limits, the demand for visiting the site is inelastic. Under the assumption of an optimal entry fee (of 14 USD for foreign tourists and 1.89 USD for Vietnamese tourists), taking into account the preservation cost of the site (estimated at 12.89 million USD) and considering a time horizon of 20 years, the two authors estimated that the net present value of the investment would range between 0.3 million USD and 5.1 million USD (depending on the discount rate);

- Sache (2009) evaluated Mogoșoaia Palace using a questionnaire applied to 100 respondents. 74% of them agreed to an increase of the entrance fee in order to ensure the preservation of the site, the average WTP being 20 RON. The main reason invoked by the respondents who gave a negative answer was the lack of confidence in the authorities designated to manage the money. Estimated logit and probit models showed that WTP is determined by four main factors: the knowledge about the objective, the importance assigned to the preservation of the objective, the number of cultural visits per year and the education level. Considering a time horizon of 50 years, an average of 27,450 visitors per year, and assuming that 74% of them will accept to pay an entrance fee of 20 RON, Sache estimated the value of Mogoșoaia Palace at 8.5 million EUR.

3.3. Travel cost method

This method originates in the initiative of the US National Parks Service towards the valuation of national parks. Hoteling (1947) suggested that the valuation of a certain place or attraction should be made on the account of visitor's travel costs. The methodology was further developed by Clawson and Knetsch (1966). Bedate et al. (2004) describe the travel cost method as an indirect valuation method that uses the costs generated by visiting a cultural heritage site to estimate its recreational value. It must be stated that this method only captures the use value of cultural heritage, unlike the contingent valuation method which also captures the non-use value. The travel cost method can be approached from two different perspectives:

- the zonal travel cost method divides the visitors into groups taking into account the distance from their point of origin to the heritage site. The zones can be concentric but, in order to facilitate data gathering, it is recommended to assign them according to administrative or geographic units. The demand curve is obtained on the basis of average travel cost (some studies include here the entrance fee) and the number of visits from each zone. The area under the curve denotes the consumer surplus which is used as an estimate for the recreational value of the heritage site;
- the individual travel cost method takes into consideration that every trip to the site is defined by different parameters. Therefore, it is quite possible that two individuals starting from the same point of origin will incur different travel costs on their trips to the site. As a consequence,

this method begins by estimating the individual demand functions, then aggregates them to obtain the global demand function,

Next, Bedate et al. present some of the practical problems that occur when the travel cost method is employed, as follows:

- the consumer surplus will be underestimated if the opportunity cost of the traveling time is not taken into account. This opportunity cost may be measured through a fraction of individual salary but this fraction must not be chosen arbitrarily. On the other hand, when a tourist picks a certain route in order to enjoy the landscape, traveling time is no longer a cost, but a benefit;
- it is particularly difficult to estimate the travel cost in the case of multi-purpose trips (more than one site is visited during the same trip). Several solutions to this problem were proposed, such as: dividing the cost of the trip to the number of visited sites, distributing the cost of the trip according to the time spent by the tourist at each site or using the travel cost from the previous visited site. However, neither of these solutions is generally accepted;
- the existence of substitute sites is quite controversial when referring to cultural heritage. Certainly, for tourists with a particular interest in culture every site is unique and, therefore, cannot be substituted by another one. Nevertheless, other tourists have no objection towards replacing a site with alternate recreational opportunities;
- there are certain additional costs, outside fuel, that should be included in the travel cost. Such costs are: parking fees, vehicle maintenance costs and entrance fees to the heritage site. More questionable is the inclusion of food and accommodation costs because, usually, they contribute to the recreational experience;
- the visit length should be considered when estimating the travel cost. A possible solution to this problem is to classify visits to the site according to their length and to estimate a demand curve for each category;
- it is necessary to take into account site quality and congestion. The number of visitors is significantly influenced by the quality of the site. On the other hand, a congested site indicates that the demand for visiting is underestimated. Consequently, the consumer surplus will be also underestimated;
- the travel cost method assigns the same marginal utility for all visitors, regardless of their income. Greffe (1999) considers that this problem could be ignored because, usually, cultural tourism expenses represent only a reduced fraction of the households' budget.

Bedate et al. (2004) employed the zonal travel cost method for the valuation of the following cultural sites situated in the Autonomous Community of Castilla y León (Spain): The Iberian Organ Festival, the historic ensemble from Urueña, The Museum of Burgos and the Cathedral of Palencia. They divided the visitors into four zones, as follows: the neighboring provinces, central Spain, peripheral Spain and the non-peninsular zone which included the Balearic and Canary Islands and the European countries. The necessary data was collected using a questionnaire that was filled in by the visitors. The number of respondents was 300 (The Iberian Organ Festival), 130 (Urueña), 294 (Burgos) and 191 (Palencia). In the absence of information concerning the food and accommodation costs, Bedate et al. took into account only the transport costs (namely fuel, vehicle maintenance costs, insurance, taxes and other expenses), estimated by the Spanish State Administration office at 0.15 EUR per kilometer. Finally, the cultural demand functions were estimated and the consumer surplus for the considered heritage sites was computed. The results are as follows: 248.82 EUR (The Iberian Organ Festival), 272.26 EUR (Urueña), 1,171.97 EUR (Burgos) and 712.2 EUR (Palencia). The results allow for the ranking of the above heritage sites according to consumers' preferences measured through the travel cost. The authors conclude that this ranking is strongly correlated with the attractiveness of the heritage sites and does not take into account their historic or cultural value.

Poor and Smith (2004) also employed the zonal travel cost method to estimate the use value generated for visitors by Historic St. Mary's City, Maryland, USA. St. Mary's City was the British Colonial capital of the State of Maryland and represents one of the most important historical archeology sites in the US. The zones of origin were established on the basis of a questionnaire, submitted by 328 visitors between 1999 and 2001, and were delimited with the aid of zip codes. Three components were included in the travel cost: the transport cost, the opportunity cost of the traveling time (considered to be one third of the zonal salary) and the entrance fee. Using the information collected through the questionnaires and with the aid of econometric models, Poor and Smith estimated the demand function including, besides zonal travel cost, three additional explicative variables: income, ethnicity and age. The estimation results show that the demand for visiting St. Mary's City is elastic to changes in travel cost, while the income elasticity is, bizarrely, negative. As a consequence, visiting this cultural heritage site appears to be an inferior good. Therefore, if their income increases the visitors will seek other cultural activities. On the other hand, the average estimated value of the aggregate annual consumer surplus, for the period 1999-2001, ranges between 75,493 USD and 176,551 USD.

4. Conclusions

Cultural heritage is a key resource that belongs to all humankind. Its value transcends money and the economic universe, cultural heritage being a repository of knowledge and meaning that inspires and fulfills human beings. Therefore, investments in the preservation and valorization of cultural heritage are extremely important. In our opinion, such investments should not fall exclusively on public authorities. Conversely, given that cultural heritage generates a series of economic effects, we recommend mixed financing which may take the form of public-private partnerships. On the other hand, Sache (2009) suggests that major projects concerning the preservation and restoration of Romanian cultural heritage should be financed using European grants⁽²⁾.

The evaluation of investment projects in cultural heritage poses two important problems:

- first of all, the economic effects of these investments are very complex, they occur both on short and long terms and they are difficult to identify. Unfortunately, some researchers have analyzed superficially this domain which led to the exaggeration of these effects. Still, impact studies remain a valuable tool for evaluating investment projects in cultural heritage but they must take into account all the economic effects generated by the project (either positive or negative) and compare them to the effects produced by alternative projects (Bowitz, Ibenholt, 2009, p. 7);
- secondly, there is a significant need for a robust method that would provide satisfying answers to all the issues concerning the valuation of cultural heritage. The existing valuation methods were initially used for environmental goods and, afterwards, they were adapted for the valuation of cultural heritage. Moreover, they do not capture the entire concept of heritage value, but only parts of it. The non-use value proves to be the most difficult to estimate, only the contingent valuation method being able to capture it.

In conclusion, valuation and economic valorization of cultural heritage still pose a lot of unanswered questions that incite to future research in this area. One of the main challenges is to formulate an improved method (or set of methods) for the valuation of cultural heritage.

Acknowledgements

This paper is supported by the research project no. 92-119/2008, entitled “Valorificarea și managementul patrimoniului construit în context intercultural - PATRIV@L”.

Notes

- (1) ICCROM Working Group ‘Heritage and Society’, “Definition of Cultural Heritage – References to Documents in History”, selected by J. Jokilehto, 15 January 2005, pp. 9-47.
- (2) Regional Operational Programme, Priority Axis 5. Sustainable development and the promotion of tourism, Major Intervention Domain 5.1. The restoration and sustainable valorization of cultural heritage, as well as the creation of adjacent infrastructure.

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