



METHODS FOR CALCULATE THE VALUE OF CULTURAL HERITAGE

OVERALL AIM:

Gaining knowledge about different ways of esteem cultural heritage values



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The use and non-use value of cultural heritage

- The value of cultural assets that we can hypothesize, is commonly calculated as the result that comes from the sum of the use value and the non-use value.
- *Use value* derives from the use of the good.
- *A non-use value* may be an *option value* (i.e., the value for individuals who have not visited the site but who wish to have the opportunity to do so in the future)

The *use value* of cultural heritage

- the use value of a cultural asset is equal to the financial flows deriving from the use of the asset and in particular:
 - to all the revenues related to the use of the asset itself (as revenue deriving from the tickets entry, additional services, etc .)
 - all the income connected to several economic sectors that exploit the cultural asset (tourist economy) in terms of higher revenues for the owner (the State) related to the expenditure in goods and services (mainly tourism), which would not have taken place in the absence of the cultural asset (taxes and taxes that belong to the State as a result of the developed tourist economy).

The *non-use value* of cultural heritage

A *non-use value* may be:

- an *option value*: the value for individuals who have not visited the site but who wish to have the opportunity to do so in the future),
- an *existence value*: the value attributed to the good by those persons who have neither visited the site nor plan to do so, but who view the existence of the site in a positive light)
- *bequest value* (i.e., the value of knowledge that the heritage has been retained for the benefit and use of future generations).

The *non-use value* of cultural heritage

- Given the difficulty related to the measurement methods of non-use values, the practice and the economic literature have however identified as a proxy of that value the public contribution assigned to the type of cultural goods or services being analyzed, as indirect expression of the availability of the community to support the existence (regardless of its use) of cultural heritage.
- In the case of State cultural assets, for example, this value can be identified as the sum of the expenses that the State supports to guarantee the protection and enhancement of its assets.
- This approximation can indeed represent a value, which is not fixed by the market, that the community recognizes to the existence of the heritage itself.

The final *value* of cultural heritage

- Finally the formula for calculate the final value of Cultural Heritage is:

$$VCH = Ed0 + STV0 + Efet0 - Sfr0i$$

where:

VCH = value of the cultural heritage asset

Ed = direct income produced by the asset at year 0

Efet = fiscal income produced by the tourism economy at year 0

STV = expenses occurred for protection and valorization of the asset at year 0

Sfr = expenses occurred for the use of the asset at year 0

i = proper discount rate

The final *value* of cultural heritage

- The application of this method would lead to define the value of cultural heritage, according to a logic of discounting future flows, focusing on the expectations that are nourished on the values that the asset will generate in the coming years.
- However, we could say, at the same time, that it completely neglects the "past", the "history" of the good, with the limit of potentially keeping on the same level a very ancient cultural asset and a more recent cultural asset.

A mixed technique for estimating the value of CH

What therefore seems most appropriate for our purposes is a mixed technique, which considers both historical values and future flows in a balanced way, with the following formula:

$$VCH = (VCH_f \cdot p) + (VCH_s \cdot q)$$

Where:

VCH = value of cultural heritage

VCH_f = value of the cultural asset, calculated with the method of discounting the flows

VCH_s = value of cultural heritage, calculated using the "historical" method (see below)

p, q = weighting factors, where $p + q = 1$

A mixed technique for esteem the value of CH

We therefore establish that

$$VCHs = VI + t = m0Inv t$$

Where is it:

VI = initial value of the asset, equal to the expenses for its realization

m = number of periods of capitalization of the asset, a value that begins when the asset comes into existence and where the index t decreases to 0, the year in which the valuation is carried out.

Inv = investment costs incurred on the asset (restorations, maintenance, works, buildings, etc.)

A mixed technique for esteem the value of CH

Now, it is clearly evident that reconstructing the values of "VI" and "Inv" is a very complex task due to the lack of data and information.

To overcome this gap, we can propose as significant proxy of the value of "Inv" the capitalization of all expenses incurred on that asset for protection and valorisation, minus the expenses incurred for its use.

Finally:

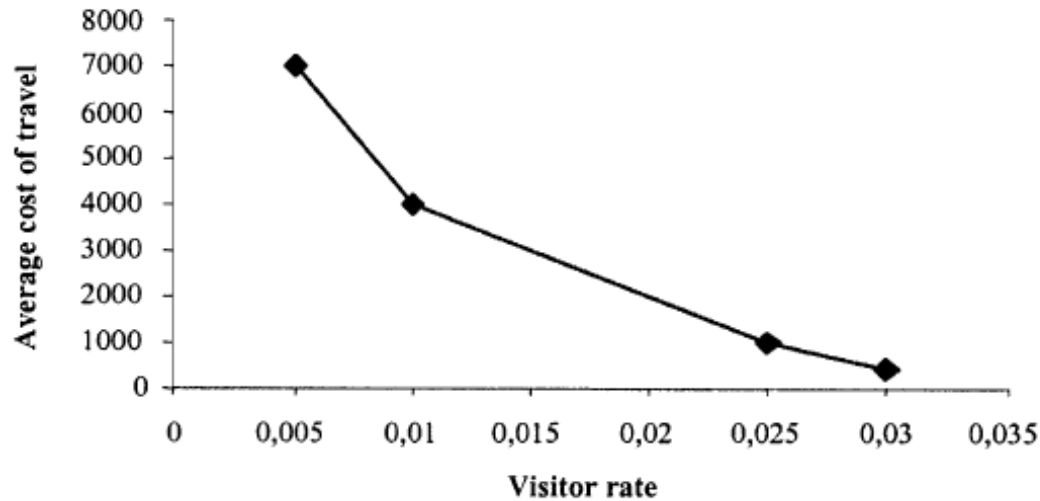
$$VCHs = VI + \sum_{t=0}^m (STV_t - Sfrt) (1+j)^t$$

Where j is the capitalization rate

To Estimate the value of CH through travel costs method

- Despite much work on perfecting esteem methods, each has a number of problems associated with them, and all may be criticized both for the basic premise they take and the analytical techniques they employ.
- The travel cost method of estimating value of CH is one of these methods which is used to solve the problem of calculating the value of an individual places on a given attraction—irrespective of its nature and regardless of whether an entry fee is charged
- The method consists of attributing the cost of travel from the visitor's point of origin to the site.
- The aim of the travel cost method is to provide a measure of the use value of a recreation site by establishing a demand curve based on users' utility maximization

To Estimate the value of CH through travel costs method



Cultural heritage in the context of the cultural / creative industries

- In several studies, assessment of the value of cultural heritage has been part of a broader research on the impact of the cultural and/or creative industries
- Among other sub-sectors within the creative industries sector, cultural heritage is assessed not as an explicit sub-sector or branch but, rather, as a cross-cutting prerequisite for economic development, particularly for the tourism industry and job creation. Such evidence based on the interconnection between cultural heritage and the emerging research of the creative industries sector is a recent phenomenon.

Cultural heritage in the context of the cultural / creative industries

- Although the individual approaches in determining the impact of the cultural heritage sector within the broader cultural industries research differ, certain commonalities can be identified.
- The methodology of research refers to the so-called 'three-sector model' where cultural industries are divided into a core area of artists / cultural production and a peripheral surrounding area comprising the public, the intermediate (non-profit) and the private (market-oriented) sub-sectors.

Cultural heritage in the context of the cultural / creative industries

- Cultural heritage and its actors are located in all of the three above-mentioned sectors. Based on this observation, some authors claim that public funding is crucial for cultural heritage, particularly for museums.
- These studies refer to the notion of public goods which brings forward the arguments for public intervention, public funding and the need for cultural policies aimed at supporting cultural heritage

Cultural heritage in the context of the cultural / creative industries

- With regard to cultural heritage, in particular the mostly publicly-run heritage sites or museums in Europe, the identification of concrete interdependencies of cultural heritage with the creative industries sector seems of importance and of interest for further observation and research.

Further readings

C. Dümcke, M. Gnedovsky, 2013. *The Social and Economic Value of Cultural Heritage: literature review*, EENC Paper, July 2013



**Project "SURE - Sustainable Urban Rehabilitation in Europe"
implemented in frames of Erasmus+ Programme
Key Action 2: Strategic Partnership Projects
Agreement n° 2016-1-PL01-KA203-026232**



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This publication has been funded within support from the European Commission.

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**Co-funded by the
Erasmus+ Programme
of the European Union**

