

Directorate for Cultural Heritage, Norway

Cultural Heritage Monuments and Historic buildings as value generators in a post-industrial economy. With emphasis on exploring the role of the sector as economic driver

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We, the government of the state wish to put and end to the unhealthy practise which has created much disgust, because one permits buildings to be destroyed and thereby robs the town of its majestic appearance. Therefore we command that buildings constructed by the old shall not be desecrated. Those police officers who do not intervene when monuments are threatened by violence shall, after they have been whipped, have their hands cut off.

Roman emperor.

1. Economy – value – socio-economic theory

Every time cultural heritage contributes to artistic, educational or social development, it is a source of value: esthetical value, experience value, existence value for which the production implies economic movement, and not to take this into consideration would lead to a lack of fundamental understanding¹.

When looking to set the value of cultural heritage objects we must make use of socioeconomic theory. Cultural heritage must be treated as a (consumable) good. Further, according to socio-economic theory, cultural heritage objects are COMMON GOODS. Common goods are characterised² by being:

Non-exclusive: A good is non-exclusive when a user cannot technically be stopped from enjoying / consuming that good.

Non-rivalling: The enjoyment / consumption of the good for one user is not reduced by more persons enjoying it simultaneously.

The private (and profit driven) market cannot produce or supply sufficient non-exclusive common goods. The reason is simple: if you cannot force someone to pay to consume a specific good you cannot generate any profit! If profit may not be achieved for a 'good' the mechanisms of the private market ensure that such goods are not offered on the (same) market. So, if the mechanisms of the private market alone decided, only those (immovable) cultural heritage (ch) objects with a high market value would be protected. The logic is similar for all common goods.

Now if this is the position of cultural heritage in a market, how do we find out what value that these goods have? From the perspective of value creation / definition there is no defined and unified methodology to specify the socio-economic value of cultural heritage objects. But standard economic calculation methods may be used to define the value of a cultural heritage object – or better an aggregated group of cultural heritage objects.

"The value a consumer gets by consuming a market good is equal to the highest sum of money the consumer is willing to pay to secure that good for his own consumption."

³ Ibid.

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¹ Culture et development, No 141 – septembre 2003, Ministere de la Culture et du Communication, Direction de l'administration générale, Département des études et de la prospective.

² "Valuing Cultural Heritage", Ståle Narverud, Richard C. Ready, Edward Elgar, Cheltenham UK, Northampton USA. ISBN 1 84064 079 0

Consequentially the value of a cultural heritage good is the highest sum of money a 'consumer' is willing to pay to ensure the possibility to enjoy (consume) the good. This is the use value of the good. But, as other common goods, cultural heritage is a 'non marketable good' and also a non-renewable good. The final estimation of value must also take into account what we can call a non-use value.

In conclusion, the value of such goods must be defined by analysing to types of values: Use value and Non use value. In this article we will concentrate on trying to analyse the use value of cultural heritage from a social economic perspective. The non-use value is a value that must be added to the use value to achieve a correct picture of the total value of cultural heritage to society. This is not done in this article.

Usually studies of ch and its economic effect work with the following indicators: Turnover, Employment (direct and indirect) and Frequentation (number of visitors). There are a number of different approaches used too; such as: Basic cost studies, Economic impact studies, Contingent valuation and choice modelling and Regression analysis: hedonic, travel cost and property value studies. In this work we have chosen to analyse the sector based on the turnover and employment capacity as primary indicators.

2. Turnover of sector

Cultural heritage has great value for other industries. Cultural landscapes townscapes and individual buildings are used at input or a backdrop for many PC games, for the film and television industry and by businesses in their marketing and customer relation building activities when they organise spectacles and PR/reception activities for clients in old monuments. What this use value is not calculated here, but needs to be mentioned.

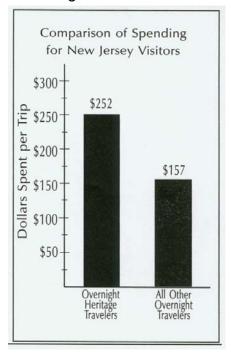
The tourism sector is the 'industry' that to the greatest extent uses cultural heritage as support for its backbone activities like hotel accommodation, transport and catering. Cultural heritage is a major contributor to the income from tourism, which stands for 5,5% of the EU GDP, generates more than 30% of its revenues from trade in external services, and employs 6% of the EU workforce. Tourism has an expected growth rate is 57% in the period 1995-2010⁴

There are clear indications that the dedicated cultural heritage tourist spends more money when travelling than other tourists. Data from New Jersey (USA) shows that their daily spending is 60% higher than other tourists / travellers. The employment is caused by the production line 'cultural tourism' and is tied to the fact that as use of cultural heritage increases the need for employment in the hotels, restaurants and in the transport sector.

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⁴ (EU High level Group, 1999).

Figure 1. Spending of cultural heritage tourists and other tourists/travellers⁵



The value of the cultural heritage flows to other businesses than cultural heritage itself. Even in those cases were entrance fees are demanded to access a cultural heritage site the problem of defining the total value based on earnings from tickets, souvenirs or other income bringing activities at the site remains. The reason for this is the difference between spending at the site (direct earnings) and the spending outside the site. All the money a visitor to the site spends on getting there, eating and (possibly) staying overnight, constitutes the "sum of money the consumer is willing to pay to secure that good for his own consumption", this sum total is part of the economic value of that cultural heritage site.

But we know⁶ that only 6 to 10% of the total spending is left at the site. Further, It is interesting to note that of the total number of jobs only 16,3%⁷ are situated on the cultural heritage site itself.

To arrive at some kind of figure for the turnover of the cultural heritage sector we used the following approach. We took the number of tourist arrivals to Europe in 2002, assumed they stay for 16 days, on an average, that they visit at least one museum or historic building during their stay. We also assessed their daily spending (overnight, food and drinks) at 150 Euro per day per person. We did not include the cost of their travel to their destination or any travels between different destinations during the stay. Local transport use as well as one entry to a museum⁸ etc. was calculated per stay⁹.

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⁵ "The economic benefits of Historic Preservation in New Jersey", New Jersey Historic Trust -1998

⁶ Studies done by English Heritage and Norwegian Directorate for Cultural Heritage

⁷ Xavier GREFFÉ, *La valorisation économique du patrimoine*, Rapport au Dep et à la Dapa, Paris, Ministère de la culture et de la communication, 2002.

⁸ Local transport and sundries at Euro 20 per day, museum/gallery visit at Euro 20 pr stay.

⁹ We also know from other studies that there is a great potential for more rational and less costly maintenance of ch, this sum is 1,9 billion Euro. This sum was added to the value. Norwegian Directorate for cultural Heritage, 2001.

So this gave us an idea of the sums of money used, but how much of this sum could be assigned as value to cultural heritage? Here we were forced to make a definition of what consumption of cultural heritage is and subsequently how much of their time is spent consuming this good. We defined consumption of cultural heritage as visiting museums and site, of course, but also included the choice of a café to take a drink when the surroundings are historical, architectonically interesting or a beautiful cultural landscape. Sitting down to eat or drink, or just walking and 'taking in' the surroundings is cultural heritage consumption. Based on this we stipulated, on an average, that 30% of the time is spent consuming cultural heritage. In sum we found that turnover (mostly) from tourism due to cultural heritage is Euro 338 billion, at European level¹⁰

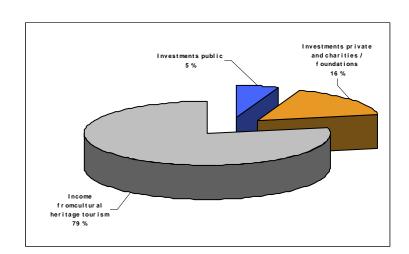


Figure 2 Elements in the turnover of the CH sector

79 % is turnover due to tourism, 16 % is investments in maintenance etc. from private owners, charities, foundations etc., and the remaining 5% is investment made by public and governmental bodies.

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¹⁰ By European level we here mean EU countries, EEA countries and the new member countries from June 2004.

Turnover ch sector compared with other figures bill Euro 350 300 250 183 200 150 100 50 Maintenance Revenue USA Trurnover Turnover VW R&D spendings group 2001 sector for investments all Computer BM W group maior US tourism Furone Peripheral 2001 companies parties

Figure 3 Turnover of cultural heritage sector compared to some other sectors

3. Employment in CH sector Europe

Based on a survey carried out in the spring 2003, we received information on the cultural heritage sector from Norway, Sweden, Finland, Denmark, The Netherlands, United Kingdom and France. We used this information to stipulate direct employment for those countries not participating in the survey.

Industry

The number of directly¹¹ employed is 306.000. Probably the number of direct employed is even larger.

Indirect employment effects amounts to 7,8 million man-years.

In total, more than 8 million jobs in the EU are sustained by the cultural heritage sector.

In France¹² more than 40.000 craftsmen work on repairs and maintenance of the cultural heritage. A study from France demonstrates such calculation.

¹¹ By directly employed we mean those who work directly with cultural heritage in administrations, research institutes and businesses executing restoration or maintenance works on cultural heritage objects / sites.

^{12 &#}x27;Les vieilles pierres valent de l'or', Journal du Dimanche, February 11, 2001, French Ministry of Culture and Communication, 2000.

Figure 4. – Jobs in the cultural heritage production line; France

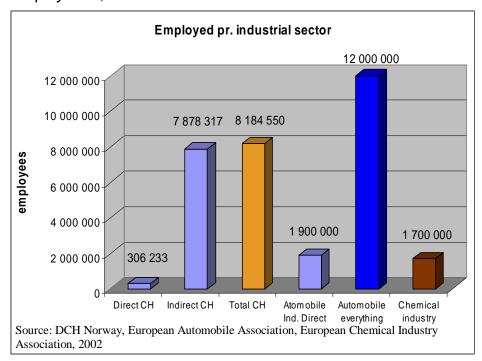
Part of the production line	Number jobs (man/years)	In % of total
Direct employment / Emplois directs	43 880	8,38%
Indirect employment in the sector / Emplois indirects en travaux de conservation/entretien 13	41 714	7,97 %
Employment from tourism / Emplois en retombées touristiques	176 800	33,79 %
Employment generated in other industries / Emplois induits dans les autres industries	260 830	49,85 %
Total for France	523 224	100,00 %

Source : Xavier GREFFE, La valorisation économique du patrimoine, Rapport au Dep et à la Dapa, Paris,

Another important element to consider in a post-industrial economy is the labour intensiveness of a sector. In all major industrial sectors the tendency is for increased production with a reduced work force. This is a general trend, and is partly responsible for the unemployment problem Europe is facing today. The cultural heritage sector, including tourism is, on the other hand very much a labour intensive sector. Further the whole sector is characterised by a huge backlog on necessary maintenance work, so the sector has the potential to employ many more people.

In Figure 4 we see that the cultural heritage sector creates app 26,7 jobs for every direct one, compared to the auto industry where the factor is only 6,3. Of course, these figures may be more correct, if sufficient data was available, but presently they are excellent indicators of the employment potential of cultural heritage maintenance.

Figure 5. Employment; direct & indirect and other sectors



The ability to create additional employment for every direct one is called the multiplier effect. What the size of this multiplier is heavily debated. Different studies come up with different numbers, depending on their analytical approach and / or the site which is being studied. The multiplier in the cited French study by Greffe X. is 17,1%. It is

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¹³ In this paper these are considered in the category direct employment.

interesting to note that of the total number of jobs only between 9% to16,3% are situated on the cultural heritage site itself; i.e. direct employment.

The World Bank also develops studies of economy and cultural heritage along these lines. Their figures are clear; in the USA building rehabilitation is a much better option than manufacturing industries in regards to generating job, household income and value added to the economy than the manufacturing industry.

Table 6. Socio-economic value created Building rehabilitation vs Manufacturing industries (US)¹⁴

Indicator. Benefits from USD 1 million invested in			
	Manufacturing Industries	Building rehabilitation	
Additional jobs (number of jobs)	21,3	31,3	
Additional household income (US dollars)	553.700	833.500	
Value added to economy's output (US dollars)	1.109.665	1.402.800	

Source: Rypkema 1998

Another comparison of the economic effect of historic rehabilitation on job creation compared to other sectors has been done by the New Jersey Historical trust in cooperation with Rutgers University. Their findings are given in Figure 7, next page¹⁵.

Their findings show that historic rehabilitation is a more effective instrument for job creation than both construction of new buildings and highway construction.

Percentage jobs created for USD 1 Million:

Highway construction equals
New construction
Historic rehabilitation
100%,
110%
126 %.

One critical effect to be considered when launching actions to generate employment is to what extent such actions generate jobs concentrated only in one sector or if the policies are able to spread jobs out over more sectors. The last option is usually considered the best for a balanced social development.

Investment in historic rehabilitation counters limiting job creation to one, or very few, economic sectors. This 'spreading' effect is demonstrated in Figure 8.

¹⁵ New Jersey Historic Trust, 1998 etc. Baseline data requested. % may therefore deviate +/- 3-5%

¹⁴ 'Cultural Heritage and Development, A framework for Action in the Middle East and North Africa', The World Bank, 2002, ISBN 0-8213-4938-4, page 52.

Figure 7. Job-creation, comparison between historic rehabilitation and other sectors¹⁶

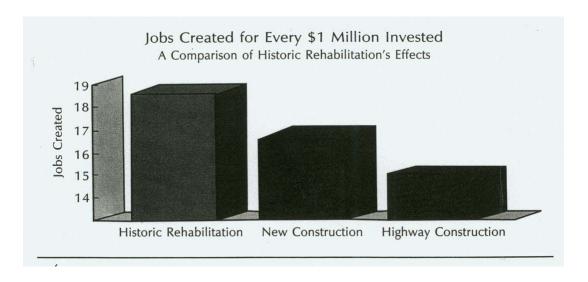
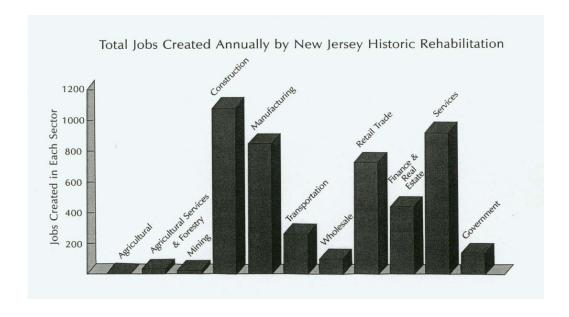


Figure 8. Employment creation through historic rehabilitation by profession / sector 17



Source: New Jersey Historic Trust -1998

Source: New Jersey Historic Trust -1998

4. Return on investment

Economic sectors are classified through their ability to generate return on investments. We will analyse a couple of cases and go though some data on income and job creation to look at this capacity of the cultural heritage sector.

4. 1 The Borgund stave church

An example is analysed for the Borgund stave church. This 800 years old church

needs, on an average, app 2 million NOK for to finance operations and maintenance every year. This includes staffing in the season.

The church is considered an expense for society because it does not generate sufficient income to cover maintenance and staffing costs. Income from tickets at this, after Norwegian conditions well visited site, is only NOK 1.75 million. Seen in this manner the 800 years old church is an expense.



To visit this church you need to travel to Lærdal in western Norway and most tourist stay overnight. All who stay overnight visit the church. The church is the 'magnet' that bring (almost all) travellers to Lærdal. Hotels and camping are closed in the winter season and all their income is restricted to the (tourist) season. As such the church is instrumental in generating income for other activities in Lærdal; hotels, camping, souvenirs, retail, transport, etc. The relation of the income factors of Borgund stave church is illustrated in Figure 9, on page 11.

We can calculate 18 that:

- Borgund stave church is instrumental in generating 168 man years pr. year.,
- This employment again generates NOK 11 million in tax income to society pr. year.

The turnover generated to society, including the church with its 15 employees, is NOK **27 million** pr. Year, 1.250 % higher than the turnover generated by direct ticket income at the church site.

If we calculated the return on the public investment in the church, based only on the tax income – the money that goes directly to public authorities – we arrive at a return on investment figure of 628,5 % return on the yearly investment.

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¹⁸ Notes: Suppliers and public administration / government calculated by use of 'NHO model' (NHO is Norwegian Confederation of Business and Industry) Personal income calculated at average salary of NOK 220.000,- (Euro 27.500). Taxes calculated on the basis of average income tax of 30%.

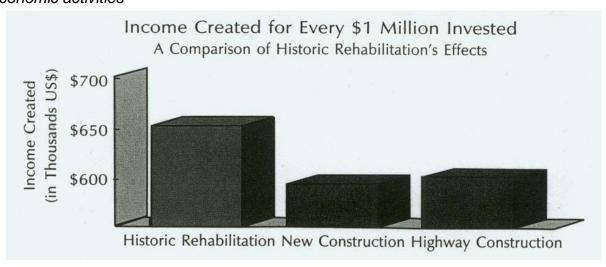
Fig. 1. Relation in % between turnover Borgund and related activities 1 142 1 200 1 000 800 % 600 97 85 120 400 100 200 Turnover Turnover Turnover Turnover Turnover **Activity Borgund** Hotell Camping saumon retail trade fishing et al

Figure 9. Relation in % between turnover Borgund and related activities 19

4.2 Income created by investments.

In a study from The New Jersey Historic Society looks at on investment from historic rehabilitation. Their focus is on income creation and job creation²⁰ per invested unit. The result of analysing income created through investment in historic rehabilitation their results is shown in Figure 10.

Figure 10. Income created by investment in historic rehabilitation compared to other economic activities²¹



¹⁹ NDCH Internal paper 2002. and <u>NOU 2002: 1</u>, 2002-02-01 Fortid former framtid Utfordringer i en ny kulturminnepolitikk. Norwegian Government Studies, 2002:1'The past shapes the future. Challenges in a new cultural heritage policy'.

See Figure 5 page 23 on jobs created by investment in historic building rehabilitation.
 New Jersey Historic Trust "The economic benefits of historic preservation in New Jersey", 1998. We have requested baseline data, not yet received. % may therefore deviate +/- 3%

1 Mil USD invested in highway construction creates app. 600.000,- in income. The figure for historic rehabilitation is app. 660.000,-. If, in percent Highway Construction is 100%, the figure for New Construction is 96 % and for Historic Rehabilitation 110 %.

Historic rehabilitation generates 10% more income to society that highway construction, and 14% more that constructing new buildings.

4.3 Capitalisation of investment - French abbeys and castles

In France the most important castles and abbeys alone are responsible for 15 % of the foreign income from tourism in France, or \in 15.1 billion (year 2000)²². French central authorities state they use \in 285.million ²³ every year for rehabilitation and maintenance of protected cultural heritage objects. To this we must assume that private and non-governmental bodies add twice that amount, or \in 570 million. In total this is \in 855 million.

Now, of course not all this investment goes to the most important abbeys and castles, but let us for the sake of making a calculation, say that these abbeys and castles receive 70% of this money; i.e. € 598.500.000. The net return on this investment is app. € 14.5 billion. Based on this, the capitalisation factor²⁴ is 2.424%. But just to demonstrate the need for more reliable data, the investment factor would increase to 2.843 % if the abbeys and castles received 60% of the money.

Looking at the effect of only the public investment; as a trigger releasing the remaining funding and income, we will get different figures. For the money invested by public administrations alone; if 70% goes to major castles and abbeys, the capitalisation factor is 7.569%!

If we use similar calculation for the Borgund stave church, assuming that 2 million for maintenance etc. is paid by the public administrations every year, the capitalisation factor for this investment would be: 1.350 %

Let these examples also be a reminder of our need for more reliable and valid data for the cultural heritage sector. As the example demonstrates we have some figures but are lacking critical data elements allowing us to make precise calculations based on empirical facts, analyse and fully exploit our findings.

So when we state that investments in maintenance and upkeep of CH buildings are capitalised to society at a rate of 1/10, we are making a conservative statement relative to the figures of our calculations.

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²² 'Les vieilles pierres valent de l'or', Journal du Dimanche, February 11, 2001. Source: French Ministry of Culture and Communication, 2000.

²³ Data from NDCH survey May 2003, source French Ministry of Culture and Communication.

²⁴ Income minus investment, in % of invested funds.

5. Other economic effects of historic rehabilitation

We would here just like to mention some other economically beneficial effects of historic rehabilitation, which has not been included in our examples so far.

- 5.1 Lime and cement treatment of facades. Lime based treatment has a better environment profile, seen in a lifecycle perspective than cement treatment. Lime uses only half the amount of energy and generates only half the amount of 'greenhouse effect' as cement. Lime gives only 1/16 as much acidity, 1/19 as much seeping of minerals to the soil. After use the cement must be transported to a special depot while lime can be used directly for soil improvement? 5.
- 5.2 Maintenance costs. If you lime wash the facades of a town apartment house, instead of using plastic based painting, the yearly maintenance costs will be reduced by 50% in a perspective of 100 years. Or, put differently, in a longrange perspective it is 2 times as expensive to use plastic paints as compared to lime wash paints. In addition lime contains no poison and no threats to the environment²⁶.
- 5.3 Waste. If you rehabilitate a town apartment house you produce app. 7 tonnes of waste material. If the same apartment house is torn down / demolished and a new house is produced you produce 8.703 tonnes of waste. Or 1.243 times more waste!27

5.4 Raw material for entertainment industry

Many movies and television films need a historic backdrop: they need a historic location to shoot scenes. For this there is extensive use of historic and protected buildings, for authentic and historic cultural landscapes and townscapes. We have not calculated the value derived from such use of historic environments and individual buildings. For one French castle alone, the income from one single film production was Euro 11 million in 2004.

A number of PC-games also make use of historic buildings, maps, clothing etc. for their games and their historical setting. The value generated by such use of cultural heritage has not been calculated.

Source: Norwegian Building Institute 8880/01
 Source: Norwegian Building Institute 212/1997

²⁷ Source: Norwegian Building institute 09901/01

6. Some methodological and political considerations.

6.1 Political and social considerations

The World Bank²⁸ states:

"Improved management of patrimony assets can yield a spectrum of multiple, distinct, and incremental benefits. Broadly these can be divided into economic and non economic high impacts, as follows:

Economic impacts

- Positive impact on poverty reduction
- Positive impact on national employment levels
- Positive impacts on total outputs and revenues levels from cultural industries and service industries
- Positive impacts on foreign exchange earnings

Non economic impacts

- Beneficial impact on educational levels and identity cultivation
- Beneficial impacts on social cohesion, inclusion and social capital development
- Beneficial impact on continuously enlarging the nation's cultural patrimony
- Beneficial impacts on safeguarding and substantially conveying the heritage to future generations

Both sets of impacts or benefits are tremendously important." (...)

"The economically 'capturable' values of cultural assets depend on the worth people tend to assign to them. Good heritage management can enhance these values and make them easier to harvest, while safeguarding the assets effectively. Far from being just a liability to national budgets, as some one-sidedly regard it, the patrimony is – and can increasingly become – a "value-adding" industry. (...) Preservation is an essential premise of good CH management, but management adds value to and builds on preservation, making the preserved assets more accessible to larger number of people. This is why heritage management and tourism must collaborate."

From this we can conclude as we started:

(the value)... is equal to the highest sum of money the consumer is willing to pay to secure that good for his own consumption.

The economic value of a ch object is a relative value. This again implies that the value may increase with increasing 'popularity' of an object, and vice versa. The value will also increase as the object is put to use in an economic 'production line'. Some may think that this fact underscores the exploitable nature of cultural heritage as a 'tradable good'. But is does not. The World Bank writes about 'capturable' and non capturable values. Behind these different values lies the indefinable authenticity of the building of monument.

Professionals in the ch sector are convinced that it is this 'authenticity' which is the single most critical factor for the object when it comes to the ability to generate economic value. They are convinces that it is authenticity which is the principal creator of the "worth people tend to assign to them". That is why the need for

²⁸ 'Cultural Heritage and Development, A framework for Action in the Middle East and North Africa', The World Bank, 2002, ISBN 0-8213-4938-4, page 45-46

authenticity is so strongly underlined in all international charters and conventions on the cultural heritage.

It follows from this reasoning that the political framework in which the cultural heritage professional's work is of great importance for the possibility to generate economic benefits from cultural heritage (buildings). The European Union politics of harmonisations of national laws (Directives), has in many cases been detrimental to keeping this authenticity.

If the EU wishes to maximise the economic benefits of exploiting cultural heritage the legal framework must permit interventions in the field of maintenance and restoration using the appropriate old techniques, tools and materials. This is often not the case today, as the lawmakers have no idea of the particular demands of the ch sector and the ensuing economic benefits. But this is the only way in which most authenticity may be kept in the future. When we are discussing the economic and development potential of cultural heritage we are definitely not discussing the economy of a 'Disneyland' construction.

It is also interesting to note that as a real estate value of the built cultural heritage does not have the importance it should have in calculating national wealth or the national fortune. Most national bureaus of census do not calculate the value of buildings which are more than 100 years old. This of course also offsets taking cultural heritage into account. In one case the maintenance condition of such old buildings as a sustainability indicator was refused on the ground that the national bureau of census did not take these values into account!

6.2 Methodological research considerations

We observe that the number of economic studies of culture and cultural heritage are on the increase. Cultural heritage is increasingly seen as a 'tool' for employment creation and regional development.

But the methodology is still being developed and in most cases the empirical data is lacking or 'impossible' to get.

"The economics of preservation is an embryonic field compared with research in other economic disciplines, and the research is currently weighed heavily towards advocacy. The paper concludes with a call for more development in the field to be able to more objectively answer the question: Does preservation pay? Toward that end, the paper calls for a hybrid of the most promising methods and more collaboration across research fields. By combining methods, the particular shortcomings or blind spots of different methods can perhaps offset one another. Without further refinement, the ability to make conclusive, generalized statements about the economics of preservation will remain elusive." ²⁹

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²⁹ 'Economics and Historic Preservation; a Guide and Review of the Literature', The Brookings Institution, Randal Manson, University of Pennsylvania, 2005.

In this conclusion we must also emphasise the following important facts which are also weaknesses in this study:

- 1. These studies and the figures given are of an explorative nature. From a social science methodology point of view the empirical data is insufficient to be able to satisfactorily verify the figures and conclusions.
- 2. In this paper we have chosen the approach we sometimes call 'follow the money'. We have calculated tourist spending conservatively, but we have made an assumption about time spent consuming cultural heritage. We are in need of more data to substantiate the consumer patterns of tourists.
- 3. On the other hand, we have sufficient data to develop hypothesises for future testing. This is exactly what needs to be done.
- 4. More research needs to be done to verify what the present explorative study expounds. The first step would be to collect all the available empirical data which is presently 'lying around' in national administrations, tourist institutions and NGO's working with cultural heritage.
- 5. We have tried to make conservative estimates and not exaggerate; taking into account the methodologically inadequate empirical data and the ensuing need for calculations and stipulations. Similarly our conclusions are also based on not wanting to exaggerate. In all I believe the figures are conservative rather than radical. But, anyway, these findings need to be substantiated through more valid and reliable empirical data.

7. The economic effect – summing it up.

88 % of 3.000 persons asked are of the opinion that the historic environment is of importance for initiating new jobs and to get the economy geared up³⁰.

The most important findings of this paper are:

- 1. Historic rehabilitation creates 13% higher return on investments than new construction and 16,5% more jobs. It also produces 1.243 times less waste.
- 2. Historic rehabilitation creates app. 10% higher return on investments than highway construction and 26,6% more jobs.
- 3. The ch sector creates app 26,7 jobs for every direct one, compared to the auto industry where the factor is only 6,3.
- 4. Cultural heritage tourism generates incomes in trade and services to Europe in the order of Euro 335 billion pr. year.
- 5. The European cultural heritage sector assures employment for more than 8.000.000. persons.
- 6. Investments in maintenance and upkeep of cultural heritage buildings are capitalised to society at a rate of 1/10.
- 7. Only 6-10% of daily spending left at cultural heritage site, the remaining money flows to society around the site. Only 10-15% of the jobs are directly on the site or directly related to the site.

Oslo 25.10.2005

³⁰ Source: Historic Environment Review Steering Group; Power of place. The future of the historic environment. 2002