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ENHANCING THE VALORISATION OF UNESCO WORLD HERITAGE SITES: 
A PIGOUVIAN APPROACH

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Enhancing the valorisation of UNESCO World Heritage Sites: a Pigouvian Approach

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Abstract

The aim of this paper is to cope with the disequilibrium affecting World Heritage Sites as to the conditions of their conservation and the resources available for their valorisation. We propose a tax-based mechanism divided into three phases. The first one aims at providing an objective approach to measure the needs and diversity of World Heritage Sites. The second phase presents valorisation strategies to generate new economic resources from cultural tourism. The third one illustrates the tax mechanism based on collecting resources through an earmarked tax on tourist activities and redistributing these resources at a regional scale.

Our proposal is a contribution to the growing literature on Unesco World Heritage sites and it may be useful to ground the decision making of the recently formed Unesco Centres aimed at raising funds for the World Heritage conservation.

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1. INTRODUCTION

The World Heritage Convention, launched in 1972 by UNESCO and so far ratified by more than 180 states, has got a great international success. In just three decades, under the coordinating effort of the World Heritage Center, about 900 sites, both natural and cultural, have been enlisted worldwide.

Paradoxically, the success of this international initiative is facing a global challenge, made of three main issues. A first issue is that of quality heterogeneity among the World Heritage Sites (WHS). Quality refers here not to the cultural outstanding value, which is a necessary condition for a site to be enlisted, but to the level of conservation and valorisation. The degree of such heterogeneity is large and almost out of control by UNESCO headquarters. From the political economy perspective, the power of control by UNESCO is soft and the enforcement is very poor. Against the trend of quality degradation of the enlisted sites, UNESCO can use only two instruments: a) the delisting action (applied up to now only to Dresden in Germany and the Arabian Oryx Sanctuary in Oman); b) the List of the Sites in Danger (currently 31 properties), which is a general warning.

A second issue focuses on the impact of World Heritage List (WHL) on local development, especially through strategies of regional valorisation of sites. Does the setting up of the inscription mobilize the local stakeholders for backing and implementing new activities and partnerships? Does the WHL brand have a positive effect on the tourism industry (Prud’homme, 2008; Arezki et al., 2009)? From the political economy perspective, this issue asks for proposals for new strategies of regional valorisation of sites in order to enhance their value and attract more financial resources for conservation and valorisation.

A third issue is connected to the disequilibrium among the WHS in terms of cultural value and financial resources. While some WHS have a wonderful heritage and low monetary resources to conserve and valorise
themselves (ex. Cuba), others have huge financial resources (ex. Venice) and others can have even a minor heritage but high financial resources (ex. The City of Luxembourg). For this reason, it should be stressed the need for a re-equilibrium through some mechanisms correcting the existing conditions. In terms of political economy, this means that we should design policies moving the system towards a more general equilibrium. Tax-based models of equalization (for instance through earmarked taxes on the tourism industry and related economic activities) can be compared with proposals following market-based approaches. So far, the only proposal addressing the disequilibrium in financing the preservation of WHS has come from Frey and Pamini (2009). In their seminal contribution, the authors perceive the strategic and global issues of WHS and try to figure out a new market-based mechanism for a global governance of the WHS system.

The dimension and complexity of the three foregoing challenges suggest the importance of dealing with these issues from a regional perspective. Such a regional approach eases coordinating strategies and cooperation among States. The recent policy by UNESCO of establishing Category II Centres for Training and Research at the regional level confirms the attention for a regional approach.

The aim of our paper is to propose a regional solution to raise and efficiently allocate funds for the World Heritage preservation, which can be seen as a contribution to the perspective carried out by Frey and Pamini (2009). The paper is divided up as follows: section 2 presents and critically discusses the main proposal by Frey and Pamini (2009); in section 3 we present a new approach dealing with the current drawbacks of World Heritage List; in section 4 conclusions will follow.

2. THE RAISING OF A NEW ISSUE

In recent years, a new pioneer literature has focalized on the preservation of World Heritage and the role of UNESCO in doing it. With regard to the UNESCO role, various fields of research are worth being investigated, among which: the impact of the nomination in the WHL on the economic and touristic activity (Prud’homme, 2008; Arezki et al., 2009); the process of site selection (Van der Aa, 2005; Bertacchini et al., 2009); the degree of world culture representativeness of the WHL; the management of WHS (Karpati, 2008; Leask and Fyall, 2006). Beyond these topics, there exists another research line scarcely analyzed despite of its high relevance, namely the institutional way of raising and efficiently allocating funds to preserve the WH. In our knowledge, several studies on funding global public goods were carried out (see for example Binger, 2003; Arce et al., 2001; Sandler, 2001), but just one of these explicitly dealt with the raising and the allocation of funds financing the preservation of WH (Frey and Pamini, 2009). The two authors of this study start stating that culture can be considered as a global public good; in other words, the benefits originating from culture and culture preservation globally spread (Sandler, 2001), and this characteristic causes the well-known problems of externalities and free-riding. The preservation of WH is still seen and managed as a national affair making the fund allocation inefficient. Frey and Pamini underline that poor countries spend too little in preserving their cultural heritage, due to budget-constraints, while rich countries spend too much with respect to the value of their cultural heritage. In order to raise funds, equilibrate the efforts and efficiently allocate the expenditure, the authors propose a four-step mechanism which originates by environmental economics and can be synthesized in the following way:

- First of all, it is necessary to determine what is to be considered World Heritage and then to assign a value to each site. The adopted definition of World Heritage is that proposed by UNESCO. The value of each site is expressed in terms of World Heritage Units (WHU) by experts; “the units correspond to the loss of global heritage if the specified project was not carried out within a given year” (Frey and Pamini, 2009; p. 9) and their amount is based on the cultural importance of the site expressed by experts on the base of the ten selection criteria already established by UNESCO; on the size of the site, and on the probability of danger.
Second, a global agreement has to be stipulated by countries in order to decide how many sites to preserve and how many WHU each country has to preserve. Following the model of UN Security Council, the effort of each country is recompensed by an analogous decisional power; in other words, this mechanism results in the creation of a World Heritage Board in which the major financing countries have the permanent seats.

Once the obligations of each country are determined, the process of preservation can start under the supervision of experts and a World Heritage Certificate (WHC) is assigned for each preserved WHU. A rich country possessing few sites is motivated to internationally spend funds in preserving the sites with the greatest number of WHU, obtaining an equal amount of WHC. Analogously, a poor country possessing many sites but no funds is motivated to attract donors by providing them with adequate incentives (for example, reducing conservation costs in order to lower the price of certificates).

Finally, a market for trading WHC is opened up. This market-led process has the function of equilibrating the allocation of funds. This is particularly important for developing countries, which could externally finance the preservation of their sites and have a new development opportunity. Since preservation activities are labour-intensive and developing countries labour-abundant, they can acquire WHC by internationally specializing in low-cost preservation activities. Analogously, firms can compete in offering preservation services at low-cost.

It is clear that the solution proposed by Frey and Pamini is market-based: the efficient allocation of funds is reached by free market mechanisms in which WHU have the role of generating “Hayekian” information about which sites have to be saved. However, this solution suffers from some limits and drawbacks. First of all, assigning a value to each site on the basis of the ten UNESCO selection criteria is highly arbitrary and based on qualitative rather than quantitative assessments; this approach does not necessarily lead to rationally rank the sites in a coherent and transitive way.

Another remark has to do with the process of distributing burdens and honours among countries at the global level. The two authors, following the United Nations model, propose the establishment of a World Heritage Board in which the financial effort of each country is recompensed by analogous decisional power. However, this point presents two problems. First of all, it is not sure that incentives limited to a greater decisional power are so strong to motivate the financial participation of countries also in the context of World Heritage. Countries indeed will compare this kind of expenditure in the cultural heritage sector with other financial possibilities which could be more convenient; in other words, the analysis does not consider the opportunity-costs. Moreover, hypothesizing that this mechanism of incentives does work, a relevant problem of public choice can occur. If the decisional power is owned by rich countries having more financial possibilities, the effort of equilibrating could paradoxically result in a greater concentration of benefits; this is one of the main criticism moved to international organizations as the International Monetary Fund and the United Nations.

Another problem relies on the different dimensions by which a country can collaborate in preserving the world heritage. The UNESCO-led financing mechanism proposed by Frey and Pamini is not the only one; indeed, countries actually participate to the international culture preservation also by bilateral or multilateral cooperation agreements. A more accurate analytical comparison between these alternatives is necessary.

Finally, the two authors base the trade of World Heritage Certificates on a low-price competition among countries and firms. However, not only the cost but also, and above all, the quality of labour is fundamental in the activities of preservation. For some goods or services a low price can indicate a low quality, so that low cost alternatives are discarded. Further, Frey and Pamini assume that restoration and conservation are labour intensive activities. On the contrary international experience shows that restoration and conservation use cutting hedge technologies jointly with high skilled workers. Indeed, new technologies are increasingly playing a role in a fresh creative approach to the cultural heritage. The creation, management, safeguarding and development of the cultural heritage are generating a flourishing market mainly involving small and medium-
sized companies with high technological content. New materials, innovative construction techniques, measurement and diagnostic tools, 3-D modelling and digital platforms are some practical examples.

For this reason, the role of developing countries as international suppliers of low cost preservation activities could be a misplaced wisdom. Beyond it, developing countries face another problem, that is the high opportunity cost of investing in this kind of specialization. Even if it was feasible, before creating high skilled labour, these countries would have to provide for basic education, health and infrastructure, which are priorities and necessary pre-conditions.

3. **A NEW PROPOSAL: A REGIONAL APPROACH**

Against the heterogeneity in the quality of the sites, the disequilibrium in preservation efforts and to foster the local development through the presence of World Heritage, we suggest a new policy framework for governing the conservation and valorisation of sites and coping with the allocation of economic resources, which is either unfair or unbalanced.

Our proposal is in the mainstream Pigouvian models (Pigou, 1932) utilizing taxes for re-equilibrium. The framework we propose is composed by three main steps: the first is linked to the knowledge of the current quality of the sites; the second is directed towards valorising sites and then generating further resources for re-equilibrium purposes; the third develops a tax scheme to feed regional funds with these additional resources for conservation and valorisation of those sites in the greatest need. The level of the analysis will be the macro-regions of the world. This supranational dimension is due to governance considerations. On the one hand, we need to overcome the national dimension, too small to consider the world heritage as an international public good. On the other hand, the choice of considering macro-areas is due to facilitate governance activities. Unlike the global size (Frey and Pamini, 2009), regional or macro-areas (for instance Central America, Latin America, Middle East, Sub-Saharan Africa, etc.) are likely to have the right dimension for several reasons. First, because macro geographic areas usually are more homogenous in terms of cultural identity, history and language. Secondly, geographical proximity can foster information and knowledge flows among the parties. These conditions tend to reduce negotiation and transaction costs favouring the production of trust and cooperation. Thirdly, under a regional approach it is easier for State Parties to capture the positive externalities deriving from regional cultural heritage conservation and valorisation.

**3.1 Defining Values and Needs: the Risk Function for Mapping Regional Disequilibria**

The first step is oriented to put the definition of values among the sites on a more rational basis. The definition of values is necessary to understand how to rank the alleged quality heterogeneity of the sites.

Today the listing is based on ten qualitative criteria assessed by international experts. Although these criteria are based on well established and shared cultural values, there is room for ad hoc, biased, subjective and qualitative judgment. For this reason, we aim to propose a rationale for assessing the quality and the characteristics of the sites in order to set up a general ranking for all the sites.

The risk function is a methodology put forward first by Italian scholars on Heritage conservation (Memorabilia, 1987). The risk of site deterioration is estimated as function of three factors:

- the cultural value of the site (\(C\)), which may be estimated through contingent valuation methodologies as opposed to ad-hoc experts’ valuation.

- the vulnerability of the site (\(V\)), which represents its predisposition in suffering damages; for instance, absence of continuous investments in preservation are likely to increase the vulnerability of the sites.
the probability that an harmful event (H) occurs, which is function of natural events (earthquakes, floods, volcano eruption, air pollution, etc.) and human actions (anthropic pressure, tourist pressure, plunders), occurs.

Moreover, to take into account between-countries economic inequalities that could affect the conservation capability of WHS we suggest also:

- the distance of the income per capita of the country in which the site is located as compared to regional average income (RI)

The risk function is therefore expressed as

$$Risk = f(C, V, H, RI)$$

Of course, one of the most puzzling point is the evaluation of sites’ cultural value. In order to avoid experts’ subjective point of view, Contingent Valuation (CV) method can be an effective technique to provide reliable and comparable information of the cultural value of a site, given its public good nature. CV tries to measure the use and passive use values of a heritage site eliciting the willingness to pay of the people (Santagata and Signorello, 2000). Albeit the acknowledged biases, CV still remain a reliable method to assign value to cultural and environmental goods.

In the analysed context, the importance of building a risk function for each site relies on the possibility to create a priority list of needs (Handbook for the Environmental Risk Analysis, 2003). On the basis of the risk functions computed for each site it should be possible to design maps of the regional disequilibrium.

### 3.2. A potential strategy for valorisation

The potential strategy of valorisation included in this step is mainly directed to create new economic values which can be partially used to redress the regional unbalances. The starting point is to increase the total amount of resources for conservation and valorisation. The main way to reach such a goal is to count on cultural tourism and related activities.

As we noted at the beginning, there is a problem of heterogeneity in attractiveness among world heritage sites. Such heterogeneity is not signalled, because once a site enter in the list it gets the same mark signalling the average quality of the overall WHS. The higher the number of the sites in the list, the less significant could become the signal of the inscription. To correct this unintended effect of the UNESCO inscription, we are imaging the introduction of a new layer of quality mark. World Heritage Sites receiving this new seal of excellence will be in a position of attracting further visitors and tourists given their greater visibility, their capability to differentiate on the tourism market and the increase of their symbolic value. As a consequence, the sites which won’t receive the superior quality mark will signal a relative inferior quality and, probably, they will attract a lower number of tourists. However, as we will see in the next section, in the medium and long term they will be not damaged because they will receive additional resources generated by the earnings collected in the superstars heritage sites. Only if the procedure could be thought as benefiting all the sites, it will have some probability of success. The challenge for implementing this two marks system stays in the fact that the increase in tourist visitors to the superior quality heritage sites will be able to compensate the potential losses in tourist revenues suffered by the sites that continue to hold the basic UNESCO mark. In this case, there is a strong analogy between this proposal and the system of double quality certification of wines in some countries, namely Italy.

Along with the superior quality marks another strategy for creating new economic values from WHS is to use collective trademarks on artisanal products manufactured within the area where WHS are located. A collective trademark is a signal communicating information about the quality of commodities and services locally produced. In principle, setting up a collective trademark is a way to create individual incentives in quality increases (Santagata, 2006). In fact, the quality requirements imposed by the collective trademark exclude low
quality producers from the use of the mark. The low quality producer has the option to stay outside the collective brand without investing in increasing the product quality. Alternatively, he may invest and be entitled to use the collective mark that brings several benefits: sharing strong unique image of the brand in the national and international market and belonging to a producers’ community endowed with facilitating institutions (chambers of commerce, training institutes, information sharing on international markets characteristics). To realise potential complementarities between the heritage site and the culture based products and services, a possible enhancing strategy is to entitle local producers to juxtapose the collective and community trademark of their products to the Unesco Heritage label. This is not merely a commercial operation because it entails the mobilization of local culture and strengthens the relationship between the local economy and the cultural heritage site.

Beyond this enhancing strategy, there are many other factors which can promote local development and cultural tourism on world heritage sites. On one hand, there are social and economic conditions which are favouring the international tourism towards cultural heritage destinations (the GDP per capita increase in emerging economies, the increase of the global education level, the reduction of transportation costs). On the other hand, entrepreneurial activities by private and public actors in the area of the world heritage site could stimulate the development not only of the site as a tourist destination, but also of handicraft sector and industries producing culture based goods and services.

3.3 A Pigouvian Frame for Fund Raising

If the assignment of quality marks – along with other entrepreneurial initiatives and the evolution of world tourism demand - will enhance the valorisation of world heritage sites and trigger additional resources, the mechanism suggested to collect new funds for re-equilibrating the preservation of sites will be based on earmarked tax mechanism that will feed a common regional fund to be used for supporting conservation and valorisation activities. The new funds do not reduce the previous amount generated by cultural activities because are supposed to be levied on new resources at the margin. In this view re-equilibrium strategies are a positive sum game, in which the funds financing conservation and preservation are drawn from the additional resources generated by these strategies. As a result, this proposal should be easily agreed and sustained by State members because it can be supported by further resources.

The tourism industry and the artisanal production (handicrafts, food and cultural services) are among the major beneficiaries from the existence and valorisation of the UNESCO sites and so it could be fair to tax them for supporting the conservation of cultural heritage (monuments, museums, galleries, artifacts). This makes suitable the introduction of earmarked taxes which are raised and allocated to specific expenditure programs, often through an extra-budgetary fund.

There exist many empirical examples of earmarked taxes in the tourism sector and the tax base varies accordingly. The tax is introduced in order to fund tourism promotion and is usually imposed to accommodation and food services; an example is the “lodging tax” authorized by the State of Florida in 1967, according to which a 4% and 2% tax rate is currently allowed on transient rentals and food services respectively (Culver et al., 2006). Another example of earmarked tourism tax is given by the Mâconnais – Val de Saône Urban Community Area in French; in this case, the tax base is charged on accommodation services and its amount is fixed depending on the class of lodgings, ranging from 1.50 € for accommodations in 4 stars hotels to 0.20 € in 1 or 2 stars camp sites. On the contrary, there are other examples in which the tax base is larger and extended to all tourism-related activities, as in the case of the seasonal tourism tax in South Dakota; in this case, the tax rate is fixed to 1.5% and applied to all the tourism-related activities spacing from lodging establishment to motor vehicle rentals, recreational services, spectator events and visitor attractions.

In our case, the tax base will be provided by two different sources. The first and principal source relies on the increased turnover generated by furthering cultural tourism in the site area (i.e. motivated by cultural heritage) as compared to the preceding period. All the tourist activities (hotel, restaurants, professional guides,
recreation services as festivals and performing arts) located in the area of a World Heritage site are asked to contribute a given share of the total amount. The tax base of a given year could stand from the extra touristic revenues with respect to the average of the three previous years. Technically, this means to use three-years moving average as a base to calculate every year the potential tax base. The tax rate will be decided by the State members of each region according to an agreed amount of conservation investments planned for a given period. In order to make the proposal more suitable to local tax payers, part of the tax revenues collected from each site area will be used locally for valorisation projects, while the other part will feed the regional re-equilibrium fund.

Economic literature analyses earmarked taxes describing their advantages and limits (Buchanan, 1963; Carling, 2007; McCleary, 1991; Wilkinson, 1994). Although this type of taxation is faced with many criticisms, in general we can state that the more specific is the goal and the context for which the tax is applied, the lower is the possibility that tax-related problems, as distortive effects, inefficiency and administrative difficulties, occur. In particular, two conditions seem to be necessary for a successful earmarked tax (Carling, 2007). First, the tax revenues must be used exclusively to fund the service identified as the goal, avoiding the over-funding of it (in other words, the tax revenues have not to be greater than the needs). Second, the tax must be paid by those subjects which will benefit from its revenues. In our case, these two conditions are satisfied. The first because, as already noted, the collected funds are used just for the valorisation and conservation activities located into a World Heritage site, in a context in which subjects and goals are clear and well defined. Moreover, the amount of tax revenues should not be greater than the needs because the tax rate is fixed on the basis of the agreed amount of conservation investments planned for a given period.

The second condition relies on the fact that the tax payers must be the final recipient of the service financed by the tax revenues. As we have already said, the tourism industry and the artisanal production located within the site area are one of the major beneficiaries from the valorisation of the sites; directly, since a part of the tax revenues from this area goes to site preservation activities and, indirectly, since the remaining part feeds the regional re-equilibrium fund which can be used if the site eventually ranks high in the list of needs originated from the Risk Function. The other beneficiaries are the visitors of the site which, as compared to tourism industry and the artisanal production, can benefit from the preservation not only of the UNESCO Heritage site they are visiting, but also of all the other sites in the region. As economic literature noticed (Anderson et al., 2001; Chouinard and Perloff, 2004; Ring, 1999), the earmarked tax can be either paid by the tourism industry (and related activities) or transferred to the visitors, depending on the elasticity of the demand. In other words, if the demand of tourism and related activities is rigid with respect to the price, it is highly possible that the tax will be paid by visitors; on the contrary, if the elasticity of the demand is so high that an increase in the price (normal price plus tax) can cause a decrease in the number of customers, the cost of the tax will burden the tourism and artisanal industry. Anyway, in both cases who pays the tax is a subject benefitting from the goal for which the tax is introduced.

### Regional allocation of funds for re-equilibrium policies

Given the collected amount of each regional fund, and given the sites ranking originated from the Risk Function, it should be possible to allocate resources to the sites that most need conservation and valorisation support. It is necessary to estimate the cost of preserving and conserving each site (through a good management plan). The resources in the fund will first cover the conservation needs of the first site on the ranking. Should other resources from the regional fund remain, these will be invested in restoration projects for the second site on the ranking, and so on.

### A practical example

In order to verify the feasibility of our proposal, it is necessary to estimate how much funds it is possible to raise. To do it, we have taken as an example the South Asia geographical area. We collected the visitors
statistics of each World Heritage site of the area by consulting the Periodic Reports that every six years the States Parties of the Convention have to submit to the World Heritage Centre. Since this information is not available for all the sites, we collected statistics on the annual visitor flow for 41 cultural sites in the period 2000-02, representing the 43% of the 95 cultural sites currently inscribed on the list of the 12 considered countries (Bangladesh, Cambodia, China, India, Indonesia, Iran, Japan, Nepal, Pakistan, Philippines, Sri Lanka, Thailand). On the whole, at the beginning of the millennium, around 82,484,000 persons yearly visited the UNESCO sites located in South Asia; in most cases, this number was constantly increasing over the preceding years. The type of site visited is highly heterogeneous ranging from historic and religious cities like Kyoto, to small heritage sites like shrines and historic monuments. We stated that the earmarked tax should be applied just on the additional revenues obtained by valorisation strategies and the increasing trend of world tourism. According to the World Tourism Organisation, the estimated annual growth rate of tourist arrivals for the South Asia is of 6.2% in the period 1995-2020. Applying the same annual rate of growth to the visitors of this sub-sample of UNESCO sites, we find that in the next decade the additional flow of tourists could be equal to 116,925,727 (an annual mean of 11,692,572.7 additional visitors per-year in the period 2010-2020).

For instance, if the value of the tax revenue is one dollar per additional visitor, more than 10 million dollars per year could be raised from less than half of the sites located in South Asia and the funds would be used both locally and regionally. In comparative terms, the UNESCO World Heritage Fund currently provides at the global level about 4 million USD per year for international assistance to State Parties while, at regional level, the African Heritage Fund (together with the Nordic Heritage Foundation, one of the recently formed UNESCO centres entitled to raise funds) amounts in 2009 to 4.4 million USD. As a result, our proposal may potentially draw a relevant amount of financial resources if compared with the current international assets.

4. Conclusions

In this paper we have suggested a proposal to cope with the disequilibrium affecting World Heritage Sites as to the conditions of their conservation and the resources available for their valorisation.

The proposal is based on a Pigouvian mechanism and is divided in three phases. The first step aims at providing an objective approach to measure the needs and diversity of WHS. The second step presents valorisation strategies to generate new economic resources from cultural tourism. The third one illustrates a tax mechanism based on collecting resources trough an earmarked tax on tourist activities and redistributing these resources at a regional scale. The overall objective is to reduce the differences among World Heritage Sites in terms of their ability to conserve and valorise the local cultural heritage.

Our proposal is a contribution to the growing literature on Unesco World Heritage sites. In addition, it is worth noticing that our proposal may be useful to ground the decision making of the recently formed Unesco Centres aimed at raising funds for the World Heritage conservation.

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