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Tax incentives for cultural heritage conservation

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Abstract

Investment tax credits are increasingly viewed as a privileged way of encouraging private responsibility in cultural heritage conservation. However, an overview of the empirical investigations into the effects of tax credits on investment in cultural heritage reveals that research is only at its beginning, and suggests that further inquiry is necessary in order to offer a sound guide to effective tax policy. Within a conceptual framework that relies on the increasingly shared view of cultural heritage as a capital asset, this chapter discusses the main issues that arise when evaluating the welfare consequences of indirect public support to conservation, and reviews the most frequently encountered tax credit mechanisms for private investment in cultural heritage.

Introduction

According to the Council of Europe (2003), around 65% of cultural heritage sites and buildings in Europe are under a private property rights regime. A similar picture emerges from the rest of the developed world (Pickard, 2009): in the US and Canada, private sector involvement in the conservation of heritage is extensive and pre-dates formal government intervention; in Australia, the majority of historic heritage places on statutory lists of the Federal, State and Territory governments are under private ownership (Australian Government Productivity Commission, 2006).

This widespread property rights structure forcefully raises the issue of the desirability, as well as of the effectiveness, of systems of tax incentives to private owners, with the objective of preserving cultural resources in the wider community interest. In that regard, the Council of Europe (2003) emphatically asserts that “where necessary that owner should be given whatever support and encouragement the wider community might be able to offer,” and the US National Historic Preservation Act of 1966 declares that “it shall be the policy of the Federal Government to contribute to the preservation of nonfederally owned prehistoric and historic resources and give maximum encouragement to organizations and individuals undertaking preservation by private means.”

This chapter aims at evaluating the soundness of the above arguments within a conceptual framework that relies on the increasingly shared interpretation of cultural heritage as a capital asset – akin to the concepts of physical, human, and natural capital employed in economic analysis (Throsby, 1999) – that is inherited from the previous generations and should, upon proper care, maintenance and investment, be preserved for the next generations living on earth (Peacock and Rizzo, 2008).

The recent literature in this area suggests that the key issues in the design of tax incentives to private investment in cultural heritage consist in: a) evaluating the social returns from private investment in cultural heritage preservation; b) identifying the potential causes of under-investment that might jeopardize the transmission of cultural heritage to the generations to come; c) realizing that investment tax credits for maintenance or restoration of heritage require resources, and resources have opportunity costs (Rizzo and Throsby, 2006).

Notwithstanding the conceptual difficulty of establishing the optimal long run growth path of cultural heritage and the technical complexity in measuring the overall burden of a tax incentive scheme (in terms of foregone tax revenues, allocation distortions, and compliance and administration costs), the issue under heading a) above is comprehensibly the most controversial in

the cultural heritage domain. However, the widespread belief that quantifying the social returns from investment in cultural heritage preservation “amounts to calculating the incalculable, or pricing the priceless” (Mason, 2005) seems to result from a misunderstanding of the cultural value (having to do with society’s preferences) versus the economic value (having to do with society’s constraints on scarce resources) of heritage, and is unlikely to constitute any useful guide for sound and successful tax policy.

After outlining the conceptual framework for the analysis of cultural heritage and for the investigation of the causes of underinvestment that call for fiscal incentives, the chapter turns to a discussion of the outcomes that can be expected to result from a number of investment tax credit mechanisms and reviews some significant experiences of investment tax credits for private cultural heritage conservation. Finally, the chapter concludes by pointing to the need for further empirical research into the effects of tax credits on private investment in cultural heritage.

Cultural heritage as capital

Cultural heritage can usefully be interpreted as a capital asset granting a flow of benefits over time, including private benefits accruing to well-defined current and future generations of individuals, as well as “public” benefits to wider (possibly universal) stakeholders (Rizzo and Throsby, 2006). In addition, and similarly to physical, human and natural capital, cultural heritage is subject to depreciation and requires adequate investment in order to be preserved for future users.

This perspective is becoming increasingly popular in the cultural economics literature, where a number of growth models have been developed that include cultural heritage along with traditional capital (Rizzo and Throsby, 2006; Bucci and Segre, 2009; Bostedt and Lundgren, 2010; Roseta-Palma et al. 2010). In particular, Rizzo and Throsby (2006) argue that, similarly to the analysis of natural capital in some recent economic theory (Pearce and Atkinson, 1993), regarding cultural

heritage as a capital asset requires consideration of sustainability aspects and calls for a long-term dynamic rule for cultural capital accumulation.

The basic analytical framework that is employed in the recent literature shares the standard features of endogenous growth models (Barro and Sala-i-Martin, 2004), and is extended to account for cultural heritage: a stylized endogenous growth model accounting for cultural capital is reported in the Appendix. In those growth models, cultural heritage is treated as an additional form of “capital” in the economy, and is allowed to play a valuable economic role (say for accommodation or tourism) in addition to its cultural value.¹ Such two-sided role is best interpreted as cultural heritage having an economic value reflected in the community’s conventional resource constraint, and a cultural value reflected in the social welfare function. In fact, what makes cultural heritage different from other forms of capital that might have an impact on individuals’ well-being (say, personal or family) is that cultural capital is shared by a large number (allegedly a majority) of individuals and provides them with a sense of identity and connection to the past.

Since the distinguishing feature of cultural heritage relative to ordinary physical capital is that it directly influences society’s welfare, irrespective of its contribution to economic growth, the intertemporal social welfare optimization process – by which the current generation makes conservation decisions that will also have an impact on future generations’ wellbeing – must take into account the fact that any increase (impoverishment) in cultural heritage also brings a direct gain (loss) in the welfare function. The crucial policy question, then, is whether a “market” mechanism for the allocation of resources to investment in conventional capital versus cultural capital is able to attain the optimal cultural heritage accumulation/preservation path spontaneously. The (generally negative) answer to this question turns out to depend on the collective good characteristics of heritage and on the property rights regime it is subject to. Suppose that, from the consumption side, cultural heritage has collective good characteristics, in the sense that the utility of each individual depends on overall society’s cultural heritage. From the supply side, assume that each component of

society owns a tiny fraction of cultural capital, say $1/N$, where N is the population size of the community. In those circumstances, while each individual cares for cultural heritage, (s)he has to bear the full cost of investment to preserve it, while being at the same time able to freely enjoy the cultural heritage owned by the rest of society. This is an instance where free-riding can emerge and lead cultural heritage to eventually disappear in the absence of government intervention. A similar argument holds if cultural heritage is in few private hands: private owners tend to ignore the social spill-overs of their investment in cultural heritage preservation, leading to a sub-optimal level of investment and justifying government intervention.²

Private ownership of cultural heritage: tax policy and investment

The failure of the market allocation mechanism in the presence of social spill-overs from privately owned cultural heritage provides the basic justification for government intervention. Of course, in order to correct the inefficiency of the private mechanism and identify the socially optimal level of cultural heritage, knowledge of its contribution to society's welfare is required.³ However, public support of investment in maintenance and restoration of cultural heritage does not come without costs: first, the resources allocated to cultural heritage could alternatively be employed elsewhere, so that any tax policy decision ought to be based on a rigorous analysis of its social benefits and costs. As a result, the first economic issue to address concerns the effectiveness of fiscal incentives in increasing the cultural capital stock. In general, a tax incentive – in the form, say, of an investment tax credit (ITC) – is a cost-effective way to foster the accumulation of capital if the (total) cost of the tax credit program is less than the increased volume of investment generated by the tax credit. As correctly noted by the Australian Government Productivity Commission (2006): “The existence of wider community benefits – and the possibility that private owners may not conserve some places – does not, of itself, establish a role for government. For government

intervention to be warranted, the extra benefits to the community need to be greater than the added costs of that intervention.”

It is interesting to notice that the vast business fixed investment literature has in fact shown that tax incentives are important components of the net return to investment, and that the long-term responses of capital accumulation to ITCs can be large (Hassett and Hubbard, 2002). However, that literature also points to the fact that tax incentives can cause inter-asset distortions (Auerbach, 1989b), that they might not work due to investors’ financing constraints (Fazzari et al., 1988), or that they might simply be reflected in higher interest rates or higher prices of capital goods when the supply of the latter is fixed or highly inelastic in the short run (Hassett and Hubbard, 1998). Moreover, their effectiveness depends on whether incentives are permanent or temporary in nature (Auerbach, 1989a), and on whether investors are uncertain about their duration (Pindyck, 1988; Hassett and Metcalf, 1999).

Interestingly, the literature on ITCs for investment in research and development (R&D) bears significant similarities too with the cultural heritage issue. Scholars in the R&D literature have long investigated the elasticity of R&D investment to its price, and shown the conditions under which an investment tax credit leads to a net welfare gain.⁴ The main suggestion arising from that literature is that the subsidized input must generate external effects or social spill-overs in excess of the efficiency losses associated with the financing of the tax credit program in order to warrant a subsidy, and that a proper general equilibrium analysis is best suited to answer the question empirically (Zee et al., 2002).

As shown in the above section, one potential source of inefficiently low investment in cultural heritage conservation arises from the failure of private heritage owners to account for the welfare benefits of heritage accruing to society at large, meaning that tax policy should aim at bridging the gap between the private and social rate of return. To make things worse, that gap might be even widened by the distortions generated by taxation itself: improvement or maintenance works might

inflate the property value and therefore raise the owner's tax burden (in terms of estate tax or capital gains tax), further discouraging private owners' investment. In the presence of decreasing marginal returns from cultural heritage and a fixed interest rate, taxation of the returns from cultural capital lowers the optimal investment in heritage conservation and development. The higher is the tax rate, the lower is the profitability of investment in cultural heritage, making the private market outcome even further away from the social optimum.

Consequently, the introduction of an investment tax credit – where documented expenditures on maintenance and preservation can be deducted from the tax base – has the effect of reducing the cost of the investment and moving closer to the optimal level. In a way, the ITC would in that case sort of restore an efficient level of investment from the inefficiently low one caused by the pre-existing fiscal distortions (Hassett and Hubbard, 2002). On the other hand, since raising revenues to fund the tax credit is likely to generate allocation distortions elsewhere, the so-called excess burden of taxation should be weighed against the welfare improvement from increased investment. In addition, tax credit programs typically involve technical assessments, documentation and an often complex process of determination of which expenditures qualify, so that administration and compliance costs can be a non-negligible share of the credits claimed.⁵

In order to conclude whether a tax credit program is welfare-enhancing, the key question to address is therefore whether the lower “price” of investment actually stimulates it so much as to compensate for its costs, or it simply crowds out private efforts, in the sense of leading to little or no overall increase in private investment (Payne, 2009). In particular, the tax incentive achieves the so-called treasury efficiency if the absolute value of the price elasticity of investment is greater than one, meaning that the cost of the investment borne by the resource owner increases as a result of the tax credit (Andreoni, 2006; Schuster, 2006). Whether this is the case or not is in the end an empirical issue.

Tax incentives for cultural heritage conservation in practice

In general, fiscal incentives for protection, care and maintenance of cultural heritage constitute a “middle path” (Council of Europe, 2003) between the two extreme arrangements of either empowering national governments or other public authorities to coercively fulfil those needs, or leaving it to private owners to take responsibility for conservation. It is increasingly clear to policymakers that neither of those two extreme options is fully satisfactory: on the one hand, the size and richness of historical heritage in many countries makes it particularly difficult for governments in periods of fiscal retrenchment to directly provide for cultural heritage preservation (Schuster, 2006); on the other hand, the “public” nature of cultural heritage calls for indirect support from the wider community. In addition, as argued by Throsby (2006b): “For some owners the costs imposed by regulatory controls or simply by the physical tasks of restoration and repair are excessively burdensome in relation to the individual benefits the heritage bestows on them. In these circumstances – where in effect the benefits of preservation are substantially public rather than private – it is appropriate that public assistance should be provided if the size of the public benefit warrants it.”

The indirect public support of private investment in cultural heritage is well grounded in the developed world. In Europe, the first formal guidelines for governments to provide tax relief to encourage protection of cultural heritage emerged with the Council of Europe Resolution (66)20 of the 29 March 1966, and were later reinforced at the Congress on European Architectural Heritage (Amsterdam, 21-25 October 1975): the ensuing Amsterdam Declaration included a further description of financial measures officially included in Resolution (76)28 (adopted by the Committee of Ministers on 14 April 1976) concerning the adaptation of laws and regulations to the requirements. Finally, the need to implement financial support for conservation was made a requirement of signatory countries to the Convention for the Protection of the Architectural Heritage, the so-called Granada Convention (Granada, 3-4 October 1985). More recently,

guidelines on financial support measures for the conservation of the architectural heritage were summarized in Recommendation (91)6 adopted by the Committee of Ministers on 9 September 1991.

In the US, public support for cultural heritage conservation takes place both at the federal and at the state level. The former operates via the Advisory Council on Historic Preservation (ACHP) - promoting, among other programs, the Preserve America Initiative, - the Department of Housing and Urban Development (mostly through the Community Development Block Grant), and the federally regulated Preservation Tax Incentives for Historic Buildings jointly managed by the Internal Revenue Service, the National Park Service and the State Offices for Historic Preservation. Moreover, most US states implement own systems of tax credits for the preservation of historic properties, either as a piggyback on the federal credit, or as a specific support for projects not eligible for federal credit (Zhong and Lipsman, 2009; Telesetsky, 2010). Similarly, virtually all other countries in the developed world have formal tax incentive programs for cultural heritage conservation that are briefly discussed in the following.⁶

Investment tax credits

As argued above, the tax structure can have important consequences on the extent to which owners of resources of cultural value find it profitable to invest in maintenance and restoration. Reduced value added tax (VAT) rates on construction and repair works on historic buildings, monuments and sites, the possibility for income taxpayers to offset conservation expenses against their income tax liabilities, as well as favourable treatment for inheritance, wealth and capital gains taxes, can have a non-negligible impact on private owners' investment strategies.⁷

Beneficiaries of fiscal incentives can include households, firms, non-profit private organizations and foundations.⁸ Fiscal incentives favouring owners' investment come in different forms,

depending on their degree of : a) generality, in terms of eligibility criteria to qualify for help (e.g., fiscal incentives can apply only to certain types of owners, to a restricted set of cultural goods or to a well-defined area); b) flexibility, meaning that they can either be mechanically determined by the tax code or be distinctly discussed and arranged depending on the conservation activity to be partly funded with public money (say, a specific intervention to prevent demolition of a notable building); c) conditionality, in the sense that the tax relief can be granted only under particular circumstances (e.g., the owner granting public access, committing to a future flow of proper maintenance investments, or to eventual legacy to a public body).

As far as income tax is concerned, there are two forms of incentives: 1) tax deductions, where the owner may deduct specified expenditures on conservation or restoration from income, reducing effective taxable income; 2) tax credits, where the owner may deduct a fixed percentage of those expenditures from income tax payable. In tax deductions, the benefit received by the owner for heritage conservation activity is a direct result of his marginal income tax rate, while, for a tax credit, it is in the same percentage irrespective of income. Most European countries employ an income tax cost-deduction system.⁹ The typical arrangement refers to built heritage and relies on a list or classification of buildings that have an historic or cultural interest, whose owners can claim, under certain conditions, the deduction of costs for maintenance, restoration and repair, while improvement works are usually not eligible. In most countries, expenditures are deductible up to a limit, and depending on whether the building is owner-occupied, rented, and is open or not to the public.¹⁰

Some countries employ instead the tax credit system. In Spain, owners of historic buildings are allowed a 15% tax credit of any expenditure incurred on conservation, repair and restoration works, provided that the building is open to the public and the sum incurred has not already been deducted from property income for tax purposes. In Italy, owners of (non-rented) protected buildings have a 19% tax credit for certified necessary expenditures on repair and maintenance. The tax credit

system is also employed at the federal level in the USA via the “Federal Historic Rehabilitation Income Tax Credit,” according to which owners’ private investment qualifies for a 20% tax credit in case of rehabilitation of certified historic structures, and a 10% tax credit for the rehabilitation of non-historic, non-residential buildings built before 1936.¹¹

As for property taxes, they are typically levied on a recurrent basis at the local level either on the market (rental or capital) value, or the cadastral value of a property. Various forms of temporary or permanent tax relief for historical properties are aimed at alleviating the high tax burden increases that can be a result of heritage conservation, where conservation work leads to an improvement in the value of property and so may cause an increase in taxation. In countries where market value is used as the property tax base and is assessed frequently, property taxes might represent a serious disincentive to conservation work on heritage structures. In most European countries – including Denmark, Germany, Italy, Spain and the UK – historical properties are either exempt altogether or very lightly burdened by local property taxes, irrespective of investment in conservation (Pickard, 2009).

On the other hand, more targeted property tax incentives have been designed at the state, province and municipality level in the US to encourage preservation or rehabilitation of historic sites and buildings, namely current use assessment and assessment freeze.

While traditionally focused on open space resources (undeveloped, agricultural or forested land), current use assessment as opposed to alternative, best economic use is increasingly available for use by historic sites, and it is designed to allow sites of public value (be it environmental, cultural, or historic) to be taxed on a significantly lower property value than the current real estate market valuation. Assessment at a percentage of full market value should encourage private owners to keep their properties in current use and free from economic development that might jeopardize their nature and public value.

Property tax assessment freeze is meant instead to leave the assessed value of historic residences unchanged for a number of years even in the presence of rehabilitation works raising the market value of the property significantly. Typically, assessment freeze for historic rehabilitation is conditional on owner-occupied housing, substantial rehabilitation budget, and listing of the building or structure on a national, state or community register. Most US states offer private owners some form of assessment freeze for rehabilitation of historic properties, and require rehabilitation works to follow public rules and standards aimed at preserving the defining characteristics of the building and safeguarding the features of its site and environment (Mirel, 2006).

As for the value added tax (VAT), a reduced rate or exemption on the sale of goods (such as building materials) and services is widely believed to provide a spur to the upkeep of heritage properties (Council of Europe, 2003). Within Europe, though, there are very few examples of VAT relief. In fact, the opportunity to reduce VAT rates specifically for cultural heritage is limited by the tax harmonization policy of the European Union, though some countries apply lower rates of VAT to protected buildings used as homes. However, it is rare for VAT relief to be given directly to architectural heritage property. Several countries (including Belgium, France, Ireland and Italy) apply lower VAT rates on dwelling renovation and repair works, but those rates tend to apply also to new constructions. On the other hand, Spain and the UK represent exceptions. In Spain, works to historic buildings are charged at a lower VAT rate of 7%, while the UK grants full VAT exemptions to alterations and improvements to charitably owned historic buildings.

Giving to cultural heritage

In principle, charitable giving might play an important role in the conservation of cultural heritage. As alternative sources of funding to market revenues and direct public support, private donors might have more freedom from bureaucratic preservation criteria and management mechanisms,

and be able to exercise their influence both during the ‘preservation’ phase and, more crucially, during the earlier ‘saving’ phase (such as preventing heritage buildings and monuments to be demolished: Cheng and Ma, 2009; Henderson, 2011).

In fact, philanthropic engagement in the support of heritage is widely encouraged across the globe by means of explicit tax incentive schemes. In most instances, tax incentives for private giving from private individuals or firms to non-governmental organizations – heritage trusts, non-profit museums, foundations, associations, and limited liability companies – or public bodies belong to either of the following two general types.

In the first type, a donor has a tax relief whose size can depend on a mix of donor/recipient characteristics, including the nature of the donor (corporate, institutional, individual) and the beneficiary (public body, non-profit organization, charitable trust, heritage foundation), the time-series structure of donor commitment (with long-term regular donors becoming eligible for more generous tax relief schemes) and the material way by which the donation takes place (e.g., monetary transfer or gifts in nature).

Typically, charitable giving to non-profit organizations for conservation of cultural heritage – be it in the form of money or of heritage items – qualifies for tax relief for the donor. In countries where non-profit museums, archives and galleries play a central role in conveying cultural heritage to the public – whether they display moveable heritage items such as paintings, sculptures, manuscripts and artifacts, or are built around particular heritage buildings or sites – charitable contributions to those non-profit institutions are deductible under the income tax rules for individuals and corporations (Feldstein, 1991; Throsby, 2006a), leading in turn donation-dependent museums to exert substantial fund-raising effort – and devoting a great deal of resources – to attract donors (Frey and Meier, 2006). In the US, cash donations and transfer of property to registered non-profit charitable heritage trusts or foundations entitle donors both to federal tax relief and income tax deductions that vary from state to state, and businesses in particular are encouraged by specific tax credits to own, use

and rehabilitate historic properties. Canada has a number of heritage organizations, foundations and charitable trusts both at the federal (Heritage Canada Foundation) and at the provincial (such as the Ontario Heritage Trust) level that promote heritage conservation, foster community involvement in heritage preservation activities, and raise revenues (donations from private firms and individuals, who can reclaim income tax on the amount given) to support heritage activities. As charitable trusts, those organizations benefit themselves from tax relief on all gifts of money and property (Hayhoe, 2010).

Moreover, in common law countries donations of preservation or conservation easements to non-profit organizations or public bodies can qualify for tax relief in some circumstances. Preservation easement donations – or restrictive covenants – can be assimilated to charitable giving and allow a sometimes considerable abatement of the assessed value of the historic property if owners renounce certain rights on the property, such as alteration, demolition, subdivision or development for economic activity, and grant public access to the site or property, while maintaining private ownership. In fact, the property owner only transfers the specific set of rights represented by the easement to the easement holding private or public organization. In some instances, the easement agreement obliges the owner to maintain or rehabilitate the property according to the terms of the agreement, or to contribute an easement endowment. While some easements are for a limited number of years, most preservation easements perpetually bind future owners to their provisions. In addition to federal tax incentives, several states and local jurisdictions in the US states grant substantial tax relief against income and property taxes for the donation of conservation and preservation easements (Pickard, 2009).

In Europe, formal guidelines and recommendations for governments to provide tax incentives to encourage donations from private individuals and firms for the protection of cultural heritage emerged with the Council of Europe Recommendation (91)6 – adopted by the Committee of Ministers on 9 September 1991, – part IV (Specific measures to promote sponsorship). The

Recommendation stressed in particular the need to elaborate an appropriate new legal framework for the establishment of specific foundations for the conservation of cultural heritage and the associations of diverse partners, and to design an adequate system of tax incentives to promote sponsorship.

In most European countries, charitable giving for the preservation of heritage – whether in the form of personal donations or commercial sponsorship – is supported by a variety of tax measures, with some incentive schemes specifically requiring that donations be directed to specialist organizations – trusts, foundations, associations – for heritage conservation (Klamer et al., 2006; Pickard, 2009). In particular, gifts of enduring property (by bequest or inheritance) can be free of tax if directed to non-governmental non-profit charities acquiring those properties and managing them in the public interest – i.e., a sort of private institutional ownership with the provision of inalienability – such as the United Kingdom National Trust and the National Trust of Scotland (Council of Europe, 2005). In Ireland, relief is available both as an income tax-based incentive for money donations to eligible charities, and in the form of a tax credit equivalent to the value of the heritage items (books, estate records, manuscripts, paintings, or archaeological items) donated to a limited number of approved bodies, which may subsequently be set against past, current or future income tax, corporation tax, capital gains tax, gift tax and inheritance tax.

The second form of indirect public aid to stimulate donations to heritage conservation is a mechanism of matching grants to beneficiaries of private giving, where the transfer is related to the volume of donations, therefore explicitly “crowding in” more public funds as donations increase. The suggestion of conditioning public transfers to prior collection of private funds was in fact explicitly envisaged in the 1991 Council of Europe recommendation, and has long existed in the UK charitable giving legislation through the Gift Aid and Payroll Giving mechanisms (Wright, 2002).

The creation, innovation and restructuring of tax incentives for charitable giving has in fact been the subject of an enormous amount of research (Schuster, 2006). Most contributions in this area have been concerned with the price elasticity of giving, where price is to be intended as the tax price of giving: if a donation can be used to reduce the tax base of the donor, and the donor's marginal tax rate is τ , the "price" of the donation is $1-\tau$ (Schuster, 2006). Alternatively, if the government gives a supplementary matching grant to the beneficiary, say in proportion γ of the sum donated, then the "price" for the donor is $1/(1+\gamma)$.¹² Similarly to the ITC schemes discussed above, the size of the price elasticity of giving – i.e., the percent increase in donations for a one percent decrease in the price - is crucial for evaluating the treasury efficiency of the tax incentive scheme: if donations are price-elastic (that is if the absolute value of the elasticity is greater than 1), then the increase in donations is larger than the foregone tax revenues.

While the empirical evidence on the effects of the tax system on charitable giving is far from conclusive (Andreoni, 2006; Payne, 2009) and some authors stress that the public nature of cultural heritage makes voluntary giving unlikely to support the appropriate level of heritage conservation activities due to free-rider temptations (Feldstein, 1991), the tax codes of virtually all developed countries allow deduction of charitable giving to widely interpreted "cultural projects" from income tax liabilities. According to Schuster (2006): "this proliferation is more likely due to the influence of politics and advocacy than to the influence of reasoned analysis," leading to an increased concern among academics and policymakers about the "misplaced emphasis" on the effects of extrinsic (monetary) motivations on charitable giving to cultural heritage (Bertacchini et al., 2011). In spite of the widespread use of generous tax incentive schemes and of overall charitable giving being non-negligible in a number of countries, in no instance is the fraction of it going to the cultural area large (generally below 5%): there seems to be little appeal of cultural heritage for attracting donations, or at least donations seem to be fairly inelastic to their tax price. This might be due to the fact that private donations respond to a different set of motivations – information, awareness and

accountability – that are only weakly affected by monetary tax incentives (Andreoni, 2006; Benabou and Tirole, 2006).

Conclusions

In the light of the growing recognition of the importance of cultural heritage preservation, and given that a large fraction of it is in private hands, the issue of the desirability and effectiveness of indirect public support through tax incentives is clearly a crucial one. However, the mounting scepticism towards the ability of tax incentives to stimulate private giving to cultural heritage conservation has recently shifted the attention of academics and policy-makers to the design of tax incentive schemes explicitly directed at private owners of cultural heritage.

When evaluating the welfare consequences of an ITC for cultural heritage preservation, it is necessary to carefully estimate the direct and indirect benefits to be gained from it, as well as the costs in terms of foregone tax revenues, investment allocation distortions, and resources required to administer and comply with the often complex tax incentive programs. As for the benefits, while the direct ones include the conservation, restoration and rehabilitation of heritage (long-term preservation), the indirect benefits might in fact be tangible in the short run, including employment, tax revenues gained through conservation work, tourism, improvement of facilities and enhancement of the environment to the benefit of society as a whole. On the other hand, since raising revenues to fund the tax credit is likely to generate distortions elsewhere, the excess burden generated in other sectors of the economy should be weighed against the welfare improvement from increased investment.

In terms of actual policy targeting, a properly designed tax incentive scheme should promote the heritage conservation projects with the largest gap between the social and private return; however, private owners will tend instead to use the tax incentive to fund the investments with the highest

private rates of return. On the other hand, while in principle public decision-makers should target the investment projects with the highest social spill-over gap, asymmetric information and opportunistic behaviour might make selective tax incentive mechanisms work less well than general ones embedded in the tax code.

Based on the belief that “too much cannot be expected of the private sector without some form of incentive” (Council of Europe, 2003), investment tax credits are increasingly viewed as a privileged way of encouraging private responsibility in restoration, preservation and promotion of cultural heritage for the current and future generations. However, the empirical research into the effects of tax credits on investment in the broad and various forms cultural heritage is only at its beginning. Further investigation into this area seems necessary in order to offer a sound guide to effective tax policy.

Appendix: A stylized endogenous growth model with cultural capital

Say that aggregate production of a homogeneous rival good in a closed economy (Y) requires two inputs, namely capital – broadly interpreted as encompassing physical as well as human capital (K) – and cultural heritage (H), and production takes place via a Cobb-Douglas production function:

$$Y = AK^\alpha H^{1-\alpha} \quad (1)$$

with $0 < \alpha < 1$. Equation (1) broadly captures the idea that, apart from its cultural value, heritage might play a valuable economic role (say for accommodation or tourism), depending on the size of parameter α .

The economy has a constraint on resources requiring output to be employed for consumption (C) or gross investment in capital (I_K) and heritage (I_H) respectively:

$$Y = AK^\alpha H^{1-\alpha} = C + I_K + I_H \quad (2)$$

If capital and heritage are assumed to depreciate at the same rate $\delta > 0$, the respective changes of K and H over time are given by:

$$dK/dt = I_K - \delta K \quad (3)$$

$$dH/dt = I_H - \delta H \quad (4)$$

On the other hand, a potential conflict in the use of cultural resources can be incorporated in the model by following a similar reasoning as Bovenberg and Smulders (1996) and England (2000) do with respect to natural capital. In particular, equation (4) describing the growth path of cultural heritage can be written as: $dH/dt = (I_H - \delta H) - \pi(I_K - \delta K)$, where $\pi > 0$ measures the detrimental impact of new net investment in physical capital on cultural heritage, and captures the trade-off between cultural heritage conservation and investment in physical capital.

As in Bostedt and Lundgren (2010), Roseta-Palma et al., (2010), and, in a slightly different context, Bovenberg and Smulders (1996), the preferences of society can be represented by the following intertemporal welfare function W defined in continuous time t over C and H :

$$W = \int e^{-\lambda t} U(C(t), H(t)) dt \quad (5)$$

where λ is the intertemporal discount factor, and the U function exhibits the usual quasi-concavity property. The fact that, in addition to consumption, H is an argument of the utility function, with $\partial U/\partial H > 0$ and $\partial^2 U/\partial H^2 < 0$, implies that society cares about the level of cultural heritage H , irrespective of the economic contribution cultural heritage can give to production in equation (1).

The U function can be given a specific functional form (Bovenberg and Smulders, 1996):

$$U(C, H) = \mu^{-1} \cdot (C \cdot H^\varphi)^\mu \quad (6)$$

where: $\mu \equiv (\sigma - 1)/\sigma$; σ is a parameter measuring the (constant) elasticity of intertemporal substitution and is assumed to be greater than -1; φ is a parameter representing the relative weight of cultural heritage in the representative utility function, with: $(\partial U/\partial H)H/(\partial U/\partial C)C = \varphi$ (constant). The above formulation allows us to see as special cases the cynical assertion that welfare is not affected by cultural heritage ($\varphi = 0$) as well as the demagogic rhetoric that cultural heritage is invaluable to mankind ($\varphi \rightarrow \infty$).

With $\varphi = 0$, the utility function collapses to the standard concave function of consumption. Implementation of standard dynamic optimization techniques (Barro and Sala-i-Martin, 2004) yields that the net marginal product of capital (left hand side of (7)) needs at an optimum to equal the net marginal product of heritage (right hand side of (7)):

$$A\alpha \cdot (K/H)^{-(1-\alpha)} - \delta = A(1-\alpha) \cdot (K/H)^\alpha - \delta \quad (7)$$

thus implying that the ratio of capital to heritage equals the constant:

$$K/H = \alpha/(1-\alpha) \quad (8)$$

The higher α , the lower the contribution of cultural heritage to production, and the lower the equilibrium level of cultural heritage relative to physical and human capital. However, as long as α stays constant, this economy shows no impoverishment of cultural heritage over time: the assumption of private property of all forms of capital (K and H) guarantees in this case an optimal path of capital accumulation, with capital owners appropriating the net returns from it. This simple model of course does not call for any government subsidy to investment, either in K or in H. A similar, efficient result is to be expected if, instead of being privately owned, cultural heritage is subject to a common property regime as long as a number of basic conditions in terms of access, information and enforcing are fulfilled (Ostrom, 2009), meaning that the community owning the property right on the cultural asset can be expected to efficiently manage it.

Consider now the more interesting and relevant case of $\varphi > 0$, meaning that cultural heritage directly enters society's welfare function. Now the intertemporal welfare optimization process must take into account the fact that, besides the contribution to production, any additional unit of cultural heritage also brings a gain in the welfare function. As a result, equations (7) and (8) need to be rewritten as:

$$A\alpha \cdot (K/H)^{-(1-\alpha)} - \delta = A(1-\alpha) \cdot (K/H)^\alpha - \delta + \varphi(C/K) \quad (9)$$

$$K/H = g(\alpha, \delta, A, \varphi) < \alpha/(1-\alpha) \quad (10)$$

The welfare contribution of cultural heritage is captured by the last term in equation (9), that is obtained by the fact that the marginal utility of consumption equals in equilibrium the shadow price of cultural heritage, and that the utility function exhibits the property that the relative weight of cultural amenities in welfare equals the constant φ . Most importantly, equations (9) and (10) show that the “amenity” value of cultural heritage raises society's optimal level of H relative to K.

Underinvestment in cultural heritage preservation can arise in this model from two distinct sources. First, due to the public good characteristics of cultural heritage, private owners appropriate only a

portion of the flow of benefits accruing to society, and tend to ignore the social impact of preservation, leading to an inefficiently low level of investment. Second, in the presence of decreasing marginal returns from cultural heritage – as would be the case with a constant returns to scale technology in equation (1) – and a fixed interest rate, taxation of the returns from cultural capital lowers the optimal investment in heritage conservation and development. Saying that gross returns from cultural heritage are taxed at the rate τ , the net rate of return to cultural heritage owners while accounting for capital depreciation must equal the interest rate:

$$(1-\tau)A(1-\alpha)\cdot(K/H)^\alpha - \delta = r \quad (11)$$

As a result, the higher is τ , the lower is the profitability of investment in cultural heritage, making the private market outcome even further away from the social optimum in equation (10). The above considerations suggest that direct or indirect fiscal support might be needed to restore the socially optimum level of conservation investment.

References

Andreoni, J. (2006), 'Philanthropy', in S-C. Kolm and J.M. Ythier (eds.), *Handbook of the Economics of Giving, Altruism and Reciprocity*, Volume 2, Amsterdam: Elsevier, pp. 1201-1269.

Auerbach, A.J. (1989a), 'Tax reform and adjustment costs: the impact on investment and market value', *International Economic Review*, **30**, 939-962.

Auerbach, A.J. (1989b), 'The deadweight loss from 'non-neutral' capital income taxation', *Journal of Public Economics*, **40**, 1-36.

Australian Government Productivity Commission (2006), *Conservation of Australia's Historic Heritage Places*, Report No. 37, Canberra.

Barro, R. and X. Sala-i-Martin (2004), *Economic Growth*, Cambridge: MIT Press.

Benabou, R. and J. Tirole (2006), 'Incentives and prosocial behaviour', *American Economic Review*, **96**, 1652-1678.

Bertacchini, E., Santagata, W. and G. Signorello (2011) 'Individual Giving to Support Cultural Heritage', *International Journal of Arts Management*, forthcoming.

Bostedt, G. and T. Lundgren (2010), 'Accounting for cultural heritage: A theoretical and empirical exploration with focus on Swedish reindeer husbandry', *Ecological Economics*, **69**, 651-657.

Bovenberg, L. and S. Smulders (1995), 'Environmental quality and pollution-augmenting technological change in a two-sector endogenous growth model', *Journal of Public Economics*, **57**, 369-391.

Bovenberg, L. and S. Smulders (1996), 'Transitional impacts of environmental policy in an endogenous growth model', *International Economic Review*, **37**, 861-893.

Bucci, A. and G. Segre (2009), 'Human and cultural capital complementarities and externalities in economic growth', Dipartimento di Scienze Economiche, Aziendali e Statistiche, Università di Milano, Working Paper No. 5.

Cheng, E. and S. Ma (2009), 'Heritage conservation through private donation: The case of Dragon garden in Hong Kong', *International Journal of Heritage Studies*, **15**, 511-528.

Council of Europe (2003), *Tax Incentives for Cultural Heritage Conservation*, Council of Europe Parliamentary Assembly: Committee on Culture, Science and Education, Report 9913.

Council of Europe (2005), *The Private Management of Cultural Property*, Council of Europe Parliamentary Assembly: Committee on Culture, Science and Education, Report 10731.

England, R. (2000), 'Natural capital and the theory of economic growth', *Ecological Economics*, **34**, 425-431.

Fazzari, S., Hubbard, R. and B. Petersen (1988), 'Financing constraints and corporate investment', *Brookings Papers on Economic Activity*, **1**, 141-195.

Feldstein, M. (1991), 'Introduction to: The Economics of Art Museums', in M. Feldstein (ed.), *The Economics of Art Museums*, Chicago: University of Chicago Press, pp. 1-12.

Finocchiaro Castro, M., Guccio, C. and I. Rizzo (2011), 'Public intervention on heritage conservation and determinants of heritage authorities' performance: a semi-parametric analysis', *International Tax and Public Finance*, **18**, 1-16.

Frey, B. and S. Meier (2006), 'The economics of museums', in V. Ginsburgh and D. Throsby (eds.), *Handbook of the Economics of Art and Culture*, Volume 1, Amsterdam: Elsevier, pp. 1017-1047.

Hall, B. and J. van Reenen (2000), 'How effective are fiscal incentives for R&D? A review of the evidence', *Research Policy*, **29**, 449-469.

Hassett, K. and R. Hubbard (1998), 'Are investment incentives blunted by changes in the price of capital goods?', *International Finance*, **1**, 103-126.

Hassett, K. and R. Hubbard (2002) 'Tax policy and business investment', in A. Auerbach and M. Feldstein (eds.), *Handbook of Public Economics*, Volume 3, Amsterdam: Elsevier, pp. 1293-1343.

Hassett, K. and G. Metcalf (1999), 'Investment with uncertain tax policy: does random tax policy discourage investment?', *Economic Journal*, **109**, 372-393.

Hayhoe, R. (2010) 'A sketch of the income tax treatment of endowments', *The Philanthropist*, **23**, 93-96.

Henderson, J. (2011), 'Understanding and using built heritage: Singapore's national monuments and conservation areas', *International Journal of Heritage Studies*, **17**, 46-61.

Klamer, A., Petrova, L. and A. Mignosa (2006), *Financing the Arts and Culture in the European Union*, Brussels: European Parliament, Committee on Culture and Education.

Mason, R. (2005), *Economics and Historic Preservation: A Guide and Review of the Literature*, Washington: The Brookings Institution, Metropolitan Policy Program.

May, P., Veiga Neto, F., Denardin, V. and W. Loureiro (2002), 'Using fiscal instruments to encourage conservation: municipal responses to the "ecological" value-added tax in Paraná and Minas Gerais, Brazil', in S. Pagiola, J. Bishop and N. Landell-Mills (eds.), *Selling Forest Environmental Services: Market-based Mechanisms for Conservation and Development*, London: Earthscan, pp. 173-200.

Mirel, D. (2006), 'Back to the future', *Journal of Property Management*, January 1, 2006.

Mohnen, P. and B. Lokshin (2009), 'What does it take for an R&D tax incentive policy to be effective?', IEB Barcelona, Document de Treball 9.

- Ostrom, E. (2009), *Governing the Commons: The Evolution of Institutions for Collective Action*, New York: Cambridge University Press.
- Parsons, M. and N. Phillips (2007), 'An evaluation of the federal tax credit for scientific research and experimental development', Canada Department of Finance, Working Paper No. 08.
- Payne, A. (2009), 'Does government funding change behavior? An empirical analysis of crowd-out', *Tax Policy and the Economy*, **23**, 159-184.
- Peacock, A. and I. Rizzo (2008), *The Heritage Game. Economics, Policy, and Practice*, Oxford: Oxford University Press.
- Pearce, D. and G. Atkinson (1993), 'Capital theory and the measure of sustainable development: An indicator of weak sustainability', *Ecological Economics*, **8**, 103-108.
- Pickard, R. (2009), *Funding the Architectural Heritage: A Guide to Policies and Examples*, Strasbourg: Council of Europe Publishing.
- Pindyck, R. (1988), 'Irreversible investment, capacity choice, and the value of the firm', *American Economic Review*, **78**, 969-985.
- Ring, I. (2008), 'Integrating local ecological services into intergovernmental fiscal transfers: The case of the ecological ICMS in Brazil', *Land Use Policy*, **25**, 485-497.
- Rizzo, I. and D. Throsby (2006), 'Cultural heritage: economic analysis and public policy', in V. Ginsburgh and D. Throsby (eds.), *Handbook of the Economics of Art and Culture*, Volume 1, Amsterdam: Elsevier, pp. 983-1016.
- Roseta-Palma, C., Ferreira-Lopes, A. and T. Sequeira (2010), 'Externalities in an endogenous growth model with social and natural capital', *Ecological Economics*, **69**, 603-612.

- Schuster, M. (2006), 'Tax incentives in cultural policy', in V. Ginsburgh and D. Throsby (eds.), *Handbook of the Economics of Art and Culture*, Volume 1, Amsterdam: Elsevier, pp. 1253-1298.
- Telesetsky, A. (2010), 'Corporate foundations and US cultural heritage: role of US corporate in protecting and promoting the built cultural heritage sector', *Aedon*, 1/2010.
- Throsby, D. (1999), 'Cultural capital', *Journal of Cultural Economics*, **23**, 3-12.
- Throsby, D. (2006a), 'Introduction and overview', in V. Ginsburgh and D. Throsby (eds.), *Handbook of the Economics of Art and Culture*, Volume 1, Amsterdam: Elsevier, pp. 3-22.
- Throsby, D. (2006b), 'Paying for the past: Economics, cultural heritage and public policy', Text of Joseph Fisher Lecture delivered at the University of Adelaide, 16 August 2006.
- Wright, K. (2002), 'Generosity versus altruism: Philanthropy and charity in the US and UK', London School of Economics, Civil Society Working Paper 17.
- Zee, H., Stotsky, J. and E. Ley (2002), 'Tax incentives for business investment: A primer for policymakers in developing countries', *World Development*, **30**, 1497-1516.
- Zhong, J. and M. Lipsman (2009), 'Iowa's historical preservation and cultural and entertainment district tax credit program evaluation study', University Library of Munich, MPRA Paper No. 14794.

Notes

¹ In some circumstances, though, there might be a conflict between the cultural and economic values of a resource, where the foregone gains from failing to economically exploit a cultural resource need to be weighed against the value of its cultural preservation (recent examples are reported in Cheng and Ma, 2009, and Henderson, 2011). This case is discussed in the Appendix.

² Similarly, assume that a local government is in charge of conservation of local heritage, and that such heritage is valued by the whole national community. When making its investment decision, the local government having to bear the full cost of it will consider only the fraction of the total heritage benefits accruing to the local community. Clearly, that local government is bound to under-invest in the preservation of the resource from a nationwide point of view, calling for regulatory or fiscal intervention from an upper level of government.

³ Various techniques have been recently developed to achieve that objective (Mason, 2005; Rizzo and Throsby, 2006) and applied to specific cultural heritage issues in endogenous growth models (Bostedt and Lundgren, 2010).

⁴ See the classical review in Hall and van Reenen (2000). Empirical research is very lively in that area, see recent papers by Parsons and Phillips (2007) and Mohnen and Lokshin (2009).

⁵ See the figures in Hall and Van Reenen (2000) and Parsons and Phillips (2007) for R&D tax credits.

⁶ In many instances, cultural heritage is managed at the local level, while interest in the resource has a national or supranational dimension (see Finocchiaro Castro et al., 2011). A number of innovative fiscal mechanisms aimed at providing decentralized decision-makers with the correct incentives to account for the wider benefits of the local cultural resource have been experimented. A recent experience – though in terms of biodiversity conservation – is the ecological value added tax in Brazilian states, that is an instrument to reward local governments for their efforts to protect forests and biological resources (May et al., 2002; Ring, 2008). It consists of a revenue-sharing criterion by which state receipts from the value added tax are assigned on the basis of their efforts in protecting forest and biological resources.

⁷ As far as inheritance, gift and capital gains taxes are concerned, many countries have substantially reduced them or abolished them altogether in recent years. In the countries where they exist, several forms of rebate or exemptions exist (such as France, Germany, Ireland, Spain, and the UK).

⁸ In general, according to the Council of Europe (2003): “responsibility for the conservation of any particular object or site rests first with the immediate owner.”

⁹ For a detailed country analysis, see Pickard (2009).

¹⁰ In the Netherlands, no such limits exist for owners of state-level protected buildings, that can offset all repair, maintenance and improvement works against income tax (Pickard, 2009).

¹¹ In addition to the federal tax credit, most US states developed own heritage programs that supplement the federal system or benefit owners of historic properties certified at state or local level, but not qualifying for the federal tax credit. A detailed overview of the states’ tax credit systems is Telesetsky (2010).

¹² In fact, the two mechanisms generate the same price effect for the donor if $\gamma = \tau/(1-\tau)$.