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Chapter 10

Tax instruments for environmental management in tourist destinations

Introduction

The intent of this chapter is to discuss some of the theoretical and practical issues associated with tourism taxation and to consider in more detail an approach that relies on a tax instrument that is already used at the local level in most developed and developing countries – property taxation. We begin by briefly addressing the major issues associated with identifying and measuring the external costs associated with tourism. That is followed by a brief review of analyses of alternative revenue instruments designed to internalise those external costs. The possibility of using property taxation is then addressed followed by a short summary and conclusion.

Background

For many developing and developed countries, tourism constitutes a primary service-based industry. And where a substantial portion of tourists are foreign, the incomes generated can be considered equivalent to an export industry[1]. With growing personal incomes throughout the world, the income elasticity of demand for tourism and increased availability of information regarding tourism opportunities in 'foreign' lands has led to very large increases in international tourism activity over the past decades. Table 10.1 gives details on international tourist arrivals worldwide between 1995 and 2006.

International tourist arrivals market

Tourism can, however, be considered a 'double-edged sword'. Despite the direct and indirect benefits from tourism activity, massive numbers of those same spending units can create a variety of damages to the local (and global) environment. The United Nations Environment Programme (UNEP) has identified three main areas where tourism can have a detrimental effect on the 'local' environment. These include: depletion of natural resources such as water and land quality; pollution of the air, water, and the landscape (through littering), as well as additional noise; and, finally, negative physical impacts on flora and fauna including destruction of coral reefs. UNEP also recognises that the global environment can be adversely affected if tourism leads to the loss of biodiversity, depletion of the ozone layer, or climate change[2].

Table 10.1. International tourist arrivals worldwide between 1995 and 2006

	International tourist arrivals (millions)					% Market share	% Change		% Average annual growth
	1990	1995	2000	2005	2006	2006	05/04	06/05	00–06
World	**436.0**	**536.0**	**684.0**	**803.0**	**846.0**	**100.0**	**5.5**	**5.4**	**3.6**
Europe	**262.3**	**310.8**	**392.5**	**438.7**	**460.8**	**54.4**	**4.3**	**5.0**	**2.7**
Northern Europe	28.3	35.8	42.6	51.0	54.9	6.5	7.8	7.6	4.3
Western Europe	108.6	112.2	139.7	142.6	149.8	17.7	2.6	5.0	1.2
Central/Eastern Europe	31.5	60.0	69.4	87.8	91.2	10.8	2.2	3.9	4.7
Southern/Mediter. Europe	102.7	140.8	140.8	157.3	164.9	19.5	5.9	4.8	2.7
Asia and the Pacific	**56.2**	**82.5**	**110.6**	**155.3**	**167.2**	**19.8**	**7.8**	**7.7**	**7.1**
North-East Asia	26.4	41.3	58.3	87.5	94.0	11.1	10.3	7.4	8.3
South-East Asia	21.5	28.8	36.9	49.3	53.9	6.4	4.9	9.3	6.5
Oceania	5.2	8.1	9.2	10.5	10.5	1.2	3.7	0.4	2.2
South Asia	3.2	4.2	6.1	8.0	8.8	1.0	4.7	11.0	6.4
Americas	**92.8**	**109.8**	**128.2**	**133.2**	**135.9**	**16.1**	**5.9**	**2.0**	**1.0**
North America	71.7	80.7	91.5	89.9	90.7	10.7	4.7	0.9	-0.2
Caribbean	11.4	14.0	17.1	18.8	19.4	2.3	3.7	3.5	2.2
Central America	1.9	2.6	4.3	6.3	7.0	0.8	13.2	10.8	8.2
South America	7.7	11.7	15.3	18.2	18.8	2.2	11.9	3.0	3.5
Africa	**15.2**	**20.1**	**27.9**	**37.3**	**40.7**	**4.8**	**8.8**	**9.2**	**6.5**
North Africa	8.4	7.3	10.2	13.9	14.9	1.8	8.9	7.4	6.5
Subsaharan Africa	6.8	12.8	17.7	23.3	25.8	3.0	8.8	10.4	6.5
Middle East	**9.6**	**13.7**	**24.5**	**38.3**	**41.8**	**4.9**	**5.9**	**8.9**	**9.3**

Source: World Tourism Organisation (UNWTO)

Economists consider these potential adverse effects of tourism activity as *externalities* since the behaviours of tourists (and industries supporting tourists) are imposing costs on others (including present and future generations) without bearing any of the costs themselves. In such instances, economic theory calls for some sort of policy intervention which will result in tourists directly bearing the costs associated with their behaviour. One such policy instrument which is often recommended is taxation.

Ideally, the tax instrument imposes a burden on participants in the tourism market to encourage them to alter their behaviour in a manner that will lead to an outcome where the additional full costs of their activities will approximate the additional benefits they derive. Such taxes are termed *Pigouvian taxes*, named after the economist who first suggested this approach for internalising externalities (Pigou, 1947). While implementation of Pigouvian taxation poses administrative challenges, it provides an underlying rationale for the use of tax instruments to internalise the externalities associated with the tourist industry.

Tourism and the environment

Environmental impacts of tourist activity worldwide are considered to be substantial (Green et al., 1990). However, empirical evidence on environmental degradation due to international tourism in LDCs is scarce. It is known that a variety of activities associated with developing and enlarging the tourism industry can entail environmental and other, direct, costs.

Where land formerly devoted to agriculture and industry is converted for tourism purposes, that conversion and infrastructure construction can have significant environmental implications. The highest rates of soil erosion are witnessed in the construction phase because there is a large amount of exposed ground, and noticeable disturbance produced by vehicle movements and excavations. According to a study, rates of erosion associated with construction and urbanisation are much higher than those obtained in undisturbed areas (Vice, et al. 1969, taken from Gouldie, 1996).

The supply of coastal resources and other environmental goods cannot be adjusted instantaneously or even with a lag in response to rising tourist demand, which would, in fact, accelerate the rate of depletion and degrade the quality of natural capital. This suggests a need to regulate the growth of international tourist inflow to avoid any excessive use of these resources.

There are several ways of approaching the challenges of maintaining the quality of environment in the face of rapid tourist population growth, including directly regulating tourist inflow, imposing fees on visits or designing taxes. As suggested above, the strategy of encouraging growth in tourism has its own potential advantages. International tourism growth can lead to rising per capita incomes in the host country, which in turn would help these countries to spend more on maintaining the threatened environment. This is supported by the historical experiences of OECD countries. According to the World Bank (1992b), 'concentration of a number of atmospheric pollutants are increasing functions of GDP per head when GDP per head is low, and are decreasing functions when GDP per head is high'. This relationship is better known as the environmental 'Kuznets' curve (Dasgupta and Mäler, 1995).

This approach, however, does not take into account the fact that environmental issues present themselves differently to different situations. Even though most of the environment may be renewable natural resource, the rate of resource depletion may exceed the rate of regeneration and this may reduce net gains. Technologies on the regeneration of natural capital are less known, though greater attempts are being made in this direction. Therefore, to maintain the rate of growth of net gains from international tourism, it would be necessary to regulate the growth of such tourists. In this framework, there is no place for subsidising international tourism (Jenkins, 1982; Tisdell, 1983; Piga, 2003). Thus, between regulation of tourist inflow and taxation of tourists, we argue for taxation both for the preservation of the environment, and as a source of revenue for the host country to meet the cost of environmental management. In other words, a greater emphasis is placed on restructuring the existing system of taxation of the tourism sector. This approach is in line with the World Bank (2000) study of the Caribbean region which

proposes several ways to capture economic rents from visitors with a view to enhancing the sustainable use of environmental resources.

Most environmental accounting systems, including the system of integrated environmental and economic accounts, suggest that degradation should be measured by obtaining estimates of restoration costs, rather than by attempting to quantify the effects of degradation (Harrison, 1993). Estimating restoration costs is, however, not simple. While governments do undertake efforts to prevent degradation or restore the environment, using these expenditures as an estimate of actual restoration costs is unlikely to be satisfactory given the budget constraints faced by developing countries. Nevertheless, the fact that a government undertakes preventative or restorative activities does at least indicate the government's judgment that benefits exceed the costs. One of the important preconditions for successful implementation of environmental protection projects, however, would be the adequate social cost recovery. What is crucial is that tourists' willingness to pay for tourist private goods should also include willingness to pay for a related public good, i.e. environmental protection. In this way, we avoid measuring the social cost of international tourism but instead calculate the revenue that would be generated if tourists were to be taxed for the social cost they produce.

Tourism and taxation

According to WTO (1998), the tourism sector represents about 10 per cent of GDP and investment worldwide and is expected to grow at the rate of about 4–5 per cent per year in the next 50 years. This international trend carries implications for the economy and the environment, and thus requires government intervention through fiscal policy. Tourism generates a fairly large share of national income for destinations. It is not uncommon for 'tourist countries' to get 10–25 per cent of their fiscal revenues from this sector. In some small, highly specialised countries, such as The Bahamas, over 50 per cent of government revenue is derived from tourism. However, generally, the net revenue gain from tourist activity may sometimes be much smaller. It has been estimated that perhaps only 10 per cent of gross receipts go to the governments of the Caribbean countries (Bryden, 1973) compared to 20 per cent reported in a number of other countries, such as Tunisia and Kenya (de Kadt, 1979). In the WTO Report (1998), a list of about 40 to 45 different types of taxes is presented, which fall on the tourism business and tourists directly or indirectly.

Whereas short-period international tourist stays are very common and such tourists do pay different types of taxes and fees imposed by destination governments, analysis of taxes on international tourists has not attracted many researchers. Tisdell (1983) and Bird (1992) are among the first researchers to offer a comprehensive account of taxes on international tourists, tax administration issues and public finance implications. Other researchers such as Combs and Elledge (1979) and Fujii, et al. (1986) discuss mainly the incidence of taxes on tourist accommodation in terms of who pays the tax and if taxes can be exported to tourists through higher accommodation cost.

Some recent studies link international tourist taxes with preservation of environment.

Cremer and Thisse (1999) have shown that international tourists may be willing to pay more to buy an environmentally friendly products in imperfectly competitive markets. Nath (1993, 2001) emphasises the role of local business property tax as a Pigouvian tax on tourist accommodation in financing visitor destination improvement projects in small island economies highly dependent on international tourists such as Mauritius. Piga (2003) using a game theoretic approach, derives results that link local government taxes and land management for tourism industry. The author shows that in equilibrium, a private monopoly would develop land more rapidly than a public monopoly. This development, however, is at the cost of faster exploitation of natural resources. In this context, the author advocates a development tax on land as a Pigouvian tax depending on environmental damages. In recent papers, Gooroochurn and Milner (2005) and Gooroochurn and Sinclaire (2005) developed a computable general equilibrium model to explore the efficiency and equity of changing sales tax rates on tourism and non-tourism related sectors. They examined various trade-offs and complexities associated with taxation of the tourism sector. Their models show that most tourism sectors are currently under-taxed and that raising taxes on these sectors is socially efficient and welfare improving.

However, computating the tax burden that international tourists should carry is not straightforward. The bulk of the burden of certain taxes and fees can often be directly attributed to international tourists and international business travellers. Among these are airport landing and parking fees and departure taxes, license fees and permits granted to tourist-oriented businesses, and taxes on casinos. Often, the preponderance of taxes is levied on up-scale hotels and restaurants[3]. Other taxes are borne by tourists and local residents alike. For example, value-added taxes applied to services consumed by both residents and non-residents will be borne by both groups and the extent of the burden on tourists will depend on the tax rate structure and tourists' spending patterns.

There are four main components of international tourist spending – foreign travel, accommodation and food, inland tour services and facilities, and shopping. What makes the computation of tax burdens more difficult is the fact that these shares are not necessarily constant. For example, there were significant changes in the pattern of tourist expenditure in Mauritius during 1980–86 (EIU, 1991). The share of meals and drinks increased from 8 to 18 per cent, while spending on local transport fell from 16 to 8 per cent and shopping and gaming rose from 13 to 20 per cent. Finally, spending on accommodation, the most important expenditure category after travel costs, declined from 60 to 52 per cent of total in-country tourist expenditures.

Finally, a full consideration of the taxes associated with international tourism should include taxes falling on incomes generated by international tourists in the host country. These may or may not be ultimately borne by tourists. Direct taxes imposed on the incomes of labourers employed in the tourist sector are probably borne directly by those labourers. It is harder to determine whether taxes on the incremental profits of businesses attributed to the additional economic activity associated with tourism are shifted onto the tourists or borne by in-country owners of those businesses and their suppliers of factors of production.

Ultimately, whether tourists pay a higher proportion of total tax collected than residents depends on tax policy. What is important here is to ascertain whether government in design-

ing tax rates is influenced by the interest of the resident population or puts a higher rate on international tourists, keeping in view the damages due to international tourism. A rough estimate of this can be obtained by looking at the relative size of the tourist population compared to the total population during a period of time, a day or a month. For example, in Mauritius, the proportion of international tourists within the total population is no more than 10–12 per cent in the peak months (EIU, 1991). Thus, international tourists do not constitute a significant proportion of consumers that would have generated any tax bias against or in favour of them in general consumption and miscellaneous taxes. According to one estimate (GOM, 1992, Table 2.15), Rupees 118 million was collected in the form of import duties, Rs 20.5 million as excise duties, and Rs 47 million as sales tax on goods and services consumed by international tourists in 1991. It is clear that a good part of these taxes becomes payable by international tourists in their capacity as a paying guest or as a temporary resident but not as a charge for the social cost of tourism enjoyment.

Linking tourist taxes to environmental costs of tourism

As discussed above, ideally tax policy will impose a tax on tourism that can capture the social cost of increased tourist travel. Tax rates should correspond to the social costs imposed by international tourists; the greater the social cost, the higher should be tax rates. Tax policy may be designed in the light of the fact that international tourists travel to enjoy a diffused 'product' at a specific place (destination), where it is produced. Some of these combinations cannot be replicated in other destinations, which indeed may confer on the host country a monopoly power to treat the visitors as more than a paying guest for charging purposes. Nevertheless, the availability of alternative tourist destinations may produce semi-competitive conditions in the tourist accommodation sector.

In principle, higher demand for accommodation by tourists will generate greater demand for environmental resources, both as enjoyment of amenities and inputs in the production and consumption of tourism services. As the supply of the environmental resource increases, its marginal product decreases because environmental quality goes down. While on the consumption side accommodation and environmental resources are complementary, they will be substituted in the production of such goods and services. Substitution possibilities between the environment and accommodation can be enormous because the latter involves conversion of land devoted to agriculture and industry for tourism purposes on a considerable scale, Both conversion and construction could have significant effects on the ecological balance of a site and pose environmental complications. Thus, both consumption and production activities would entail loss of environmental quality. This would indicate that a rise in the market value of accommodation generated by demand and supply forces in the tourism sector would be at the cost of environmental quality. Thus, the higher the value of accommodation, the lower will be the environmental quality. This relationship suggests that the market value of accommodation will constitute a reasonable base of any Pigouvian tax on international tourists since the market value of tourist accommodation and tax liability will be positively related.

The value of tourist accommodation is also justified as the base of a Pigouvian tax in terms of optimal tax theory. It is argued in the literature that, in the absence of 'tax handles' to

tap leisure, it may be superior to tax consumption items that are complementary to leisure (Hardy, 1993). Tourism is largely a leisure activity; about 90 per cent of tourists can be grouped under 'leisure as a purpose of visit' in Mauritius (EIU, 1991). And, as was noted above, about 60 per cent of total tourist expenditure is accounted for by accommodation.

Direct taxes on accommodation can be realised through additional ad valorem 'tourist taxes' imposed on hotel room tariffs. In fact, this is very common throughout the world, particularly in sites catering to tourists (international or domestic). Furthermore, differential rates might be imposed depending on the nature of the accommodation (e.g. two-star hotels would require a lower tax paid by tenants than a four-star hotel) or the residence status of the tenant[4]. A potential disadvantage of such taxes imposed in an attempt to internalise the externalities of international tourists is that hoteliers may collude with hotel guests to impose lower room charges, resulting in tax revenues that fall short of the external costs associated with tourism activities.

Using business property taxation to capture the environmental costs of tourism

The use of property taxes on international tourist accommodation is feasible and can have the benefit of capturing the environmental costs of that tourism. It does, however, face certain administrative challenges that are described below.

For a given trend in tourist arrivals, the market value of a tourist business property would rise due to the capitalisation of tourism growth trends in land value and property value. Thus, the trends in market value would broadly capture the increased tourist travel and associated social cost. Symbolically,

> Tourist Business Property Tax (TBPT) liability = (C*+ m)t* where C* is market value of accommodation; and t* is TBPT (Pigouvian tax) rate on tourist accommodation.

Under an ad valorem room tax, different amounts of taxes are payable for the same amount of accommodation used even though the same amount of accommodation is assumed to create the same social cost. Under a Pigouvian tourist business property tax, higher taxes will be associated with higher amounts of accommodation used. As such it will capture tourists' willingness to pay for the social cost produced. The merit of a tax on the tourist business property value is that when the social cost of increased tourist travel rises, which is manifested in the increased market use of accommodation, tax liability would also rise.

Conditions for effective tourist business property tax administration

Although the administrative details associated with a tourist business property tax will differ depending on the country in which it is used, the imposition of any property tax requires a number of specific administrative steps. These may include:

1. specification of which level of government has the right to impose and collect a property-based tax;
2. identification of taxable property;

3 valuation of that property;
4 imposition of a levy against the valuation; and
5 collection of the taxes due.

Property taxes are most commonly assigned to local governments, since such taxes have theoretical and practical advantages as local revenues relative to other taxes. However, where the tax is intended to correct for market failures due to the externalities associated with tourism, it is probably most reasonable for the tax to be imposed by a national or at least a regional taxing authority. This is because the external costs of at least some of the activities of tourists fall on all residents of the country; as such, internalising the externalities should be carried out on a basis beyond the immediate locality[5]. In some countries such as Mauritius, this could require the creation of new taxing districts (discussed in more detail below). At present in the country, hotels, guesthouses, bungalows, huts, restaurants and shops located outside a municipal jurisdiction are not liable to pay (local) property taxes. Given the island's topography, all the municipal areas are located at its centre, but most of the tourist accommodation is found very close to beaches. These properties, which do not fall under municipal councils, are not assessed for municipal rates. The proposed tourist business property tax is based on the logic that the business component of local property tax should be applicable to all properties devoted to business and entertainment irrespective of their location.

In areas where property taxation is already in place, identification of taxable tourist business properties has already occurred. While identification of small properties, e.g., residential houses in large cities, can be challenging, identification of large tourist-oriented hotels should be easily identified even if they are not on the current property tax rolls[6]. Furthermore, it is easy to observe construction of new tourist accommodation.

A determination (assessment) of the taxable value of a parcel is generally the most difficult administrative task associated with property taxation. Interestingly, different countries utilise different definitions of what constitutes taxable value. One approach – the capital valuation method – requires an estimate of the market (capital) value of the property, i.e. at what price a willing buyer and seller would be willing to purchase/sell the property. A second approach – annual rental valuation method – attempts to estimate the annual rent that the owner of the property could fetch from willing tenants. For instance in Mauritius, the tax base is the rateable (rental) value of property, which is determined by the central assessment authority. Hotels and other accommodations are assessed on the basis of room rents adjusted for occupancy.

Unfortunately, due to administrative problems of assessment processes, assessed valuations of properties under either the capital or annual rental value approach generally lag behind the true value[7]. Moreover, market transactions in hotels/motels are quite infrequent, which makes the availability of the data on the market value of tourist business properties quite difficult.

An alternative and better way to deal with the problem of continuous assessment, which heavily relies on market value of properties, is to use the standardised rates with a provision to make it grow in response to rise in demand. Standardisation proposals in the literature

have taken several different forms. One approach is area-based standardisation of tax payment: ORG (1979) and Ramakrishna (1980) have suggested moving away from rental value and relating property tax to the plinth area. Surcharges or 'extras' may be added according to location, type of construction, nature of use and age of building. Each of these would be divided into a few categories and a tax value would be attached to each category. In the second approach, rental or market value per unit of area is fixed.

The fourth step in any property tax system is determination of the tax rates. Generally tax rates are determined (if not otherwise constrained by legislative upper or lower bounds) on the basis of the desired level of projected revenues and the assessed tax base (the 'tax value'). Tourist business property tax (TBPT) rates can be fixed per sq. ft of covered area under a property. The location and quality of property would automatically result in different standard rates.

One desirable attribute of any tax system is that revenues grow with a corresponding rise in the demand for services and in the costs of those services due to changes in prices. It is, obviously, necessary to generate enough revenue to meet government expenditure on tourism-related maintenance. In order to impact growth or elasticity in TBPT revenue, either the base or the rates must be adjusted annually to reflect the effects of those factors.

It would be quite useful to develop a tourism growth index combining relevant factors for indexing proposes. Revenue requirements can be made to depend upon the growth rates of total tourist arrival (g_1), total tourist expenditure in the host country (g_2) and general government expenditure (g_3). g_1 captures the effects of larger tax-paying populations, g_2 measures tax payers' capacity to pay, and g_3 is indicative of increasing requirements for government expenditures to maintain tourism projects. An average of these rates (g) would give a measure of the rising cost of environmental protection, which can be used for indexing purposes. TBPT payable by a tourist business property can now be calculated in either of the following ways:

- **Alternative 1**
  $TBPT = AAO [t_0 (1 + g)]$
- **Alternative 2**
  $TBPT = t [(AAO) MV (1 + g)$

  where,
  - AAO : Area under property adjusted for occupancy
  - MV : standardised market value per unit of property
  - t_0 : standardised tax rate per square feet covered area
  - t_a : tax rate per square feet covered area
  - g : growth rate of total tourist arrival

Alternative 1 proposes indexing the standard tax rates as against indexing the standardised market value in alternative 2. Standardised rates can be worked out in view of revenue needs, which can be fixed in terms of the estimated government expenditure on maintaining the environment for conducting tourism business. Benchmark estimates of the maintenance costs of projects and informed qualitative judgements can also be used as a guide.

These tax methods are an attempt to acquire economic rents bestowed on the private sector in an administratively feasible way but they may not be equal to Pigouvian taxes. Lump sum taxes are not Pigouvian since they do not affect the marginal conditions to create incentives and disincentives. In fact, these taxes once paid to cover pollution cost would encourage the taxpayer to pollute as much as possible so as to maximise benefit from the payment[8]. If the idea is to regulate the demand in Pigouvian terms, then it is imperative to specify different pricing methods to those derived from marginal conditions. Indexing these rates in line with tourism growth will not influence the short-run marginal costs, but presumably will affect in the long run to the extent that they are included in the long-run marginal cost. This long-run effect is crucial in the present tax design. The willingness to pay for environmental damages through TBPT would have implications for the demand for accommodation depending on who bears the burden of the tax.

The TBPT burden

Who pays TBPT is a central issue for tax design and reform. Even though it is statutorily payable by the owners of property, there may be situations when the tax may be shared between the owner of property and tourists, or it may fall separately on owners or tourists. Ideally, the TBPT will be shifted to tourists who are the principal reason there is environmental degradation. Furthermore, if the tax is exported it will not generate adverse effects on resource allocation in the tourism sector, e.g. will not be shifted on to labour. There have been studies in the USA (Combs and Elledge, 1979 and Fujii, et al., 1985) which show that a substantial portion of such taxes are shifted to tourists.

There are two distinct views on the incidence of the residential property tax- traditional and modern[9]. Since the value of accommodation consists of the land value and the value of any structures on the land, the theoretical approaches differ as regards their treatment. A tourist tax would tend to be shifted if capital is mobile, supply of land is elastic and the demand for accommodation is price-inelastic. Where, as in the case of Mauritius, there is an excess supply of tourist accommodation, tax-shifting outcomes will largely depend on demand conditions in the accommodation market. As long as international tourists are price takers, market conditions will be favourable to tax shifting. Data on tourist preferences and cost differences in alternative destinations are not available. Nevertheless, the recent trends in international tourism in Mauritius and many similar countries can help form some opinion about tax shifting.

It is important to note that the upward trend in tourist arrivals in Mauritius has continued unabated despite the fact that the rents and prices in the domestic markets have increased. However, continuous depreciation of the Mauritian Rupee would have minimised the effect of these cost increases. Thus, small increases in the cost of tourism due to BPT, which is considerably neutralised by the currency depreciation would have little adverse impact on the tourist demand. In other words, BPT is more likely to be borne by international tourists. Even under the conditions of relatively stable exchange rates, such taxes will be borne by international tourists because of the up-market profile of tourists to most developing countries.

Administration of TBPT

In most countries, a final political question must be addressed – namely, what government entity should be given the responsibility for designing, imposing and administering the TBPT. Several alternatives exist including the central government as part of its overall revenue raising – public spending responsibilities; local governments; or the creation of a new, special purpose district.

Local governments, which traditionally have exclusive rights to property taxation in many countries, may argue that since the TBPT is a property-based tax, the revenues should accrue to them. An advantage is that such governments probably already have property tax administrative apparatus in place so that the transition costs would be lower with this arrangement. A disadvantage is that the funds collected under a TBPT may be diverted to uses other than environmental protection. Furthermore, there is always the risk that, in an attempt to attract additional private tourism investments, e.g. hotels to the locality, a local government may keep TBPT rates as low as possible. (This, by the way, is a potential issue associated with 'environmental federalism'.)

Finally, it needs to be recognised that some developing countries with strong international tourist sectors do not have property taxes imposed on tourist areas either because such areas lie outside municipal boundaries, e.g. Mauritius, or there are no municipal level property taxes in place. Thus, creation of a tourist business district may be in order. The economic argument for creating a tourist business district is based on the idea of the geographic area over which the tourist businesses are distributed. An idea of the incidence of such businesses can be ascertained by looking at the location of hotels, motels and huts. The geographical area over which they are scattered may cut across several district and village councils so a single taxing district can be more efficient than one that is segmented. This authority should be vested with independent expenditure and revenue functions. TBPT can be an important source of revenue for this business district authority. This authority should be the sole body to undertake civic functions in this area with a view to improving visitor destinations. This authority thus can be modelled as an autonomous single purpose parastatal body. However, this arrangement also has a disadvantage. As a parastatal, the authority may not be as accountable to the citizenry as are directly elected, representative municipal or urban districts.

Summary and conclusion

Taxation of international tourists has generally been attempted through the taxation of tourist expenditure, which is dominated by the cost of accommodation in the host country. Implementation of tourist expenditure taxation in the large informal tourism sector is a difficult task, which provides ample opportunities for free-riding. For the same amount of tourism enjoyment, a tourist can choose, in collusion with private providers of services, to pay a lower or insignificant amount of taxes. Therefore, even though such taxes are most suitable on administrative grounds, there seems to be a need for some other tax measure.

A proposal is made to employ tourist business property tax on the market value of tourist accommodation 'within' the existing framework of local property taxation. This tax is

based on the Pigouvian principles of taxing negative externality created by international tourism. It is important to note that such a tax does exist in all countries; however, its value as a Pigouvian tax is not recognised particularly in tourist destination countries. Economic trends and tourist public goods externalities are capitalised in the market value of accommodation. Thus, as the social cost of increased tourist travel rises, which is manifested in the higher demand for accommodation, tax liability also increases. A properly designed tourist business property tax would also capture informal accommodations, which are mostly used by low-spending tourists.

VAT may be retained on revenue grounds with suitably designed tax rates. There is a case for lower VAT rates as the consequences of a VAT would be economy-wide as against a more localised incidence of tourist business property tax. Even though VAT is popular on revenue grounds, there is a trend towards a reduction in VAT rates on tourist-related goods and services in the European Union.

To avoid any conflict with existing property taxes, it would become necessary to work out a mechanism of inter-governmental fiscal co-ordination between the central government and local level authorities, namely, municipalities and rural district councils. In the interest of the tourist sector, however, tax and expenditure sharing devices should have a bias towards improving visitor destinations. A better fiscal co-ordination can be visualised by assigning this job to a new organisation, namely, a tourist business district authority.

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Notes

1 It is, however, recognised that, particularly for many developing countries, the incomes generated from international tourists do not necessarily remain in country. Many of the revenues from airline tickets, four- and five-star hotels, cruise lines, etc. are, in fact, derived by multi-national firms.
2 For a fuller discussion of these see the UNEP, Production and Consumption Branch – Tourism website: http://www.uneptie.org/pc/tourism/home.htm
3 These generalisations are, however, more relevant for small developing countries than for larger or higher income countries where tourism by residents constitute a substantial proportion of all tourists. For example, it was estimated that of 44 million visitors to New York City in 2006, 37 million were residents of the United States with 7 million international visitors. (Reuters News Agency, December 27, 2006).
4 It is, for example, common to find higher room rates are imposed on hotel guests holding a foreign passport than on local residents.

5 It is also the case that if the property tax on hotels was made a local levy, local governments might find it to their economic advantage to under-tax hotels in order to entice additional hotel investment in the locality. This is comparable to the disadvantages mentioned above regarding the inefficiencies of using subsidies for attracting tourism-based businesses.
6 This constitutes another weakness of a hotel room tax. Informal accommodations can more easily avoid this levy than where all structures are on property tax rolls.
7 For a good description of these problems, see Bahl and Linn, 1992.
8 Obviously, for any pollution tax to be effective, the rate at the margin must equal or exceed the cost of the pollution.
9 For references on both theoretical and empirical literature, see Harberger, 1962; Bird and Slack, 1978; Nath, 1987; Nath and Sen, 1989; Bahl and Linn, 1992.