Introduction

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Tourism is big business and getting bigger. In the 20 years from 1980 to 2000 global tourism receipts increased at an annual rate of nearly 8 per cent, much faster than the rate of world economic growth of around 3 per cent. In 2000, income from tourism combined with passenger transport totaled more than \$575 billion, making this sector the world number one export earner, ahead of automotive production, chemicals, petroleum and food (UNEP web site¹). So it is no surprise that people are paying attention to tourism when they debate how the world can move to a more sustainable pattern of development.

Given the increasing importance of the sector, an enormous literature has emerged on the three pillars of sustainable development – environmental, cultural and economic – and on how tourism impacts on them and how these aspects of tourism can be enhanced. In this active and somewhat crowded field, what is the purpose of introducing yet another book? In spite of all that has been produced, we would argue that we do offer something special. Unlike much of the literature that has primarily an environment and sociological perspective, our effort is firmly grounded in economics – its theory and applications. Economics here is made to be the servant of policy in the field of tourism. But economics has increasingly become a technical subject and its methods and results are not easy for the policy maker to comprehend. In this book, we try to present some important economics results, and relate them to the policy debate. If we are successful, our approach offers the prescriptions for moving tourism, and economic development generally, closer to a sustainable ideal, with a firm analytical anchor. This is important if we are to be taken seriously by important decision makers in governments – in ministries of economy and finance, for example.

SUSTAINABLE TOURISM: A MACROECONOMIC PERSPECTIVE

What are these tools of economic analysis, and how do they relate to tourism? The first is the 'macroeconomics tool box'. This allows us to study the growth performance of countries and understand the sources of growth. There is, of course, great controversy on this topic, especially on what are the main drivers for growth (see, for example, Easterly, 2002). Physical capital, human capital, population control, good governance and good policies have all been given prominence in the growth debate. Fashions change and presently institutional reforms for good policies are probably the most popular explanation. Of course, no one factor is sufficient and all the above are, to some extent or another, necessary. For this book, we are interested in the role of export-led sectoral growth – that is, leading the growth process by rapid increases in the output of a sector that is not constrained by domestic demand. The sector in question is of course the tourism sector. The chapter by Brau, Lanza and Pigliaru (Chapter 1) shows that 'tourism countries' have achieved a higher rate of growth than other sub-groups. Given that tourism has been a fast-growing sector, is this simply a 'good luck' phenomenon, or is it the result of deliberate good policies? The chapter analyses the performance of these economies, and finds that tourism explains a part of the growth independently of other factors, such as investment and openness (that is, 'good' policies). Moreover, the governments in these countries did not have to promote tourism to the extent that they did. That was a choice – and it turns out to have been a good one. Finally the chapter shows that while being a small economy can be bad for growth, this effect can be mitigated by increasing the role of tourism in that economy.

Like any important piece of research, this chapter opens up a number of areas for further study. What is the 'right' amount of emphasis for governments to put on tourism to achieve the highest level of sustainable growth? Does this process need detailed direction from the government or is it one that is best driven by market factors? Answers to the second question definitely point to a *dirigiste* role for the government, and these are provided by some of the other chapters in the volume. Before discussing these we turn to a number of others that use the macroeconomic tool kit.

One macro level issue is how tourism affects the use of land. As we build more golf courses and hotel complexes and so on, we take land away from agriculture and we encroach on the natural environment, which may be the reason the tourists came in the first place. Thus the shift of land to tourism, which will promote growth as shown in the chapter by Brau et al. (Chapter 1), may be taken too far and, without some constraints, the process may overreach itself, resulting in lower real incomes for the population.

The chapter by Palmer, Ibáñez and Gómez (Chapter 3) analyses these trade-offs. Not surprisingly, they show that it does not pay society to expand tourism to the point where the private marginal benefit is zero – the classic externality argument that market production is too high for a good with negative externalities. The chapter further shows that, to attain the maximum sustainable long run level of well-being for local people, it is desirable to limit tourism below its private marginal benefit even when the price of tourism services rises continuously relative to the price of other uses to which the land can be put. The implications from a growth point of view are important – an economy cannot depend on expanding tourism to be the engine of growth for ever. Of course, it may take quite a long time to reach that limit, especially if we allow for the possibility of expanding tourism by improving quality rather than increasing volume (an option not allowed for in the model).

That there should be limits to the level of free market tourism development is not surprising given the extent to which this sector is associated with externalities and market failures of various kinds. But, even in the absence of such effects, a tourism boom may not increase welfare. The reason is due to trade effects. The chapter by Nowak, Sahli and Sgro (Chapter 4) argues that a tourism boom can cause a decline in welfare. This can arise if the shift out of the manufacturing sector and into the services sector (needed to fuel the tourism boom) generates welfare losses in manufacturing which offset the gains in welfare due to the increase in the price of non-traded goods. In their model this is likely to happen if the tourism sector is more labor intensive than the agricultural traded sector, which is, of course, an empirical question. But the labor intensity of tourism is not fixed; it is possible to develop tourism that is more ‘land intensive’. Furthermore, where tourism needs to be labor intensive, it may be possible to import workers. Nevertheless, the chapter provides a warning: take care of the economy-wide effects of tourism when developing a policy of expansion of the sector.

To all but the most convinced free marketers the need for some state involvement in regulating the tourism sector is clear. But any regulation requires good data, especially statistical data, and this is the responsibility of the government. The chapter by Costantino and Tudini (Chapter 5) contributes to the discussion by showing what is needed to develop an accounting framework for ecologically sustainable tourism. A start for developing a full set of sectoral accounts for tourism is the preparation of ‘satellite accounts’, which are not fully integrated into the system of national accounts but are based on the same principles as the main accounts. Initially we need to know how much tourism demands from other sectors in the economy, how much it demands of goods imported from abroad, and how much it generates in the form of net financial flows to the government. For this, the convention sectors of the economy have to be mapped into the

‘tourism sectors’. All this provides the important building blocks for a detailed economic analysis of tourism. Following on from that, we would like to be able to measure the environmental impacts of tourism more accurately. Once the tourism sectors have been defined, the environmental burdens can be measured. None of this is straightforward and it does require political will on the part of government to carry out the work. Fortunately, we are seeing progress in these areas although we are not there yet.

FORECASTING NUMBERS OF VISITORS

Good economic accounts data relating to tourism, which is clearly important, needs to be complemented by good data on the demand for tourism within the country. Visitor numbers can be notoriously volatile, especially in the face of natural disasters, or threats (real and imagined) of terrorism. The chapter by Chan, Hoti, McAleer and Shareef (Chapter 2) provides a relatively robust model for forecasting the impact and duration of shocks in terms of visitor numbers for small island economies. This is important not only for the private sector, but also for policy makers, who need to promote activities that can take up the slack in the economy in the event of a sharp fall in tourism.

For investment and planning purposes, governments and private investors need to know what the long-term trends in tourism flows are likely to be and one of the most important factors that is emerging in determining the flows of tourists is climate change. The chapter by Bigano, Gorla, Hamilton and Tol (Chapter 6) reviews the studies of the impact of climate change on tourist destinations, based on the experience of the recent past, when we have seen some unusually hot summers and mild winters. The data show that people tend to go in greater numbers to summer destinations when these destinations become warmer and in fewer numbers to winter destinations when they become milder, making winter sports less attractive. This is pretty much what one would expect, although the attractions of higher temperatures must wane at some point. The literature suggests that the optimal temperature in the destination country is around 21°C, which is useful information for those planning to invest in tourism development in warm climes. The chapter also reports on the impact of climate on domestic tourism flows in Italy, and finds that warmer summers do increase such tourism significantly. Extreme weather events also deter tourists, more so for short breaks when visitors have not committed to the trip a long time in advance. There is no doubt that such considerations must play an increasing role in determining where developments in tourism will take place, and in adapting tourism to a changing climate through measures that make the experience less vulnerable to extreme events.

MICROECONOMIC PERSPECTIVES FOR SUSTAINABLE TOURISM

At the microeconomic level, questions about sustainable tourism can be asked covering at least two areas:

- What economic and other instruments do we have at our disposal to promote sustainable tourism? Is the management of tourism at the national level adequate and what measures are available to improve it?
- What is the demand for environmentally friendly tourism and do we have the right tools for estimating this demand?

This book includes two chapters covering the first set of questions and three covering the second.

On the use and availability of economic instruments, many experts have proposed the use of some kind of tourism tax to limit visitor numbers in places and at times when a free market would result in congestion and excessive environmental degradation. One only has to spend a day in Venice or Florence in August to appreciate that the experience would be better if the number of visitors could be reduced, and some sites do this simply by preventing access at critical times. But a tax or charge would do this by providing an economic disincentive, and would also raise some revenues that could be used for environmental and cultural protection of the sites. The introduction of an ‘eco-charge’ on tourists, however, is controversial. Local authorities are reluctant to impose it in case it causes a really serious decline in demand and national authorities can be against it on the grounds that taxation authority is vested at the national level and ‘earmarked’ taxes are fiscally inadvisable, as they limit the flexibility of governments to spend money where it is most needed. These issues have been debated for a long time (and not only in the context of tourism charges), so we cannot expect a quick resolution. The Balearic Islands introduced an ‘eco-tax’ to finance a ‘Tourist Area Restoration Fund’. There has been a challenge to this tax from the central government, which was overturned and the situation is changing even as we write. There are other examples of some earmarked taxes in other countries (Bhutan, Dominica), provided in the chapter by Taylor, Fredotovic, Povh and Markandya (Chapter 7). That chapter is mainly devoted, however, to examining the political economy of another tourism tax in detail – the one introduced on the island of Hvar in Croatia. The authorities on the island have been concerned for some time by the heavy environmental burdens imposed by the tourists, and the lack of funds to address them. Hence they agreed to look at a charge that would be earmarked to reduce coastal pollution and finance the removal of litter and so on during peak tourism periods.

The study of the options involved extensive consultations with stakeholders and with the relevant authorities to ensure that such an instrument was indeed legal. A modest charge rate of €0.21 to €0.57 was recommended, based on a willingness-to-pay study of visitors, and the tax is likely to be implemented next season (2005). The lesson is that with careful consultation and detailed analysis, economic instruments can be designed to move us in the direction of sustainable tourism.

The other chapter on tourism management is the one by Bosetti, Cassinelli and Lanza (Chapter 9). They address the important problem of measuring the performance of local governments in managing tourism. A supplier of a service is efficient if he or she makes use of a combination of inputs which cannot be bettered – that is, you cannot reduce any one input without increasing at least one other input. To measure how efficient Italian municipalities are in providing a service called ‘beds occupied’ by tourists, the researchers measure inputs of number of beds and amount of solid waste generated and use linear programming techniques to identify the efficiency frontier. Measures of efficiency reveal substantial differences between municipalities (the worst – Portovenere – is 3.7 times less efficient than the best – Rio nel’Elba) and between regions (Emilia Romagna is nearly 15 times less efficient than Liguria). The analysis also looks at changes in efficiency between 2000 and 2001. The results are interesting and important but one is bound to ask (a) can this analysis be extended to more inputs and how would the rankings look then, and (b) what are the factors that determine efficiency? As the work progresses answers will, no doubt, be provided to these questions.

The remaining three chapters in the volume analyze the demand for environmentally friendly tourism. Ideally with sustainable tourism both the environment and the economy benefit from tourism. The chapter by Markandya, Taylor and Pedroso (Chapter 8) looks at how much the projects and programs supporting tourism at the World Bank subscribe to this principle. As one of the main institutions financing projects under the Global Environment Facility (GEF), which includes biodiversity protection as one of its areas of activity, one would imagine that a large number of Bank projects would have a tourism-related component. One finds, however, that although many projects mention tourism as one of the potential benefits of a conservation project, very few actually measure these benefits in any degree of detail. On the other side, looking at strategies for development in developing countries, there is discussion of tourism, especially in relation to transport projects but also in projects covering cultural heritage protection and health (tourism can spread diseases such as HIV/AIDS). The much-vaunted Poverty Reduction Strategy Process (PRSP), which is the main instrument for promoting pro-poor growth in a

coordinated way, has given little attention so far to the contribution of sustainable tourism. To sum up, therefore, the Bank has not, so far, realized the potential of sustainable tourism in its development strategy for developing countries.

If governments spend money to protect the environment, how much of this can be recovered in terms of higher payments by tourists? The chapter by Ruta and Pedroso (Chapter 10) looks at the evidence from the Dominican Republic, where two areas are identified: one on the east coast, where the natural environment is generally still good; and the north, where there has been rapid tourism development and where the area suffers from relatively high loads of organic pollution. Using econometric methods the researchers find that hotel room rates are affected by a number of environmental variables, such as smell, municipal water connections and the existence of sewage treatment in the area. The results are not altogether conclusive, but they do point to positive private benefits to hotel owners from improvements in public goods. If these are accepted, they could form the basis for the financing of some of these improvements.

The final chapter (Chapter 11) is by Morimoto, who examines tourist preferences in Laos. By using 'choice experiment' techniques, she compares preferences between packages of sites during a visit to the country and obtains values for visits to particular sites. She then uses the results to estimate what people would pay for some new tourism options, such as a new trekking route, an artisan village and so on. These costs can provide useful information in designing tourist activities and even in setting fees for access to the sites.

Sustainable tourism is a fast-growing subject and a book such as this can only touch on some of the issues. Nevertheless, we hope that the chapters provide some important insights and stimulate readers' interest in the subject.

NOTE

1. www.uneptie.org/pc/tourism/sust-tourism/economic.htm.

REFERENCE

- Easterly, W. (2002), *The Elusive Quest for Growth: Economists' Adventures and Mis-adventures in the Tropics*, Cambridge, MA: The MIT Press.