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BASIC ECONOMICS OF TOURISM: AN OVERVIEW MAINLY OF VOLUME I

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1.1   INTRODUCING THE COVERAGE OF THIS BOOK

Tourism economics has recently emerged as a specific focus of study. However, most articles on tourism economics have appeared in journals devoted to tourism or travel research generally. Often such articles are interdisciplinary in character. Hence, many of the articles in this book are not based narrowly on economics, although all have an economics focus. Furthermore, many of the contributions in this book are from articles which economists may not normally come across in their reading or which are not easily accessible. This book will help to make these articles more easily accessible to economists as well as provide economics reference material for those interested in tourism research and management generally.

This book is in two volumes. The scope of Volume I is outlined here and the coverage of Volume II is reviewed in Chapter 39. It is hoped that these overviews will be valuable in themselves to readers as well as providing a useful guide to the contributions contained in this book. These overviews can be read as 'stand alones', but actually they are complementary. To provide a separate overview for each volume seemed a sensible procedure because although they could be combined in a single commencing chapter this would have the disadvantage of making for a very long chapter and result in loss of proximity between the material reviewed and contents.

Volume II covers what I have called wider dimensions of tourism economics (impact analyses, international tourism, tourism in developing countries, and in economic development, sustainability and environmental aspects), whereas Volume I focuses on applications of basic economics to tourism. In Volume I, after discussion of the nature and role of tourism economics, contributions deal with economic influences on tourism demand and the forecasting of such demand, and with the supply-side of the tourism industry including issues in managerial economics encountered by tourism enterprises and aspects of industrial organization. The final part of Volume I concentrates on applications of public economics to tourism analysis and

associated issues involving public finance and the tourism industry, for example, bed-night taxes. Most of the coverage in Volume I relates to applied microeconomics, including industry economics.

It ought to be noted however, that there is considerable debate about what constitutes the tourism industry. Because a composite of industries contribute to tourism, it is sometimes claimed that the tourism industry can not be identified. There are certainly problems of identification. For example, many facilities and services are used jointly by tourists and non-tourists, for example restaurants and various entertainments, and transport in some cases. However, as Triffin (1941) indicated, considerable problems are involved in the defining of the limits of most industries. Boundaries are in most cases artificial.

Within the tourism industry, it is often useful to concentrate on sub-sectors of it, for example, the hotel sub-sector, transport sector, restaurant and catering, man-made entertainments and so on. Many leisure and recreational commodities are used by both tourists and non-tourists. But not all tourism is for leisure and recreation, for example, business tourism. The collection of essays in this book do not deal with the economics, of the transport and restaurant and catering sub-sectors and with leisure and recreation activities *per se*, such as the value of outdoor recreation, and so on. The coverage of these topics could warrant separate reference books at a later time.

Let us now consider the contents of the four parts of this volume.

1.2   THE NATURE AND ROLE OF TOURISM ECONOMICS (PART I)

The emergence of tourism economics as a distinct subject is relatively recent. Therefore, debate about the nature of the subject and its role is not surprising. Some of this debate is evident from Part I which outlines the role played by tourism economics in the study of tourism, and the impact of research in tourism economics on the development of the economics discipline itself.

Gray (1982, Chapter 2 in this book) provides one of the earliest discussions of the role of tourism economics.   As he sees it, one of the most important contributions of tourism economics is to improve the quality of decision-making in and in relation to the tourist industry. However, Gray is quick to emphasize that the relationship between tourism economics and the overall study of

tourism is not one-way. At the very outset of his article, he states:

'The title of this paper is somewhat misleading in that it implies contributions flowing from economics to tourism without any reverse flow of insights. In fact, any flow of intellectual capital is by no means unidirectional. It was the ability of the phenomenon of international tourism steadfastly to resist analysis by the rather straightforward orthodox version of international trade that led to the development of a more comprehensive theory of international trade' (Gray, 1982, p. 100).

Studies in tourism highlighted the importance in the case of developed countries of international trade or exchange of similar commodities, that is close substitutes, rather than of different types of commodities as might have been expected on the basis of the theory of international comparative advantage. Thus, less specialisation in production was present internationally than one would expect on the basis of the conventional theory of international trade.

After elaborating on the above theme, Gray outlines a number of significant ways in which economics has contributed to tourism research and to increased efficiency in goal fulfilment in the tourism industry. For example, the economic theory of assets has shown itself to be important because tourism relies heavily on assets to create an environment attractive to tourists. The nature of these assets varies, but many are Ricardian in nature; they are unique and irreplaceable once lost. They are capable of earning rents and for the most part, they are capable of being destroyed. The rental aspect has implications for public finance (see Parts IV and VI of this book) and the second aspect has implications for sustainability and environmental management (see Part VIII).

Gray also points out that the economic theory of public goods is very relevant to tourism. Many tourist environments, for example, display characteristics of public goods. Furthermore, social and communal relationships can have significance for tourism, for example, consider law and order, and may be influenced by economic factors.

Gray (1982) highlights the importance of limits to business capacity in the tourism industry at least in the short-run. For example, hotels have a relatively fixed upper limit to their capacity to

accommodate guests and fixed costs are generally their major cost. Their situation is similar to that of many public utilities or enterprises. One consequence of this may be market segmentation in the tourism industry coupled with price discrimination, for example, discounts on 'standard' prices for particular groups such as reduced air fares for students or for senior citizens and so on. A rich body of economic analysis exists dealing with such matters.

However, the potentially valuable role of economic analysis in relation to the study of tourism has not been accepted easily. Gray for example, brings attention to the early reluctance of the World Tourism Organisation (WTO), which was established in 1975, to recognise the importance of economics in relation to its mission. This was displayed in a response of the WTO to an invitation to it to contribute to a special issue of the *Annals of Tourism Research* devoted to economics and tourism. While such negative reactions are now less common, they are not entirely absent.

Possibly Sessa (1984, Ch. 3 in this book) in a rejoinder to Gray (1982) expresses some lingering concerns. He is dubious about the role of 'specialisms' such as tourism economics and favours a more general or holistic approach to the study of tourism. He is especially worried that the social context of tourism will be overlooked in discipline-based studies. It is not quite clear whether he is opposed to discipline-based studies of tourism *per se* or to the use of reductionism as a scientific method, or both.

In reply, Gray (1984, Ch. 4 in this book) argues that specialist models can be useful for policy formulation because they allow in depth studies to be completed. He states that specialist constructs 'allow greater attention to details within the narrower scope of the model and are capable of being refuted. Such specialist models also make possible greater flexibility in the face of changes in underlying conditions since they can be more easily incorporated in the narrower frameworks' (Gray, 1984, p. 289). Nevertheless, Gray suggests that ideally specialist models should be integrated with general models of tourism.

It might be observed here, however, that such integration is less common than may be desirable. Furthermore, specialist models need not be based on a single discipline. For some purposes, a specialist model which draws on more than one disciple may be more useful for policy

formulation than one based on a single discipline. The selection of articles in this book has not been confined to those which are narrowly economics-based in nature. Interdisciplinary modelling can hardly be avoided in the study of the economics of tourism.

Eadington and Redman (1991, Ch. 5 in this book) update the contribution of Gray (1982) in relation to the application of economic analysis to tourism. They claim that 'Economics provides a structure and framework for analysing important public policy issues relating to tourism. For example, applications of economic analysis can yield interesting and often substantive insights into resource allocations problems, as well as improved forecasts of changing trends and potential bottlenecks, that can aid private and public sector decision-makers in planning a tourism strategy, and add to a better understanding of the general phenomenon of tourism' (Eadington and Redman, 1991, p. 42). At the same time, they emphasize that tourism economics studies only one dimension of tourism and therefore is less than complete analysis. They do not however, say anything about the extent to which tourism economics should be incorporated into complete analysis and about the best way of going about this.

Nevertheless, they provide a valuable survey of applications of economics to tourism up to the appearance of their article. They give special attention to the role economics in the study of tourism demand and its forecasting, and to tourism and industrial organisation as well as impact analyses. Thus, their article provides a useful introduction to Parts II and III of this book, which deal with tourism demand and with the industrial organisation of the tourism industry, and Part V which concentrates on impact analyses of tourism. But there are several other parts to this book. For example, Part VIII deals with sustainability and environmental issues involving tourism. The great range of topics and parts in this book indicates that the coverage of tourism economics has broadened out since the publication of Eadington and Redman (1991).

According to the pragmatic tradition, the 'proof of the pudding is in the eating'. The contributions in this book should give the reader a good grasp of the ability of economics to contribute to tourism studies, and highlight some of the cross-fertilisation that is occurring as a result of interdisciplinary studies in the area of tourism. Let us now consider contributions of tourism economics to the study of tourism demand and the forecast of this demand.

1.3   TOURISM DEMAND AND ITS FORECAST (PART II)

There are many reasons why it is important to be able to forecast tourism demand and numbers of tourists and these vary by situations. Reasons include:

(1)   Returns on private tourism projects depend upon levels of demand, as well as cost factors. A knowledge of future tourism demand is important for the economic evaluation of tourism projects.

(2)   Appropriate business strategies such as levels of pricing tourism products, selection of a tourism product or tourism product-mix and expenditure on methods for promoting tourism, such as advertising, are influenced by the nature of tourism demand and future tourism possibilities.

(3)   Government decisions about several fiscal matters, such as whether to impose a hotel room tax on bed-nights and the tax revenue to be expected from it, depend upon predictions about the demand for tourism.

(4)   Forecasts of future levels of tourism are important for guiding governments in their provision of infrastructure and public services to cater for tourists and minimise possible social costs generated by tourism.

(5)   Tourism is such a relatively large industry, in some countries, that significant variations in tourism demand can have important macroeconomic consequences, such as economy-wide impacts on employment and inflation. This is especially so in small economies which rely heavily on tourism for foreign exchange earnings.

In forecasting tourism demand, we need to be clear about the market for which the forecast is made and the influences which we assume to be constant or varying. For example, tourism demand may be:

(1)   estimated for the services or products of an individual enterprise, e.g., demand for the rental of the rooms of a hotel, demand for its other services such as catering services;

(2)   for a region either in aggregate or for a particular community in that region;

(3)   similarly for a nation; and,

(4)   forecasts may be made according to socio-economic groupings of tourists.

Forecasting procedures can vary greatly with the focus of the demand forecast and the accuracy of the forecast usually declines the further it is projected into the future.

Models for forecasting tourism or tourism demand are often divided into (a) causal models and (b) non-causal models. Further division into quantitative and qualitative models or methods is possible, but some forecasting models use a mixture of quantitative and qualitative methods. These diverse methods are reviewed in Part II. Most economic applications use econometric type methods which are usually causal, as are most methods based on economics.

Causal models have the advantage compared to non-causal models of being able to be manipulated to predict the consequences of changing circumstances. They can be used to predict the consequences of a range of different scenarios. They also provide scope for improvement in the sense that explanatory variables included in the models may be altered, or their relationships varied to produce 'better' models. Nevertheless, they are not always more accurate in their predictions than naive non-causal forecasting models, as will be seen from some of the contributions in Part II, and they are often more costly to develop and apply. Let us consider the individual contributions in Part II.

Uysal and Crompton (1985, Ch. 6 in this book) provide an overview of approaches used to forecast tourism demand. They divide these into qualitative and quantitative approaches. In the former they include results from surveys, Delphi models and judgement-aided models. The quantitative approaches include time-series of tourism variables and their projection, gravity-type models and multivariate regression models. The latter are widely used in econometric analyses of tourism and are usually based on causal-type relationships. But as will be discovered from the contributions of Martin and Witt (1989, Ch. 10 in this book) and Witt and Witt (1995, Ch. 13 in this book) such econometric models do not necessarily show more accuracy in prediction of tourism variables than naive methods of forecasting.

Note that there is some scope for argument about the taxonomy proposed by Uysal and Crompton for considering approaches to forecasting tourism demand. For example, many of the survey-type methods placed in the qualitative category by Uysal and Crompton rely on extensive use of quantitative methods both in relation to sampling techniques and interpretation of results including inferential analysis. In his review of demand forecasting and estimation, Archer (1987, Ch. 7 in this book) does not include all survey methods in the qualitative category.

Archer (1987) highlights the need for forecasting tourism demand from a managerial point of view. He points out: 'Forecasts are needed for marketing production, and financial planning. Top management needs demand forecasts for implementing long-term objectives, lower echelons of management require forecasts to plan their activities over a more limited horizon. In the tourism industry, in common with most other service sectors, the need to forecast accurately is especially acute because of the perishable nature of the product. Unfilled airline tickets and unused hotel rooms cannot be stockpiled and demand must be anticipated and even manipulated' (Archer, 1987, p. 77).

However, there is a need for forecasting of tourism demand form an even wider economic perspective. Some regions and countries are heavily dependent on tourism as a generator of economic activity. Governments often need to forecast tourism demand to plan for the provision of infrastructure and supporting public services. Furthermore, in tourism-dependent regions, a downturn in tourist demand can have adverse social consequences such as increasing rates of unemployment which may require action by the government. The appropriate provision of human capital, for instance long-term investment in tourism education, will vary depending on forecasts of future tourism demand.

Archer suggests that it is not really a question of whether forecasting of tourism is needed, but more a matter of deciding on the appropriate methods to use for forecasting. He maintains that from a managaerial perspective this should be decided on a cost-benefit basis bearing in mind the purpose for which the predictions are required. The costs of increased accuracy of forecasts due to improvements in data collection or in applying techniques to analyse data for productive purposes must be weighed against its increased benefits in much the same way as suggested by Baumol and Quandt (1964) for economic optimality of imperfect decisions and as commonly

discussed in theories of bounded rationality (Tisdell, 1996; Blaug, 1990). Archer details specific matters which need to be considered in choosing a method of forecasting tourism demand and provides a very readable review of the choices available to managers involved in tourism.

Yesawich (1984, Ch. 8 in this book) considers the task of forecasting occupancy rates for a lodging property such as a hotel outlining methods commonly used in practice. This type of forecasting occurs at a micro-level. Consideration of market segments is an important component of his market-based approach to forecasting. A number of similar issues are considered by Beal and Troy (1982, Ch. 28 in this book) in their feasibility analysis of hotels. To some extent, these two articles are complementary and represent marketing/management-type approaches which demonstrate current practices reflective of the importance of bounded rationality in decision-making at the level of microeconomic units such as a firms (Cf. Blaug, 1990).

In Chapter 9 in this book, Martin and Witt (1987) point out that in economic models, price is as important determinant of the demand for a commodity. However, in the case of international tourism, it is often difficult to decide how best to represent the tourist's cost of living in a destination country. As Martin and Witt (1987, p. 233) point out, 'In the case of tourism, there are two elements of price:

- the cost of travel to destination; and
- the cost of living for the tourist in the destination.'

While it may be comparatively easy to compile a suitable index of the cost of travel to a destination, estimation of tourist cost of living in the destination country is more complex. However, most econometric models incorporate a cost of living variable.

In the latter models, the following have been used or considered as proxies for this variable:

- the consumer/retail price index in the host country;
- the exchange rate; and,
- tourists' cost of living index for in the host country.

Using European and North American travel data, Martin and Witt evaluate the relative effectiveness of these measures as explanatory variables for tourism flows.

While in principle, and index of tourists' cost of living is superior, in practice it is not because of the cost of collecting the data. Martin and Witt (1987, p. 245) find: 'The empirical results presented in this study do not provide evidence of [its] clear superiority, but rather indicate that the consumer price index (either alone or together with the exchange rate) is a reasonable proxy for the cost of tourism. Exchange rate on its own is not an acceptable proxy'. Note that this contribution is also relevant to Part VI of this book.

In Chapter 10, in this book, Martin and Witt (1988) continue to develop and elaborate on economic aspects of tourism demand using international tourism as a testing ground. They find that for international tourism involving selected European countries and North American countries, that variations in relative tourism prices do result in travel substitution but that the degree of response varies with circumstances which they specify.

Martin and Witt (1987, Ch. 11 in this book) explore a rather different question to those considered earlier by them. Using ANOVA and Scheffé tests they concluded that 'several of the simple [short-term forecasting] methods produce more accurate forecasts than econometrics; this finding is supported by an examination of the accuracy of commercially available econometric forecasts of tourism, where the naive 'no change' model forecasts more accurately in 70% of the cases' (Martin and Witt, 1989, p. 407).

Witt and Witt (1995) continue to explore this aspect in Chapter 13 of this book, but more comprehensively than in Martin and Witt (1989). While this later review confirms their earlier findings about the relative accuracy of predictions from econometric models for forecasting tourism demand compared to naive forecasting models for predictions one year ahead, the later article adds some qualifications. Econometric models are likely to be valuable for scenario-type analyses. Furthermore, naive forecasting models are usually less able to predict turning points than econometric models. It can be crucial to predict turning points or changes in trends with some degree of accuracy. They endorse the view that the best forecasting method to adopt depends upon the purpose for which the forecast is to be used.

Clewer, Pack and Sinclair (1990, Ch. 11 in this book) use a structural time-series model and compare its results with those for the application of the Box-Jenkins forecasting model apply it to foreign tourism in three areas of Spain. They argue that structural time series analyses are superior in a number of respects to the Box-Jenkins ARIMA models. They are less costly to apply than multiple regression models. Nevertheless, they do have the disadvantage of not being able to be manipulated to consider the impacts of different scenarios and their ability to cope with structural change in tourism is unclear. They need if possible to be supplemented by other methods.

In Chapter 12, Smeral, Witt and Witt (1992) address the difficult question of how the creation of a single internal market for commodities by the European Community (EC) at the end of 1992 might affect world tourism. Because of the large structural changes which were expected to occur, they used econometric modelling to make their forecasts. They utilise a complete system of demand equations, adopt a linear-expenditure system for simplicity and assume a two-stage budgeting procedure, a general procedure which incidentally is criticised by Morely (1992) – see Chapter 57 in this book.

Syriopoulos and Sinclair (1993, Ch. 14 in this book) provide a useful introduction to models using systems of equations to estimate tourism demand compared to the traditional single equation approach. They apply the almost ideal demand system (AIDS) which uses a particular system of equations, but other approaches to specification of such equations are available. In the past, most empirical studies of tourism demand have been based on single equation specifications. Syriopoulos and Sinclair (1993, p. 1542) explain:

"System of equation models differ from single equation models in that, whereas the latter explain the responsiveness of the level of demand to changes in explanatory variables selected on an *a priori* basis, the former explain the allocation of a consumer's (given) level of expenditure (budget) among different types of tourism expenditure, subject to utility maximization. Thus, the systems of equation models provide the elasticities of budget shares to changes in relevant explanatory variables'. Various assumptions are needed for application of the system of equation models as indicated by Syriopoulos and Sinclair such as separability of consumer expenditure by

commodities. Expenditure is assumed to be allocated in stages, generally two- or three-stages in practice. Syriopoulos and Sinclair apply the AIDS model to the third stage of budget allocation, namely budget allocation to tourism destination within the Mediterranean region. Note that the first stage involves the consumer's budget allocation between tourism expenditure and non-tourism expenditure. The second stage involves allocation between the Mediterranean region and all other regions. Then follows the third budget allocation as mentioned above.

They found own and cross price elasticities to be important influences on the allocation of tourism budgets within the Mediterranean. Nevertheless, in their conclusion, they also indicate some limitations of the AIDS model in practice and suggest that it be used as a supplement rather than a substitute for the single equation approach.

Crouch (1994a, b; Chs 15 and 16 respectively in this book) completes a comprehensive review of methods and variables considered over a 30-year period in studying factors influencing on international tourism demand and summarizes and reviews the main findings. He points out that 'in view of the diversity in research findings, it is clear that caution should be exercised in using the findings of past research in ways that are alien to the circumstances characterizing their derivation' (Crouch, 1994, b., p. 21). These papers are complemented by two others by Crouch – Crouch (1995 and 1992; Chs 18 and 56 respectively in this book).

Syriopoulos (1995, Ch. 17 in this book) develops the analysis of the demand for Mediterranean tourism in a rather different direction to Syriopoulos and Sinclair (1993, Ch. 14 in this book). A single equation model is used so that account can be taken of short-run dynamics as well as long-run effects of changes in economic variables likely to affect tourism in the Mediterranean. This article complements the earlier AIDS application in Syriopoulos and Sinclair (1993) and more or less reinforces the conclusions from this earliler study regarding elasticities of demand.

In Chapter 18, Crouch (1995) undertakes the major task of synthesizing the results (empirical findings) from 80 studies of international tourism demand using meta-analytical techniques. He finds that estimated demand coefficients (industry elasticities) are relatively situation-specific. Thus, empirical generalisation across countries does not seem possible. He suggests that more research is needed to discover factors which give rise to differences in tourism demand

elasticities between countries and regions.

As can be seen, most economic studies on tourism demand and forecasting have concentrated on international tourism. Further articles with this focus occur in Part VI of this book. Forecasting of domestic tourism demand appears to be relatively neglected even though domestic tourism accounts for the bulk of tourism demand in most countries. However, the type of models applied to international tourism can be adapted to study domestic demand for tourism in different regions of a country. Demand for different types of tourism products can also be investigated by applying conventional economic analysis.

The econometric models of tourism demand discussed are based on conventional economic demand theory. Influences of factors such as life-cycles are not considered. This suggests that most of these models are intended for short- or medium-term forecasting, rather than for long-term forecasting of tourism demand. Opperman (1995, Ch. 19 in this book) discusses the possibility of using models and empirical data on travel life-cycles to estimate the composition of long-term demand for tourism products. He distinguishes between two types of travel life-cycles, namely the destination area life-cycles, such as that suggested by Butler (1980 and reproduced in Ch. 71 of this book) and the family life-cycles. The latter suggest that the demand of consumers for commodities is significantly influenced by their age and the stage of their family life. An example from economics is the life-cycle hypotheses of Ando and Modigliani (1963) which relates saving and dissaving to the age of individuals. Studies in Germany by Becker (1992) indicate that the destinations for travel by Germans are significantly influenced by their ages. For example, 'the data suggest that younger people tend to leave Central Europe more often than older persons', but that there is a small dip in overseas travel in the 34–48 age group which may be related to the presence of dependent children and the extra costs of taking them on such trips. This suggests that broadly speaking, when average distance travelled for holidays or vacation is plotted against the age of an individual, the relationship tends to be bimodal. The relationship appears to be like that shown in Figure 1.1. On the other hand, participation in 'adventure' holidays may be unimodel when its relative frequency is plotted against age, with the maximum occurring for youth or in the under 30 age group. However, the age-related pattern of travel and tourism may be undergoing shifts between generations. The predictive ability of the observed cycles will depend on their stationarity. Longitudinal as well as cross-sectional life cycle studies

can be useful. They can, for example, be valuable in identifying barriers to tourism at different ages and in different family situations. Tourism providers may be able to tailor their services to reduce such barriers and so expand their sales. But, apart from such managerial applications, product life-cycles may provide a basis for predicting alterations in long-term demand for tourism as the age structure of a population alters or as family patterns change. Changing age structures of human populations are relatively predictable. For instance, most developed countries will have an increasing proportion of aged persons in coming years and this is likely to alter the demand for products including tourism products.

INSERT FIGURE 1.1

Despite the fact that considerable effort has been put into the study of tourism demand and its forecasting, there is scope for much more research, especially as far as tourism demand in the long-term is concerned. The emphasis on short- to medium-term forecasting may be a result of research biases introduced by the market and political systems. Some of these demand studies may benefit from consideration of alternative approaches to those commonly used in economics, for example, life-cycle modelling, market segmentation analysis, and introduction of new variables to allow for institutional and life-style changes such as changes in working patterns, holiday availability and so on.

1.4 SUPPLY-SIDE ASPECTS OF TOURISM: INDUSTRIAL ORGANIZATION AND ISSUES IN MANAGERIAL ECONOMICS (PART III)

Much less systematic research has been completed about the supply-side economic aspects of tourism than about tourism demand and the forecasting of the demand for tourism, including tourism services. One of the reasons for this, as pointed out by Smith (1994, Ch. 26 in this book) is the complexity and heterogeneity of tourism as a commodity or product. This limits the application of standard microeconomic models to the tourism industry, e.g., use of production, cost and supply functions, but does not completely rule out their application as is apparent from the contributions of Arbel and Ravid (1983, Ch. 29 in this book), Fujii et al., (1995, Ch. 34 in this book), Mak (1988), Hiemstra and Ismail (1992, Ch. 35 in this book) which concentrate in part on the supply of hotel rooms in response to changes in the level of costs experienced by hotels, for example, as a result of higher energy prices or the imposition of tourist room taxes.

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Often supply-side factors influence the nature of industrial organization in an industry but demand-side characteristics can also have an impact. Contributions in Part III highlight industrial organizational aspects of the tourism industry (or of important sub-sectors within this industry). Industrial structures are shaped to a large extent by the supply-side characteristics of industries. For example, Dunning and McQueen (1982, Ch. 20 in this book) provide data on the nature and importance of multinational corporations in the international hotel industry and outline the economic factors favouring their presence. McVey (1986, Ch. 21 in this book) discusses the growing interest and dominance of large hotel chains in Europe and their consequences for the spatial distribution of tourism, and Go (1989, Ch. 22 in this book) examines market concentration in the hotel industry. Baum and Mudambi (1995, Ch. 23 in this book) suggest that at least in some markets, the international total industry engages in oligopolistic pricing. Sheldon (1986, Ch. 24 in this book) presents a fascinating industry analysis of the tour operator industry in the United States based on a number of features such as cost of entry and exit from the industry.

As technology changes, cost conditions and competitive conditions in the tourism industry alter. Sheldon (1983, Ch. 25 in this book) traces out some of these industrial impacts. Smith (1994, Ch. 26 in this book) provides interesting perspectives from the supply-side about the tourism product, a perspective which highlights the varied attributes of the products which are being supplied.

The contributions by Kotas (1982, Ch. 27 in this book) and by Beals and Troy (1982, Ch. 28 in this book) are of interest primarily from the point of view of managerial economics. Kotas' article has its roots in accounting-type analysis and that by Beals and Troy stems from managerial/marketing type analyses of an applied nature. Each incorporates, at least implicitly, assumptions about economic relationships of consequence for the profitable operation of hotels and for the commercial prospects for new hotels.

The last contribution in this part takes a more traditional economic approach to estimating supply and demand conditions in the hotel industry. Arbel and Ravid (1983, Ch. 29 in this book) model supply and demand conditions for room nights sold by US hotels and motels using Cob-Douglas

functions in order to estimate the impact on their sales of rises in energy prices. This article provides one of the earliest econometric analysis of supply and demand relationships in the hotel industry.

Let us consider each of the individual contributions of Part III in more detail.

Dunning and McQueen (1982, Ch. 20 in this book) find that multinational corporations are very important in the international hotel industry and exert a high degree of control over this international tourism segment of its industry. Control is relatively concentrated. For instance, 81 multinational enterprises in 1978 'controlled' 95 per cent of all hotel rooms having a foreign association. Furthermore, they found that 26 transnationals accounted for 78 per cent of the estimated total number of foreign-owned or associated hotels.

Transnational corporations involved in control of foreign hotels generally have their base in developed countries. For example, United States-based transnational corporations accounted for 56 per cent of rooms of transnational associated hotels with the UK- or France-based corporations accounting for another 25 per cent of the rooms. While the lion's share of foreign associated hotels were connected to developed country, the majority of their hotels (about 53 per cent) were located in developing countries. Developing country hotel chains (e.g. India) accounted for less than 4 per cent of foreign associated hotels abroad whereas developed countries (mostly, USA, France, UK, other European and Japan) accounted for over 96 per cent of such hotels. About one-third of the transnational hotel chains had close associations with airlines.

Why does the hotel industry have the above type of structure? Dunning and McQueen (1982) suggest that a satisfactory explanation might be found in Dunning's eclectic theory of international production (Dunning, 1979). "According to the theory, an enterprise with headquarters in one country will have some form of involvement with firms outside their national boundaries whenever they have a competitive or *ownership* advantage over other firms (whether domestic or foreign) and can combine their advantage with resources *located* in foreign countries and which are attractive to the MNE [multinational enterprise]. In the process of producing goods and services, firms carry out many other activities, including marketing,

training of labour, design and development of products, all of which are interdependent and linked through flows of intermediate products, which mostly take the form of knowledge and expertise. For various reasons, it is difficult to organize efficient intermediate product markets and thus there is a strong incentive for firms to *internalize* these markets, by acquiring control over resources either through ownership or equity capital or through contracts" (Dunning and McQueen, 19892, pp. 82–83). This internalization process gives rise to MNEs, which may increase market concentration and economic efficiency. Dunning and McQueen argue that foreign-owned hotel chains are usually more efficient in production than indigenous hotels, and may be able to protect their competitive advantage by easier access to new technology e.g., computing/electronic technology, registered brand names and superior connections with particular airlines, railway or coach operators.

There is another very important factor which arises in relation to MNEs in the hotel industry. For many customers, overseas hotel accommodation is an 'experience good' rather than a 'search good'. Normally foreign hotel accommodation is not inspected in advance and the nature of it only becomes fully apparent when it is tried. In the case of many tourists, it is not a repeat experience. So this means that tourists seeking accommodation overseas have imperfect knowledge of the accommodation available. Furthermore, tourists from developed countries may have much poorer knowledge about lodgings in less developed countries (LDCs) than in developed ones and the cultural gap is often wider between developed and less developed countries compared to differences between developed countries. Therefore, many travellers will prefer to use a chain which ensures a relatively standardised product everywhere of a known quality, especially when they visit LDCs. This may help to explain why MNEs based mainly in developed countries hold such a large proportion of hotels in LDCs relative to their total portfolio of hotel holdings. In addition, hotel chains headquartered in developed countries probably have more effective networking e.g., with airlines, than hotels based in LDCs and individuals in higher income countries travel more frequently than those in LDCs. Large hotel chains based in more developed countries are also continually involved in research and development (product development) and training and are able to achieve significant economies of scale in advertising and promotion.

Dunning and McQueen (1982) point out that hotel chains do not need equity investment or

substantial equity investment in foreign hotels in order to have a controlling interest and earn rents. Licensing, franchising, management and rental agreements can be used effectively for this purpose. Dunning and McQueen suggests that in the case of hotels, (and no doubt this extends to many other ventures associated with tourism), governments should be aware that to a greater extent than in manufacturing, MNEs can control foreign hotels by a wide range of methods other than by equity investment. Governments should be "conscious of the possibility that existing laws controlling foreign involvement may be based on the assumption that foreign direct investment is required and may therefore be inadequate to monitor contract-based control by MNEs" (Dunning and McQueen, 1982, p. 90).

McVey (1986, Ch. 21 in this book) surveyed the expansion plans of European international hotel chains and found that these were directed towards larger cities. There is concern that this pattern will stifle the growth of tourism in smaller urban countries and more remote locations. This urban-based pattern of development has also tended to be followed by retail goods chains and finance companies and is partially a reflection of improved transport possibilities.

Go (1989, Ch. 22 in this book) highlights possible trends in the structure of the international hotel industry. He observes: "As a result of the fact that the bulk of international travel takes place in the developed areas of the world, more than 80% of the world's hotel rooms are located in Europe and North America. These regions are the home to the world's leading 'corporate' lodging chains and the emerging majors in the international hotel industry which 'drive' the global lodging sector. Headquarters of these corporations are based in the USA, the UK, France and Japan. Furthermore, hotel management companies situated in Europe and North America strongly influence the development and direction of the hotel industry in less developed nations' (Go, 1989, p. 195). These observations accord with those of Dunning and McQueen (1982), discussed above.

However, Go (1989) makes several interesting additional observations. He points out that commercial hotels (and similar establishments) face considerable competition from supplementary tourist accommodation, e.g., youth hostels, holiday homes, rental apartments, guest houses, etc. Overall, such accommodation is estimated to be used by about half of all holiday makers. In addition, he notes that global demand for hotel rooms is now expanding at a slower rate than three decades ago and that although hotel stock has expanded, occupancy rates

are stagnant. The rate of global growth of hotel rooms in recent years has been slower than the global growth rate of population and GDP. This he attributes to:

> "·   faster and more frequent transport possibilities;
> ·   the availability of substitutes that 'drain' potential room nights away from the hotel industry; and
> ·   price elasticity of demand" (Go, 1989, p. 196).

Each of these influences are comprehensively explained, for example, 'self-catering' travel accommodation is increasingly being substituted for hotel accommodation by travellers.

The international hotel industry controlled by multinationals is becoming more concentrated as a result of mergers. "Scale economies coupled with the need to have lodging facilities in key markets around the world, have been, in part, cause for recent mergers and acquisitions of HMCs [hotel multinational corporations]. As a result, the international hotel industry is evolving towards a group of 'mega-HMCs'" (Go, 1989, p. 197) and Go predicts that the "ownership of international HMCs will be increasingly in the hands of large conglomerates". Go also predicts important changes in marketing which will affect the structure of the industry. For example, brand names, well known to consumers, are likely to become of greater importance forcing "individual properties and smaller chains to change from one hand to another to build business" (Go, 1989, p. 197).

The US hotel industry already shows considerable market concentration (the 25 largest hotel corporations currently control about half of the US hotel rooms) and this concentration can be expected to grow. "Generally, small, mid-priced independents are being squeezed by rapid hotel chain expansion. Furthermore, internationalisation of the hotel industry will continue. "The international hotel industry is physically expanding, but in most cases supply is outpacing demand. Since costs continue to increase, this means – rising rates, falling occupancies, overall flat profits, and HMCs leaving industry or merging with larger corporations" (Go, 1989, p. 198).

As Go points out, the hotel industry also suffers competition from a variety of new sources as a result of new technologies, especially new electronic products. "For example, besides the effects

of substitutes such as faster jet transport, lodging sales have suffered in part, from more time and money being spent by customers on durables, including home entertainment products. Alternatives to travel, such as teleconferencing, video technology and other telecommunication tools such as telefax, have not yet proved to be significant competitors, but are sure to affect the way business will be conducted tomorrow..." (Go, 1989, p. 198). Furthermore, in intruding into new communities, Go claims that transnational hotel corporations will need to be more sensitive to local community concerns and needs, including environmental concerns, if they are to avoid political hostility which may threaten their business in such communities.

Baum and Mudambi (1995, Ch. 23 in this book) explore a somewhat different theme. They consider whether in Bermuda, there is evidence of oligopolistic hotel pricing. To do this, they concentrate on the pricing policies of the seven major hotels in Bermuda which account for 40 per cent of total accommodation units on the island They find that despite falling demand for tourism in Bermuda, the prices of accommodation in these hotels have been inflexible and that Ricardian-type pricing (the offering of substantial discounts, as low as marginal cost, to fill rooms which would otherwise be empty) has been avoided. They conclude that "drastic price cutting and potentially suicidal price wars have not been a feature of the Bermuda hotel industry over the period under analysis. While the oligopolistic nature in the large resort hotel sector is not the only contributing factor to this situation, its significance should not be underestimated" (Baum and Mudambi, 1995, p. 514). However, the prices used in the study are 'off-the rack' prices and do not appear to allow for discounts to tour operators and so on. Baum and Mudambi suggest that their analysis may also apply to hotel resorts in other island localities.

Sheldon (1986, Ch. 24 in this book) undertakes an analysis of the tour operator industry and applies a number of modern microeconomic concepts in doing so. She points out that, 'the tour operators' main function are primarily to reduce information and transaction costs for the consumer and to reduce promotional expenditures for suppliers' (Sheldon, 1986, p. 349). Many agents in other industries perform similar roles, for example, real estate agents.

Sheldon (1986) outlines the development of the tour packaging industry, its relative size and importance in relation to tourism generally and its structure in the US.

The tour operator industry tends to be polarised with a few firms accounting for a large share of the transactions of the industry. In the US about 3 per cent of tour operators (18–20) account for about 30 per cent of transactions. The market is even more concentrated in the UK with the five big tour operators controlling 60 per cent of the market. Apart from this feature, there are many small operators. It is an industry in which entry and exit are relatively easy and is characterised by a high rate of entry and exit of firms, usually the smaller firms. Sheldon regards it as a contestable market in the sense of Baumol (1982).

In relation to polarisation of the industry, Sheldon (1986, p. 358) finds that "volume is critical for the tour operator to gain good discounts from suppliers and thereby be price competitive. As volume begets lower prices, so lower prices beget more volume and the spiral continues. Once a firm is established and can generate a large volume through advertising, operating efficiency, or specialised knowledge of a destination, economies of scale are generated. These economies are found in both direct and indirect costs. Direct costs for the tour operator and those incurred with suppliers (hotels, airlines, etc.). These decrease proportionately with volume". Firms which cannot attain volume may survive by specialising in a particular market niche.

Sheldon (1986) suggests that new computer technology requirements may make it more difficult to enter the industry and increase the sunk costs of departure. On the other hand, growing internet-use may lead more and more tourists to bypass tourist and travel agents all together.

In an earlier article, Sheldon (1983, Ch. 25 in this book) explored some of the possible consequences for the hotel industry of new technology, including new electronic accounting systems and developments in telecommunications. These may reduce the variable costs of operating hotels. However, on the other hand, note that these technologies could increase the fixed-costs of hotels so requiring them to increase their level of capacity utilisation in order to break-even, as per the analysis of Kotas (1982, Ch. 27 in this book) for example.

If one is to study the supply-side of tourism in-depth then it is necessary to have a holistic conception of the tourism production process. Tourism supply involves a relatively complex product. Smith (1994, Ch. 26 in this book) decomposes this product into its elements and specifies the significant stages in this production process. This process of decomposition and

specification of production sequences is important for evaluating the product, improving the economic efficiency of its supply and tailoring it more closely to market demand.

Kotas (1982, Ch. 27 in this book) uses an accounting framework to consider the economics of operating hotels. While this approach may not satisfy economic 'purists' it nevertheless makes use of existing data and may be defensible on the grounds of bounded rationality (Cf. Tisdell, 1996). As pointed out by Baumol and Quandt (1964), it is only economic to refine data and decision-processes up to the point where the extra benefits from further refinement equals the extra cost. Usually this means that one stops well short of collecting 'perfect' information and adopting 'perfect' methods of decision-making. Consequently, rules-of-thumb can even be optimal given costs involved in decision-making itself.

We find that in fact a significant rule-of-thumb for hotel operations does exist. Lundberg, *et al.,* (1995) indicate that as a rule, a hotel needs to sustain about two-thirds of utilisation of its rooms if it is to break-even. Below this level of capacity utilisation, the hotel is likely to operate at a loss and above this level of utilisation, it will usually be operating profitability.

Kotas provides a case study of a European hotel which may be relatively typical. He finds that fixed costs are very high proportion of total costs compared to variable costs. He notes that "the high percentage of fixed costs results in a high degree of profit instability: a situation where each small change in sales volume has a substantial impact on the net profit of the establishment. In this situation, the maintenance of an adequate sales volume presents itself as one of the main aims of the business strategy of the hotel" (Kotas, 1982, p. 81).

Kotas (1982) assumes that total variable costs and the total revenue earned by a hotel will vary proportionately to its utilisation of capacity. The hotel which he considered had an occupancy rate of 72.5 per cent and he projects variable costs and revenue obtained at this level in a linear fashion to apply to other levels of occupancy rates of rooms.

The linear revenue and cost model which he considers takes the following form, where total revenue is R, *x* represents the percentage of rooms occupied, *p* represents revenue for each one per cent of rooms occupied, C indicates total costs, A is fixed costs and *v* represents variable

costs for each one per cent of rooms occupied:

$$R = px \ (0 \leq x \leq 100) \qquad (1)$$

$$C = A + vx \quad (0 \leq x \leq 100) \qquad (2)$$

Equations (1) and (2) are graphed in Figure 1.1 to give a break-even point of approximately $x =$ 66_ per cent. The break-even value is that for which R = C. Solving equation (1) and (2) simultaneously gives a break-even value of

$$x = \frac{A}{p - v} \qquad (3)$$

Clearly, if A increases, other things equal, room utilisation must rise to ensure that the hotel breaks even and must do so by a greater amount percentage, the smaller is the operating profit margin, that is, the difference between p and v.

INSERT FIGURE 1.2

In practice of course the revenue and cost curves for operating a hotel may not being completely linear. However, they may be close to linear for a range of operations in the neighbourhood of the estimates be derived from accounting analysis of the type described by Kotas e.g., the linear approximation *may be* relatively accurate in his case for the occupancy rates in the range 72.5 per cent ± 20 per cent. It is possible that as the occupancy rate approaches very high levels, e.g., 100 per cent, variable costs will increase at an increasing rate.

Kotas (1982) also undertakes profit sensitivity analysis which considers in effect the elasticity of profit in relation to a proportionate changes in the value of various economic and accounting entities. One has, however, to interpret his figures cautiously. For example, Kotas (1982, p. 83) finds that a 10 per cent increase in prices by the hotel would increase its profit by 8.7 per cent, other things equal. It would however, be important to consider the extent to which other things would remain equal. Volume of sales might fall for example. Clearly, economic analysis of demand conditions would be needed to decide this and to detail the extent of any possible fall in

volume of sales as a result of a price increase.

In essence, the analysis of Kotas (1982) is short run because it assumes a fixed scale of plant; that is a hotel with a given room capacity.

Beals and Troy (1982, Ch. 28 in this book) are concerned with somewhat longer-term issues than Kotas (1982). They are concerned with the economic evaluation of new hotels (how to determine whether the building of a new hotel is likely to be profitable) and criticise a number of techniques or methods which have been used in the industry to determine the economic prospects for new hotels.

They point out that the hotel feasibility reports generally have relatively short horizons. Usually hotel construction takes 2–3 years, and "the horizon of the financial projections is typically ten years from the estimated *opening date* of the hotel, although five-year projections are not uncommon". These feasibility studies generally commence with an examination of supply and demand conditions in the area where the hotel is to be constructed and then consider the marketability of the product, particularly its anticipated occupancy rate. In many cases, the value of the real estate created by the building of a hotel has to be estimated. Some investors in such properties are limited by fiduciary restrictions on the extent of their investments in real estate or in advancing mortgage loans. In the United States, for example, insurance companies may be required to "limit their participation in individual real-estate developments to a maximum of 75 per cent of the project's value" (Beals and Troy, 1982, p. 16). Beals and Troy discuss methods often used for such valuation but favour a present discounted income approach. Using this approach, the "value of the hotel is equal to all cash flows it generates *after all operational and fixed costs but before debt service and depreciation*, plus any residual value at the end of its economic life, discounted to their aggregate present value" (Beals and Troy, 1982, p. 17). Beals and Troy discuss the difficulties of deciding on an appropriate discount rate and provide some suggestions as to how this choice might be made. In a later article, Troy and Beals (1982) suggest some ways in which hotel feasibility reports can be improved compared to common current practices.

From the point of view of economics, the contributions by Kotas (1982) and by Beals and Troy

(1982) highlight the environment of bounded rationality in which business managers must operate. Uncertainty and the costs of decision-making restrict the application of pure economic theory as for example, developed by neoclassical economists. Nevertheless, in both cases one can see that such theory has relevance even though it cannot be applied fully.

Part III concludes with a contribution by Arbel and Ravid (1983, Ch. 29 in this book) which uses standard economic analysis to estimate both a function for the supply price (marginal cot of supply) of hotel accommodation in the United States and on the demand for such accommodation. Although their main concern was to model the impact of rises in energy prices on the hotel industry, their model provides information about the components of supply and demand for U.S. hotels and motels located in more than 400 different cities and towns and the data covers a period of 22 years (1957–78).

While initially they fitted translog functions to their data, they eventually opted for Cobb-Douglas functions, because these gave a better fit to the data. In their demand function, they suppose that the demand for U.S. hotel room nights depends on the prices of rooms, energy prices, for example, petrol (gasoline) prices, because most American travel by car to hotel/motel accommodation, on U.S. income levels, and the exchange rate for the U.S. dollar.

They find a relatively high own price elasticity of demand for hotel room nights, namely one of -1.67. This could mean that for each one per cent rise in room night prices, the quantity demanded declines by 1.67 per cent. This a much higher own price elasticity than that estimated by Hiemstra and Ismail (1993), discussed in the next section, who estimated an elasticity of -0.44 for the U.S. for the same relationship. In relation to rising energy prices, Arbel and Ravid, found an elasticity of 0.701 which implies that rising energy prices actually increase the demand for room nights. Several possible explanations exist for this 'perverse' result, for example, more accommodation nights have been substituted for travel. The demand curves revealed a high positive income elasticity of 3.30, that is for every 10 per cent rise in U.S. disposable income, the demand for hotel room nights increases by about 3.3 per cent, other things equal. Furthermore, a slightly positive elasticity of demand for hotel lodging was observed in relation to devaluation of the U.S. dollar.

In order to estimate the supply price (the marginal cost) of making hotel lodging available, prices of several different inputs were considered, apart from the price of energy. The supply price was found to be most sensitive to average weekly wages in the hotel industry (elasticity -0.44), next most sensitive to operating costs associated with physical promises, for example rent, insurance, rates, interest (elasticity -0.35), and then energy prices (elasticity -0.25). Arbel and Ravid found that the price of hotel accommodation increases by about 0.21 per cent for each 1 per cent rise in the energy prices payable by hotels. Other things equal, this price rise would reduce the demand for hotel accommodation by 0.35 per cent. On the other hand, they found that on the demand side a 1 per cent rise in energy prices increases the demand for hotel accommodation by about 0.701 per cent. Thus, they suggest that at market equilibrium, the U.S. would experience a net 0.35 per cent rise in the demand for hotel lodging (room nights sold), as a result of a 1 per cent energy price hike. They also found that occupancy rates of hotels have little impact on supply prices of accommodation. This result, by the way is similar to that obtained by Baum and Mudambi (1995) for the Bahamas (as discussed above) but could have a different genesis.

Mak (1988) points out that Arbel and Ravid (1983) did not specifically estimate a supply elasticity for the U.S. lodging industry. Rather they estimate the elasticity of the supply price of lodging for changes prices of important inputs employed in the hotel industry. Nevertheless, Mak suggest that the study of Arbel and Ravid implies a supply elasticity of hotel accommodation in excess of 11 and possibly even as high as infinity in the long run, as might reasonably be inferred from their use of the Cobb-Douglas function. Further discussions of supply elasticitieis for the lodging industry occurs in Part IV of this book.

In conclusion to the section, it may be interesting to comment on an observation by Go (1989) about excess capacity in the hotel industry. He notes that, globally, excess capacity has increased because supply of rooms has outpaced demand. If, in the long-term globally and broadly speaking, the hotel industry is monopolistically competitive in nature, then one would expect excess capacity to be normal in this industry (Cf. Chamberlin, 1950). If for example, normal profits are earned with about 70 per cent utilisation of hotel rooms, then in the longer-term, one might expect excess room capacity of around 30 per cent in hotels and for this to be sustained despite growing tourism demand. The broad pattern of development of supply of hotel rooms combined with excess capacity is consistent with the predictions of the theory of

monopolistically competitive competition.

1.5   PUBLIC FINANCE, PUBLIC ECONOMICS AND TOURISM (PART IV)

Public finance relates to the way in which governments finance their activities and may be regarded as a branch of public economics which is concerned with the economic practices involved in government and the economics of intervention of governments in economies e.g. the provision of goods and services by the government, their finance by the government, taxes and subsidies on commodities, and the rationale for such intervention. Tourism is often a subject for public policy and the tourism industry is affected in a multitude of ways by public policies some of which are specifically focused on the tourist industry. In some countries, these include hotel room taxes, special visa charges for international tourists, in some developing countries tax holidays (tax exemptions) and other concessions for investors in tourist facilities and government provision of complementary facilities, such as convention centres at subsidised rates.

Contributions in Part IV give consideration to such issues which overlap with contributions in later chapters e.g. Frechtling (1987), Ch. 42 in this book; Chs 58–61 dealing with economic welfare consequences of inbound tourism and of foreign investment in a nation's tourism industry. In addition, there is overlap with topics in much of Part VII, which deals with tourism in developing countries and tourism in economic development, and Part VIII, which covers sustainability and environmental aspects of tourism.

A large number of contributions in this part (Part IV) focus on government taxes on tourism, particularly room taxes and consider their likely impact on government revenue, their burden or incidence on the tourism industry and on tourists themselves. As we shall see, the issues are much more complex than may appear to be the case at first sight. Consider now the individual contributions in Part IV.

One of the first systematic studies of the economics of a hotel room tax was undertaken by Mak and Nishimura (1979, Ch. 30 in this book). They considered the possible impact of such a tax on (1) the decision by tourists about whether or not to visit Hawaii if such a tax is imposed, (2) how long they would stay, (3) the quality of the accommodation purchased in the area and (4) the impact of the tax on the level of expenditure by tourists on items other than lodging in Hawaii.

They found that the hotel room tax proposed in Hawaii at the time would have negligible effects on (1) visitor trip demands, (2) on length of stay by visitors, (3) quality of lodging purchased, but (4) would significantly reduce non-lodging expenditure by tourists. Thus, on the one hand, while State revenue revenues would be raised by the hotel room tax, a reduction in non-lodging expenditures would reduce State and county revenues dependent on such expenditures. Nevertheless, Mak and Nishimura predicted a *net* public sector revenue gain from imposing the hotel room tax; the revenue gain from the hotel room tax would outweigh the loss in tax revenue from other sources on account of lower expenditure by tourists on items other than lodgings. Interestingly enough Mak and Nishimura did not predict a loss in income by the hotel sector but only by those in the non-lodging sector providing commodities to tourists. However, in a later article, Fujii, Khaled and Mak (1985, Ch. 34 in this book) find that a hotel occupancy tax would have a negative incidence on the lodging industry, but possibly not a major one.

Hughes (1981, Ch. 32 in this book) examines cases for and against a tourism tax. Some of his arguments against the tax are criticised by Weston (1983, Ch. 32 in this book). One of the interesting matters which Hughes touches on is the ability of a tourism tax, such as a bed-night tax, to reduce 'congestion' and act as a rationing mechanism for tourism in a locality. Its effectiveness in that regard will depend significantly on the elasticity of demand for tourism in the area imposing such a tax. If demand is relatively inelastic, a considerable tax imposition may be necessary to reduce the quantity of tourism demand significantly. Note that the capacity of a tourist tax to raise public revenue can be expected to be opposite in relative size to its ability to reduce tourist numbers, that is to lower 'congestion' due to tourism.

It might be observed also that in some regions of Europe tourist taxes on hotel bednights are used to subsidise farming systems which are uneconomical but which preserve landscape values attractive to tourists. Hence, the tax is specifically used to subsidise farmers who provide a favourable externality for tourists.

Mary Fish (182, Ch. 32 in this book) considers the taxing of international tourism in West Africa on the basis that beach-based resort hotels in West Africa operate within a monopolistically competitive market structure. Fish (1982, p. 94) states: "This study specifically analyses the initial and final impact of added export taxes on beach resort hotels that function in a

monopolistically competitive structure. The tax structure must strike a balance between the financial requirements of the government and the need to ensure that the industry is not being priced out of the international market. The bargaining power of developing countries has to be assessed in the light of the high price elasticity of demand for travel and the competition at comparable sites."

Fish (1982) concentrates on the impacts of hotel land taxes and hotel bednight taxes arguing that in the West African situation their full incidence will fall on resort hotels due to the intensely competitive situation. However, she does not take full account of the long-run situation nor of the complete industry situation in her modelling so her results could be somewhat impressionistic. As Rae Weston (1983, p. 194) observes: "Mary Fish [1982] provides the only example [of an economic study] that assumes a room tax would be absorbed entirely by the operators, however, that assumption appears likely to be valid only in a resort area competing with several neighbouring resort areas where the room tax is the only source of price differential."

Fish (1982, p. 102) points out that beach resort developments in West Africa were very lucrative; returns appeared to be above normal, which is not typical of monopolistically competitive markets, a point seemingly not taken into account by Fish. Therefore, it may well be that the main reason for the absence of West African hotel land taxes and hotel bednight taxes was the intense competition between West African *governments* to obtain foreign investment in their hotel industries. A West African country with higher taxes on international tourism might expect to lose foreign investment in its tourism industry to its competing countries. This is borne out to some extent by Fish's contention that West African countries might gain by creating a regional tourism policy board (Cf. Dieke, 1995, Ch. 64 in this book) which, amongst other things, might allow these countries to collude in imposing common taxes/tax rates on international tourism.

Weston (1983, Ch. 32 in this book) pose the question of why hotel/motel room taxes are so ubiquitous. They are widespread throughout the world but not universal. She believes their popularity is due to the fact that they satisfy most requirements for viable or 'good' taxes: they are equitable, tax neutral or efficient, have low costs of collection, shows good growth potential, and fall to a large extent on non-residents of a locality. If their tax burden falls to some extent on

constituents, such taxes can be made more acceptable by tax spending which promotes the interests of those otherwise adversely impacted e.g. increasing government expenditure on government promotion of tourism.

Equity is said to be the case because those on high incomes usually pay more for lodgings and therefore would pay a higher room tax. Several studies (e.g. Mak and Nishimura, 1979; Fujii et al., 1985; Hiemstra and Ismail, 1993) indicate that the demand for tourist lodging is relatively price inelastic so demand for lodging is little affected by the tax. The tax may therefore have a relatively neutral impact on consumption of lodging. However, to the extent that non-lodging expenditure by tourists is reduced, the efficiency impact on neutrality of this tax is not zero. The cost of collection of the tax is estimated to be 1 - 5 per cent of revenue obtained and is considered to be small and the administration of tax collection of this tax is relatively easy. Tourism is (has been) a rapidly growing industry so such a tax has growth potential. The smaller the country or State, the more likely the tax will fall on international or out-of-State residents, or at least a substantial portion of it. To the extent that the tax falls on local residents, it can be made more palatable to constituents by earmarking a portion of the revenue collected for tourism promotion, or for improvement in or protection of tourist facilities which have common access and so on.

Fujii et al. (1985, Ch. 34 in this book) systematically consider the exportability of a hotel occupancy tax and compare this with the exportability of other tourist taxes. Tax exportability is concerned with the extent to which the incidence or impact of a tax can be shifted to individuals outside the jurisdiction that imposes it. The incidence of the tax has to do with the extent to which the burden of the tax is shared relatively between suppliers of the commodity which is taxed and those purchasing the commodity. Fujii et al. find that in Hawaii hotel occupancy rate has a high degree of exportability. They find that "two-thirds of a hotel room tax would be passed on to visitors in the form of higher prices. The remaining one-third is borne by the hotel industry" (Fujii et al., 1985, p. 173). In addition, they observe that since the owners of some hotels live outside Hawaii, some of the room tax which falls on hotel owners will be exported. Hotel room taxes have a high degree of exportability in the case of Hawaii. However, we should observe that in very large states or jurisdictions where domestic tourism is high, hotel room taxes would have a much lower degree of exportability e.g. if there was a common hotel room levy in the EU, its exportability would be much lower than in Hawaii.

Fujii et al. (1985) also examined the economics of selective taxes on non-lodging commodities typically purchased by visitors to Hawaii, such as food and alcoholic beverages consumed away from home, admission to specified spectator amusements and commercial participant amusements. They find that while a high proportion of selective taxes on these items would be passed on to buyers. Because a considerable portion of these buyers are also residents of Hawaii, taxes on these selected items would show less exportability than hotel room taxes. They find that "nearly half the tax imposed on restaurant meals and beverages would come from residents. The ratio would be less if the tax were imposed on amusements. Strikingly, a general excise/sales tax would generate more than twice as much revenue from residents as visitors" (Fujii et al., 1985, p. 174). Similarly, in most countries one would expect a value added tax (VAT) or goods and services tax (GST) to have a low degree of exportability.

At this stage, it is useful to digress and recall the basic theory underlying the incidence of sales taxes on commodities and consequences for the exportability. Consider the incidence of such a tax on buyers and sellers using Figure 1.3 for illustrative purposes.

INSERT FIGURE 1.3

In Figure 1.3, line DD represents the demand for the commodity in question, in this case lodging services, and AS represents the supply curve of the commodity. In the case shown, the responsiveness of demand to a rise in the price of accommodation is less than for the supply of such accommodation. So at the initial market equilibrium point, E_1, the supply curve exhibits greater elasticity than the demand curve.

Now for simplicity, consider the impacts of a specific sales tax on hotel rooms of AB per night. Since owners of hotels/motels must pay this tax directly to the government, this raises their private costs of supplying lodging services and the industry supply curve shifts up from AS to BC. Therefore, the equilibrium situation for the industry alters from E_1 to E_2. The price of accommodation rises from P_1 per night to P_2.

Thus the tax partly has an incidence on buyers because it raises the price of accommodation to them by $P_2 - P_1$. It also has an impact on sellers since it reduces the after tax price obtained by

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them by $P_1 - P_0$. Given that the demand curve is more inelastic than the supply curve, the greatest incidence of the tax is on buyers.

The government obtains the equivalent of the area of $P_0FE_2P_2$ from the tax. Suppliers experience a reduction in producers' surplus equal to the areas of the trapezium $P_0FE_1P_1$ and consumers experience a reduction in consumers' surplus equal to the areas of $P_1E_1E_2P_2$. If buyers are from outside the jurisdiction, it is likely in small states, the portion of the tax paid by buyers is exported, in this case an amount equal to the area of $P_1GE_2P_2$ of the tax revenue raised. If some owners live out of the state, then also a portion of the tax effectively paid by suppliers, an amount equal to the area of P_0FGP_1, is exported also.

If the commodity under consideration for a sales tax is also consumed by locals, Figure 1.3 can be adapted to show the proportion of the tax which will be paid by local buyers and non-local buyers. This can be done by splitting the total demand curve into its local component plus its non-local component. Fujii *et al*. (1991) consider cases for Hawaii where a substantial portion of commodities consumed by tourists are also consumed by residents of Hawaii, and suggest that because a large portion of these commodities is consumed by locals, the sales tax on these would show a considerable reduction in exportability.

Two important side-benefits to the economics of tourism flow from Fujii et al. (1985). They apply Deaton and Mullbauer's (1980) almost ideal demand system (AIDS), as discussed in Part II, to estimate the demand for lodging and other vacation goods in Hawaii and they provide an estimated supply curve for lodging services, one of the few such supply curves ever estimated. They found that the own price elasticity for lodging in Hawaii to be close to -1. The supply elasticity of lodging services was 1.976, close to two, that is relatively elastic. Given that the elasticity of demand at unity is less than the elasticity of supply at almost two, the main incidence of any tax on lodging is on buyers not suppliers, according to standard economic theory. This accords with what Fujii et al. found.

In a later study, Hiemstra and Ismail (1993) examine the incidence of room taxes in the United States on the lodging industry. They estimated the price elasticity for demand for lodging services to be -0.44, a figure lower than that estimated by Fujii et al. (1985) for Hawaii of -1, but a figure indicating a high degree of inelasticity of demand. They also estimate a supply curve for

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lodging services and derive an estimated elasticity of supply of 2.86, indicating that the long-term supply of lodging services is relatively elastic. This estimate compares with an estimate of 2.00 for the State of Hawaii by Fujii et al. (1985).

Given their estimates, Hiemstra and Ismail (1993) come to the conclusion that about six-sevenths of the total room tax is paid by guests and the remaining one-seventh is absorbed by the industry.

The papers reviewed above shed considerable light on the impacts of tourism related taxes on the tourism industry. In particular, the article by Fujii, Khaled and Mak (1985) is of central importance because it made important advances on several fronts in relation to the taxation of tourism services, estimates of demand for tourism services and the supply of lodging services.

There is however another public economics aspect to the financial situation of the tourism industry. Some governments offer investment incentives to prospective tourism developers. Wanhill (1986, Ch. 36 in this book) reviews such incentives and considers their relative attractiveness to investors. He states: "Governments around the world offer a wide range of incentives to developers by acting to reduce capital costs and operating costs and to improve investment security. This analysis demonstrates that high operating leverage is the principal source of financial risk and that grants to reduce initial capital costs are more effective in reducing risk. Apart from guaranteed investment security, most tourism incentives are unnecessary – the primary instrument should be the capital grant, or its equivalent in the provision of facilities" (Wanhill, 1986, p. 2).

One should of course also examine the economic welfare impacts of such incentives on the host country. In the case of economic incentives described by Wanhill as 'unnecessary', they create an uncalled for burden on the host country and provide rents to investors in tourism. We cannot dismiss rent-seeking as the objective of some politicians in host countries supporting special interests (Cf. Britton, 1982 Ch. 62 in this book; Bohman, 1996, Ch. 67 in this book) or the possibility of local politicians or residents being unaware of the real situation.

While the article by Airey (1983, Ch. 37 in this book) is now dated, it provides a useful outline of issues that governments typically find an interest in as far as the development of tourism is

concerned and these often become a basis for their intervention. His article draws heavily on an OECD study and lists the tourism issues of most frequent concern to European governments and most likely to result in their intervention. In the 1970s and early 1980s, the most frequently mentioned tourism issues were regional development, seasonality, consumer protection, balance of payments, social tourism, rural/green tourism and environmental protection. Issues do of course vary with the passage of time and from country to country but many of the above continue to be important issues in tourism. In some countries, foreign investment and foreign involvement in the domestic tourism industry appears often to be an additional significant issue.

Hartley and Hooper (1992, Ch. 38 in this book) raise several questions about government involvement in the tourism industry. Should the government be involved at all? Should its involvement in this industry be greater than in other industries and why? If the government should be involved, what areas of the industry should it be involved in and what areas should it avoid? What are the dangers or the risks of government involvement in the tourist industry? They use market failure and public choice analyses to discuss the issues involved.

Thus, it is apparent that the area of public economics and tourism covers a wide spectrum. The contributions in Part IV can only be indicative of the issues involved but they do provide a useful coverage of some of the more important issues. Furthermore, a number of the contributions in Volume II also have relevance to public economics even though their main focus is often in a different direction.

1.6   CONCLUDING COMMENTS

The contributions in this volume show how fundamental economic analysis, mainly microeconomics analysis, has been applied to the study of tourism. However, the application of such analysis is by no means a straightforward mechanical task. By comparison, Volume II involves greater use of macroeconomic-typic models and consideration of more complicated problems, for example, the role of tourism in developing countries and in development, questions involving sustainability and the environment, and complex issues in international economics.

Now that tourism economics has been more widely accepted as a worthy subject for study, and with its introduction as a subject in many universities, one can expect its more rapid

development. As Gray pointed out, economics can help to advance tourism studies, but in the opposite direction tourism research can help to advance economic analysis. Cross disciplinary interaction helps to cross fertilize ideas and is an antidote to inward-looking academic activity which in the end can result in intellectual sterility. It is hoped that the contributions in this book will indicate the virtue of going beyond narrow academic confines.

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Average distance
travelled in kms
by individuals
for their annual
holidays

Depression due
to family care

Decline due
to ageing
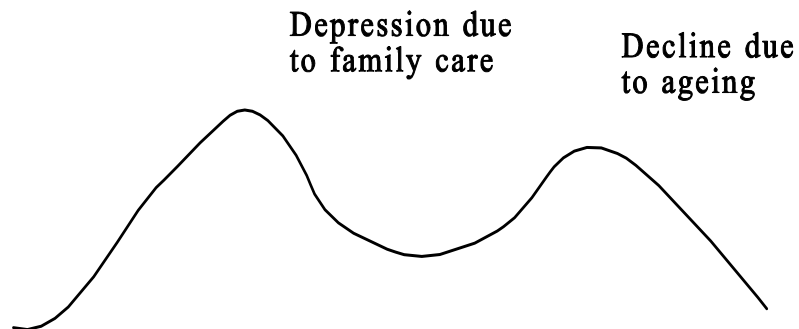
15

Age of individuals in years

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$

Total revenue
R = px

Break-even
point

Total cost
C = $A + vx$

A

Fixed costs

O

x

66

100

Room nights utilised (%)

Supply of lodging services