THE CASE FOR TOURISM PROMOTION:
AN ECONOMIC ANALYSIS

Larry Dwyer and Peter Forsyth

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AN ECONOMIC ANALYSIS

Larry Dwyer
University of Western Sydney, Macarthur

and

Peter Forsyth
Australian National University

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Summary

The case for tourism promotion has been discussed widely in Australia recently. However, it has not been subjected to rigorous economic analysis.

The paper begins by providing some information about inbound tourism promotion by Australia. It then proceeds to present a prima facie case for government support for tourism promotion using the standard economic justifications in circumstances of market failure viz externalities/non appropriability of benefits, risk and uncertainty and indivisibilities. The paper then goes on to discuss the benefits and costs of tourism promotion. A simple model of tourism demand is presented which enables consideration of the effects of tourism promotion in an economy with and without distortions. There are several distortions that could be present in any economy which would result in the resource costs of providing for tourists not being equal to their expenditure. The paper considers the marginal cost of government revenue exceeding its nominal value, the presence of distortionary taxes or subsidies on tourism services, positive and negative externalities, unemployed resources and the shadow price of foreign exchange not being equal to the market rate.

The paper concludes with an assessment of whether the benefits of inbound tourism promotion exceed its costs. The analysis, though highly tentative given uncertainty regarding impacts of promotion expenditure on tourism flows and tourism expenditure, suggests that additional promotion expenditure by the Australian government would produce net benefits to the economy. Further research is appropriate both to develop the theoretical analysis and to determine specific costs and benefits of inbound tourism promotion by Australia.
1. **INTRODUCTION**

Over the last decade many countries have experienced a rapid rise in inbound tourism. Among the various determinants of the decisions by foreigners to visit a particular country is that of promotion/marketing activity by tourism operators and government tourist commissions. The extent to which inbound tourism flows are responsive to tourist promotion overseas is uncertain but it appears that the relationship is a positive one. The debate over tourism promotion has involved questions such as should governments (State and/or Federal) support tourism promotion?; if so, to what extent?; and how will such tourism promotion be financed? Ignored to date are questions about the real costs and benefits of tourism promotion and the relative sizes of each. It is an aim of this paper to address these issues.

The following section of the paper provides some information about inbound tourism promotion by Australia. The objectives and functions of the Australian Tourist Commission are outlined as are the arguments advanced in the recent debate concerning the role of the federal government in tourism promotion. The standard economic justifications for government support of industry in circumstances of market failure viz externalities/non appropriability of benefits, risk and uncertainty, indivisibilities, are employed in the context of overseas tourism promotion to present a *prima facie* case for government support.

The next section of the paper discusses the benefits and costs of tourism promotion. The analysis is applicable to all countries. A simple model of tourism demand and supply is presented which enables consideration of the effects of tourism promotion...
in an economy with no distortions and an economy with distortions. The effects of
taxes levied to finance tourism promotion receive special attention. The final section
addresses issues in evaluating promotion and, in particular, attempts to assess
circumstances in which the benefits of tourism promotion exceed its costs. Preliminary
estimates suggest that additional promotion expenditure by the Australian government
would produce benefits in excess of costs. This may not be the case for some other
countries however. The framework of evaluation which is developed below can be
used to assess the benefits and costs of tourism promotion and hence determine
appropriate policy towards the tourism industry of various countries.

2. **INBOUND TOURISM PROMOTION IN AUSTRALIA**

2.1 **The Australian Tourist Commission**

For many years, State Governments in Australia have been directly involved in
the general marketing of tourism. Until 1967, the Federal Government provided
70 per cent of the funding for the promotion activities of the Australian National
Travel Association, a private sector organisation, now the Australian Tourism
Industry Association (ATIA). In 1967, the Federal Government established the
Australian Tourist Commission (ATC).

The ATC undertakes more than 300 separate projects annually. The main
thrust of its marketing activities can be divided into two categories vis consumer
marketing and trade marketing. Both activities are regarded as 'promotion' for
the purposes of this paper. In this activity the ATC competes for its share of
the tourist market, in a highly competitive environment with 175 other National
Tourism Organisations world-wide. The principal objectives of the ATC are similar to other National Tourism Organisations ie - to increase the number of visitors to Australia from overseas; to maximise the benefits to Australia from overseas visitors; and to ensure that Australia is protected from adverse environmental and social impacts of international tourism. As we shall see, increased benefits to a country from overseas visitors does not imply increased numbers of visitors and the first two objectives of the ATC are not necessarily consistent.

In 1990 the private sector spent an estimated $238.8 m in the international marketing of Australian tourism. This amount did not include an estimated $375.6 m in industry selling costs (eg commissions) which are associated with marketing Australian tourism products abroad, primarily carried by the larger organisations such as airlines and hotel chains, State/Territory tourism offices and inbound tourism operators. Industry currently spends an estimated $13.4 m, or about 15 per cent of its total discretionary marketing expenditure in cooperative marketing with the ATC. These industry contributions are in addition to the ATC base budget of around $40 m. The figures reveal that, while industry contributes around 20 per cent of aggregate ATC funding, the marketing and promotion of Australian tourism is overwhelmingly a private sector activity. (ATC 1991)

Promotion is just one of a variety of factors which are considered to influence tourism flows. The main determinants are thought to include disposable income, real exchange rates, airfares and relative prices (ground). Other
variables include marketing expenditure, disturbance factors (for special events), weather index, population, ethnic attraction/cultural ties, distance/travel time, total tourist expenditure, supply factors (hotel rooms, government assistance), trade/business links, tourist appeal, demographic factors and previous visitors. It appears that few studies of the travel decision making process have included marketing expenditure as an independent variable. Reasons for this include difficulties in obtaining accurate and detailed data in a form required to produce meaningful results, the problems in accounting for time lag and difficulties in modelling human decision-making. A recent study by the ATC to assess the effectiveness of its own marketing campaigns suggest that its activities have positively influenced numbers of inbound tourists and have acted in a catalytic fashion with other key variables in the decision-making process. (ATC 1991)

2.2 Government Funding of Tourism Promotion

Recently there was a vigorous debate in Australia regarding the role of the Federal Government in the promotion of the Australian tourist industry.

In its draft report on Travel and Tourism, the Industries Assistance Commission, now the Industry Commission, made clear its position that provision of selective assistance to a particular industry is generally inconsistent with the development of efficient internationally competitive industries and with efficient resource use in the economy. (IAC 1989) The Commission view was that any justification of continuing special assistance to the tourist industry by way of Commonwealth funding for tourism promotion through the ATC must rest on
two arguments. The first is that the resulting market failure would make it impossible for the ATC to organise sufficient funds to mount effective programs. The second is that withdrawal of Government support for tourism promotion would cause resources to move from tourism into less efficient industries. In the commission view such arguments could not be supported. The commission claimed, moreover, that the tourist industry would have a powerful incentive to organise some form of destination marketing and that the consequences of withdrawing Government funding for the ATC would not be serious.

The Commission draft report provoked a vigorous response from the industry. In essence the response consisted of three arguments: Firstly, if federal funding of the ATC were to cease, the marketing efforts of tourism operators would be so small as to impede the development of Australian tourism. Secondly, ATC programs provide a framework into which individual operators marketing activities can be integrated. The ATC is a necessary precondition for any significant international marketing of Australian tourism and such marketing could not be organised effectively within the private sector alone. Individual tourism operators feel unable to influence an individual’s decision to visit Australia rather than some other country, and there is a need for general rather than product specific marketing. Thirdly, previous attempts to fund promotion campaigns from industry contributions had been unsuccessful and the Commission view appears extremely optimistic in respect of convincing tourism operators of the likely benefits from collective action.

As a result of the industry responses to its suggestions that Government
funding for the ATC should cease, the Industries Assistance Commission, in its final report, indicated that it is now uncertain as to whether tourism operators could fund the ATC. It conceded the possibility that withdrawal of Government support for the ATC could reduce growth rate of inbound tourism and have adverse effects on the efficiency of resource use. The commission proposed that Federal funding for the ATC should be maintained for a period of five years, during which time the effectiveness of ATC programs should be evaluated and the scope for greater industry participation in overseas promotion should be explored. (IAC 1989a)

It is useful to link the sorts of arguments for and against government funding of tourism promotion with the standard economic justification of government support in circumstances of market failure and introduced distortions. Promotional expenditure can be considered to be an investment in future profits and benefits in the same way as is Research and Development. The economic justification for Government support of Research and Development is fairly straightforward (eg A.S.T.E.C. 1985 Appendix A) and it should prove useful to consider the relevant arguments in the context of tourism promotion. This exercise should enable us to put both the concerns of the Industries Assistance Commission and the industry responses into better perspective. The reasons for market failure are generally discussed by economists under three headings viz externalities/non-appropriability of benefits, risk and uncertainty, indivisibilities. In addition, the distortions relevant are discussed.
a) **Externalities/non-appropriability.**

Private firms undertake promotion activity when they are confident that they can appropriate sufficient benefits to earn an adequate return on their investment. A major possible cause of under-investment is that the tourism promoter often cannot appropriate enough of the benefits from the promotion to make it a profitable exercise, although the overall community benefits may exceed the costs. The existence of free riders may warrant government support for tourism promotion, particularly when the industry is ill-defined and comprises a large number of small firms.

While it is desirable that beneficiaries pay for promotion it is not always possible to determine precisely who benefits, or to what extent. The tourist industry faces considerable practical difficulties in organising independent funding of a coordinated promotion scheme. Beneficiaries of successful tourism promotions are spread throughout the whole community. There is scarcely a sector which does not experience an expansion of job opportunities and incomes whenever the tourist industry grows and ultimately these benefits flow to households. In its report the Industries Assistance Commission claimed that “Tourism operators who exported $5.2 Billion worth of services in 1988 would have strong incentives to promote their products if the Commonwealth did not do it for them”. (IAC 1989c) However, tourist expenditure is spread very widely and involves many firms which may not consider themselves as part of the tourist industry eg. supermarkets, chemist shops, movie theatres, etc. It is for these reasons that organisation of industry contribution toward cooperative funding for tourism promotion would present considerable practical difficulties.
b) Risk and Uncertainty

The levels of risk and uncertainty associated with tourism promotion in overseas countries may be such as to make it unattractive to the individual tourism operator. Commercial uncertainty and inability to predict the expected results, may lead to under-promotion of tourism products.

Individuals and firms typically are risk averse and prefer to invest in activities with low risks. Risk imposes a cost on a firm. This cost is equal to the premium that the firm is willing to forgo in order to have a guaranteed income (as a result of high and stable tourist flows for example). While, in principle, firms should be willing to pay to reduce risks, the free rider problem again emerges to restrict cooperative tourism promotion and information gathering. From the community viewpoint, however, the average rate of return on high risk promotion projects may be as good or higher than on lower risk projects. The problem of risk can be reduced by spreading the costs over a greater number of firms. As the number of firms cooperating in tourism promotion increases, the risk premium for each firm decreases. Just as public companies spread risk across their shareholders, governments which fund tourism promotion spread the risk among individual taxpayers. An efficient capital market provides an impartial means for individual firms to share their risk undertaking with other investors. In the area of research and development, deregulation of the capital market in Australia has enhanced the availability of venture capital with a broader range of institutions willing to acquire equity interests. In contrast, there appear to be some deficiencies in the Australian capital market as it
affects tourism. (Forsyth & Dwyer 1991b) It would appear that tourism operators have fewer opportunities for risk spreading than do innovative firms, thereby strengthening the argument for government support of tourism promotion.

Additionally, long lead times between expenditure on tourism promotion and increased tourist flows may contribute to under-promotion of tourism by the private sector, particularly if there are differences in time preferences between the private sector and society as a whole.

c) **Indisibilities**

The indivisibility problem occurs when the minimum outlay required to undertake an effective promotion campaign is beyond the resources of individual firms. Even when the expenditure is not significant in absolute terms, it may well be too large for many companies in a highly fragmented industry. There may well be a threshold level below which it is not possible to conduct an effective promotion campaign.

The market mechanism fails when industries are too fragmented or individual firms have insufficient awareness of the benefits to organise cooperative efforts. There is some evidence that the tourist industry in Australia is insufficiently aware of the potential benefits from cooperation in tourism promotion. (National Centre for Studies in Travel and Tourism 1990) Even when the benefits from cooperative research are recognised, competitive rivalry might preclude such
activity. Tourism is an interesting industry in this respect since, while some firms compete with each other (e.g., hotels in a certain region), others can each gain (e.g., hotels in different regions), as can different firms selling complementary products (e.g., a hotel and a cruise operation or attraction). The complex relationships among firms in the tourism industry, preclude clear-cut pronouncements as to their attitude towards cooperative promotion activity, even if the free rider problem is set to one side. (Forayth & Dwyer 1991b)

In consideration of arguments based on externalities/non appropriability of benefits, risk and uncertainty and indivisibilities it would seem that a prima facie case exists for government support of tourism promotion. The justificatory arguments do not in themselves offer guidance on the most appropriate level of support or the best allocation of government resources between competing demands. Nor do they determine how best to raise or to spend the scarce resources made available for tourism promotion. Alternative ways of financing government support for the ATC have been investigated recently and increased funding is to be derived in part from an increase in the departure tax. (ATC 1991) It needs to be realised that government support for the ATC must result in either increased taxes or in reductions in government expenditure for other purposes, and thus impact on resource allocation. We now turn to a more detailed consideration of the costs and benefits of tourism promotion.

d) Distortions to Market Prices

Apart from market failures, the case for or against tourism promotion depends
on whether market prices are accurate reflections of opportunity costs in shadow prices. When taxes or subsidies are present as market power is exercised, prices do not equal shadow prices. In addition, protection is granted to many Australian industries, creating a wedge between domestic and international prices. If tourists purchase highly taxed goods and output of lightly taxed goods is reduced, there is a desirable compositional shift in the economy. (the revenue from tourists is less than the cost of supplying them). In general, the goods and services consumed by tourists are not highly taxed relative to other exports, and this would not be a source of net benefit. The situation would differ if tourism were subject to a goods and services tax, but other exports were not.

One way of viewing the effect of protection is as creating a wedge between the market and shadow exchange rates. The expansion of tourism, an unprotected sector, will take place at the cost of a contraction in the protected sector, and this will be a desirable compositional effect. Thus, there can be a case for promoting tourism as lessening the distortions created by protection. This is really an example of "tariff compensation", and has been pointed out, (eg, by Warr 1979), much caution must be used in appealing to such arguments.

3. THE BENEFITS AND COSTS OF TOURISM PROMOTION

3.1 A Model of Tourism Demand and Supply
The tourism market is illustrated in Fig 1.

There are two sources of demand - domestic and foreign tourism. The demand
curve for domestic tourism is shown as $D_d$, and for the total of domestic and foreign tourism is shown as $D_t$. These curves show demand conditions for the country as a whole - typically a country has some market power, though this need not be true of the individual suppliers of tourism services, who can be taken as normally operating in a fairly competitive market. The relative importance of domestic and foreign demand differs from country to country. Demand elasticities differ, though estimates of around 1.0 are common. (IAC 1989a)

![Figure 1](image)

Promotion can be used to increase demand for tourism. Suppose that it is directed towards increasing foreign demand. It would result in a shift in the aggregate demand curve from $D_t$ to $D_{t2}$.

Supply is shown as upward sloping. It could be regarded as being dependent on two types of input. One includes tourism facilities and their operation, and this input is likely to be in elastic supply in the medium to long term. It involves construction, labour and produced inputs (e.g. food) used in the industry. The other input is in restricted supply - it incorporates those tourism attractions which are limited. This may be land near beaches, historic sites, areas of
natural beauty and the like. As tourism expands, hotels must be built further from the beach, and historic sites become congested. Tourism can increase, but at the expense of increased marginal cost. This results in the overall supply curve being upward sloping, as shown by S in Fig 1.

Equilibrium is shown where demand equals supply, and price equals marginal cost. Initially the equilibrium is at $E_1$ with price $p_1$ and output $x_1$. After tourism is promoted, a new equilibrium $E_2$ is established with a higher price $p_2$ and quantity $x_2$.

Tourism generates supernormal profits which can be considered as tourism resource rents. These do not accrue to the tourism industry as such, but rather to those who own the tourism resources in limited supply - the land owners, the owners of historic or beautiful sites. As a result of promotion, the rents rise from $AE_1p_1$ to $AE_2p_2$. Domestic tourists lose from higher prices. Thus the country as a whole can gain from promotion, but not to the extent that the owners of tourism resources gain.

3.2 Promotion in an Undistorted Economy

The country with market power in tourism services is analogous to a firm in imperfect competition (specifically, monopolistic competition - See Findlay & Forsyth 1988). It can be in its interest to promote its product, since it can gain greater profits if the demand is shifted outwards. While an individual country can gain through promotion, the world-wide effects on welfare are ambiguous, since tastes are changed (there is a similar problem in evaluating the welfare consequences of promotion by firms).

Suppose, firstly, an economy with no major distortions. Such an economy will still possess market power in tourism, which it can choose to exercise (i.e. the optimum tariff argument is relevant) - the price that should be charged for tourism, to maximise national benefits, is beyond the scope of this paper. Prices are everywhere set equal to marginal cost, and no externalities are present.
One issue concerns who should do the promoting. The gainers from promotion are the owners of tourism resources (including resources not currently being used, e.g. land not yet developed). These owners are diverse, but if they could organise their promotion, they would. However their diversity may give rise to a free rider problem. If this is so, there is a case for the government to undertake the promotion.

However, the existence of a free rider problem is not a sufficient condition for government provision to be warranted. Promotion involves benefits, and costs. There is the obvious financial cost of the promotion. In addition there is the loss incurred by domestic consumers. Referring to Fig 1, the net gains from promotion are the gross gain in tourism resource rents, \( P_1 \cdot E_1 \cdot E_2 \cdot P_2 \), less the loss of surplus by domestic tourists, \( P_1 \cdot BC \cdot P_3 \) i.e. there is a net gain of \( B \cdot E_1 \cdot E_2 \cdot C \). The higher the proportion of domestic to foreign tourists, the lower this net gain from promotion will be.

Indeed, in the case where the free rider problem does not prevail, it is possible that government intervention might be warranted to discourage promotion. Owners of tourism resources will gain \( P_1 \cdot E_1 \cdot E_2 \cdot P_2 \), and will promote if the cost of promotion is less than this - they do not take account of the loss to domestic tourists. It is possible that the net gain to the economy \( B \cdot E_1 \cdot E_2 \cdot C \) is less than the cost of promotion, but that promotion will still be undertaken, since \( P_1 \cdot E_1 \cdot E_2 \cdot P_2 \) exceeds the cost. A ban on promotion would improve overall welfare for the economy. This case is more likely to occur the greater the ratio of domestic to foreign tourists.

The analysis above relies on what might be termed a direct "terms of trade" effect of increased tourism expenditure. (see Forsyth & Dwyer 1991a) Increased expenditure leads to a gain for the economy through a rise in the price of an export. In addition there could be an indirect terms of trade effect which works through the prices of other goods. Additional expenditure raises the exchange rate, leading to an increase in the prices of other export goods for which the economy possesses. (though does not necessarily use), market power. The rise in the exchange rate lessens the impact of tourism promotion
on tourism directly, and its impact on tourism expenditure is ambiguous, but it will result in a beneficial indirect effect. (Adams & Parmenter 1991)

3.3 Promotion in a Distorted Economy
There are several distortions that could be present in an economy which would result in the resource costs of providing for tourists not being equal to their expenditure. Thus additional expenditure could bring net benefits or costs to the economy (they are discussed in detail in Forsyth & Dwyer 1991). Some that can be considered here are (a) the marginal cost of government revenue exceeding its nominal value (b) the presence of distortionary taxes or subsidies on tourism services (c) positive and negative externalities (d) unemployed resources, and (e) the shadow price of foreign exchange not being equal to the market rate.

(a) The Marginal Cost of Government Funds
To raise revenues, governments must impose distortionary taxes, and thus the marginal cost of raising $1 in revenue could be well above $1 (for an Australian application, see Findlay & Jones 1982). Thus, if the burden of tourism promotion falls on the government, and if it raises revenue from its normal sources, the cost to the economy of tourism promotion will exceed its nominal cost. To assess the merits of promotion, it would be necessary to compare this adjusted cost with the benefits.

(b) Distortionary Taxes on Tourism
Consider next the case where tourism is subjected to a tax - this is illustrated in Fig 2. Such a tax may not be distortionary from the point of view of the overall economy - it may function as an optimal tariff - but it does raise the supply price above marginal cost. The supply curve shifts up from $S$ to $S + t$. Tourism promotion pushes the demand curve out from $D_1$ to $D_2$, and results in a shift from equilibrium $E_1$ (price $p_1$, output $x_1$) to equilibrium $E_2$ (price $p_2$, output $x_2$). As before, domestic consumers lose, and owners of tourism resources gain. However, this time, there is also a gain in taxes paid, shown by the area $F_1 F_2 E_2 E_1$. 

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The tourists are charged a price $p_2$, however it only costs $X_2 F_2$ to supply them. The gain from tourism promotion is greater than in the untaxed case. A further point is that the value of the additional tax receipts may exceed the nominal amount, if the marginal cost of government funds exceeds the nominal value, as discussed in (a) above.

Another way of looking at this issue is to relate it to shadow pricing formulae, such as the Harberger formula (for a discussion of this and alternatives see Boadway 1975). Additional tourism is provided for by additional production $X_1, X_2$, costed at marginal cost $(X_1 X_2 F_2 F_1)$ and foregone consumption by other consumer/tourists, $X_0 X_3$, which is costed at the price they would be prepared to pay $(X_0 X_3 E_1 G)$. To this must be compared the additional revenue from tourism, less that revenue that comes at the expense of domestic tourists.

![Figure 2](image-url)

If additional tourism is self-financing at existing tax rates, then it is worthwhile to promote. If the cost of promotion is less than $F_2, F_3, E_2, E_3$, there must be a gain to the economy since $BE_1 E_2 C$ cannot be negative. This only necessarily holds where tax rates are unchanged - it need not follow that self-financing promotion expenditures are worthwhile when
the rate of tax is increased so as to finance the promotion.

A qualification that needs to be made to this analysis is that general equilibrium aspects have not been considered. Increased tourism expenditures lead to rises in exchange rates and lower production of other tradeables. These too might have prices which diverge from marginal cost; if so a correction would need to be made. For example, if prices elsewhere exceeded marginal costs, the net gains from tourism promotion would be lower.

(c) **Externalities**

Externalities may be either positive or negative - suppose, for present purposes, tourism leads to negative externalities such as environmental degradation or congestion of facilities. This situation is shown in Fig 3. The industry supply curve is shown as $S$, however the marginal social cost, MSC, lies above this by an amount $e$, the cost of the externality. From an overall welfare point of view (including benefits to domestic residents and foreigners), tourism is excessive. In spite of this, tourism promotion can produce net benefits for the home economy.

*Figure 3*
This is because expansion of tourism still creates some benefits for the home economy. There is a net gain of $B_E E_C$, which is the additional surplus gained by owners of tourism resources. From this must be subtracted the amount $E_2 F_2 F_1$, which is the additional external cost. If the net amount of these is positive, and greater than the cost of promotion, the promotion would be worthwhile.

(d) **Unemployed Resources**

If an increase in tourism expenditure is provided for by the use of hitherto unemployed resources, the case for tourism promotion is stronger. In such a case, it is probable that the supply curve lies above the marginal social cost of provision of tourism services (market prices exceed the shadow prices of some inputs). The situation would be akin to that depicted in Fig 2, except that taxes are not the reason for the divergence.

The obvious candidate for an underemployed resource would be labour. It is possible that if there is unemployed labour, additional expenditure can be provided for by increased economic activity, and there need not be a corresponding reduction in output elsewhere in the economy. However, the mere existence of unemployment does not necessarily mean that increased expenditure is met with increased production - the result depends critically on how the labour market operates. Wages for particular groups of workers may be bid up, and workers may transfer from other industries to tourism. The result in terms of employment depends on what caused the unemployment - even with considerable unemployment, the impact of additional expenditure may not be to reduce unemployment by much. Arguments relying on the presence of unemployment, and an excess of market wage over shadow wage, or opportunity cost of labour, can be used to justify just about any expenditure or subsidy, and they should be deployed with caution.

It is interesting to note that, in several simulations, of the impact of
additional tourism using the ORANI model, it was assumed that real wages were constant, and that much of the additional expenditure was met by additional employment and economic activity. In these simulations (especially in IAC 1989a), gross domestic product rose significantly, and while this change cannot be equated with benefits, because it requires factor inputs to create, net benefits would have also been large, assuming that the reduction in unemployment was desirable, or that the market wage exceeded the shadow wage. In these simulations, there were substantial external benefits from additions to tourism expenditure, and if tourism promotion created these additions, there would be a very strong case for government financing of tourism promotion.

(e) Foreign Exchange Effects
In an economy with trade distortions present, it is possible that the shadow price of foreign exchange exceeds the market price. To the extent that tourism promotion leads to additional net earnings of foreign exchange, and its shadow price exceeds its market price, there will be a net benefit from promotion. To estimate this benefit, it would be necessary to calculate the foreign exchange impact, which is given by the additional receipts of foreign exchange from the extra tourism expenditures (net of losses due to impacts of inputs necessary to provide for them), less the foreign exchange losses from domestic tourists who switch from domestic to foreign destinations because of the rise in domestic prices, and less the foreign exchange cost of promotion. This would be multiplied by the excess of the shadow price over the market price of foreign exchange; the resultant amount would be a net gain to the home economy.

3.4 Self-Financing Promotion
Thus far, it has been assumed that the host country is not attempting to make use of its market power in tourism, beyond promoting tourism. Setting prices equal to marginal cost is not setting the optimum tariff - the country can gain from levying taxes on tourism. The situation is complicated by the presence of both domestic and foreign consumers.
and to maximise the sum of domestic consumer's surplus, profit, and taxes, the government would need to levy a tax such that marginal cost is set equal to a sum of price (weighted by the domestic proportion of consumption) and marginal revenue from foreign tourists (weighted by the foreign proportion). With the competitive equilibrium, marginal revenue from foreign tourists is less than marginal cost, and the home country's welfare can be improved by levying a tax. Such a tax is not costless, since domestic tourists and tourism resource owners will be negatively affected by it. However, at the initial equilibrium, it will be arbitrarily close to zero, for small taxes, and it will be rising as the tax rate rises. Beyond the optimum tax, the welfare cost of extra revenue will exceed that revenue.

If there is a link drawn between the tax on tourism and promotion (i.e., the revenue is earmarked for promotion), then it will be the case that some positive level of promotion must improve welfare. This promotion will have the effect of transferring revenue from foreign tourists to the home country, and, at the margin it will have a zero cost. At the extreme, at the initial equilibrium there may be no foreign tourists, and the effects of the promotion on tourism expenditure may be very weak - in this case, the benefits from promotion would be arbitrarily close to zero. For a country which does not tax tourism, and which has some foreign visitors, it is very likely that the benefits from a small tax and promotion expenditure would exceed the (virtually zero) cost.

Thus said, it must be noted that there is no inherent reason why tax revenues from tourism should be earmarked for tourism promotion overseas - or any other specific purpose. If taxes can be levied on tourism without fear of retaliation, they should be levied at the optimum level no matter what promotion is undertaken. Such revenues should be used for the best available purpose, possibly to reduce other taxes if these are distortionary. In evaluating the case for promotion, the marginal cost of government funds, whether or not greater than their nominal value, should be used, since the funds, even if they are raised cheaply from tourism taxes, can be put to other uses.
The upshot of this is that tourism taxation issues, and promotion, should be considered separately. There is no reason, on efficiency grounds, to link them, and the best policy for each problem should, ideally, be adopted. A possible rationale for linking them might be that those who gain from tourism promotion should pay for it. Even granted that this rationale is rarely accepted in the context of other industries, it is hardly applicable in the present context. In the main, the domestic losers from a tourism tax, the domestic tourists, are also losers from the tourism promotion. The gainers from promotion, the owners of tourism resources, will only bear part of the tax.

It would be different if some form of "tourism resource rent tax" were imposed; however it would be very difficult to devise such a tax. Most tourism taxes proposed are levied on tourism products, and are paid in part by foreign and domestic tourists.

4. EVALUATING PROMOTION

In this section, we make an assessment of whether it is possible for the benefits of tourism promotion to exceed its costs. The results are highly tentative, because the impacts of promotional expenditure on expenditure are uncertain, and the net benefits that flow from additional tourism expenditures are even more subject to qualification. It is not possible, with present information, to draw upon reliable estimates of the parameters that are needed to evaluate tourism promotion. What follows is an attempt to give rough orders of magnitude. Although Australian data is used the framework applies generally.

4.1 Costs

Suppose the government spends $1m promoting Australia in overseas countries.

(a) Marginal Cost of Government Funds

If promotion expenditure is funded by the government from general government funds, as is the case at present in Australia, it will increase the need for additional distortionary taxation. One study of income taxation, suggested a marginal cost, depending on parameters assumed,
of $1.23 per $1.0 raised. (Findlay & Jones 1982) This estimate is taken as the basis for calculation. Thus, the welfare cost of $1.0m of government financial promotional expenditure is $1.23m.

(b) Shadow Price of Foreign Exchange
In Forsyth and Dwyer (1991a), an estimate of the maximum likely shadow price of foreign exchange for Australia was made, based on existing trade distortions. It was suggested that the shadow price would be unlikely to be above 1.045 (i.e. $1.00 worth of foreign exchange would be unlikely to be worth more than $1.045). A shadow price of 1.045 will be taken for these calculations.

Recognising the marginal cost of government funds and the shadow price of foreign exchange, the real cost of $1m promotion spent overseas approximates $1.275M (1.23m + .045m).

4.2 Benefits
(a) The Impact of Promotion
In a recent study (Crouch 1991), an estimate was made, based on an econometric demand study, of the impact of Australian foreign tourism promotion on tourism expenditures. This suggested that promotion expenditure of $1m would result in tourism expenditures of $30m. This estimate will be taken as the basis for calculations.

(b) Terms of Trade Effect
An estimate for Australia of the proportion of an increase in tourism expenditure which accrues as a surplus to the economy is given in Forsyth and Dwyer (1991a), this is based on assumed elasticities of supply and demand. It suggests that of an additional $1 of tourism spending, $0.053 will accrue as a net benefit - the rest of the expenditure will be accounted for in payment of factors (this is an upper estimate). Thus, an increase of $30m in expenditure will produce a net benefit to the economy of $1.59m. This does not make any allowance for exchange rate changes or indirect terms of trade effects as discussed in Section 3.
Shadow Price of Foreign Exchange

Net foreign exchange earnings to the nation will be less than gross foreign exchange earnings from the tourist expenditure. When tourism expenditure increases, a proportion will be spent abroad purchasing inputs. One estimate of this proportion is 17%. Using this, a $30m increase in expenditure will result in a net gain of $24.9m in foreign exchange. From this must be deducted any foreign exchange losses from domestic tourists who switch to overseas tourism when faced by a price rise. Based on previous estimates of the economic side effects of increased tourism expenditure (BIE 1983) the $30 million expenditure increase will lead to an increase of about $0.2 m in overseas tourism expenditure by domestic tourists. Overall the net gain from the initial $30m increase is $24.7m. The net benefit, from the shadow price of foreign exchange exceeding the market price, is 4.5% of this. This is a net gain of $1.11m.

Recognising the impact of promotion, leakages of foreign exchange, the terms of trade effect and the shadow price of foreign exchange, the net benefits to the economy will be $2.70m ($1.59m + $1.11m).

On these estimates, the nation gains $2.70m at a cost of $1.275m. It is concluded that additional expenditure by the government would produce net benefits using benefit-cost criteria.

It must be emphasised that this estimate is tentative, and is based on several assumptions. The data required to produce more reliable estimates do not exist. If anything, the benefits may be something of an overestimate. The overall impression is that the benefits of promotion are plausibly of a similar order of magnitude to the costs. It would be difficult to maintain that the benefits were many times larger, and that very much more expenditure is justified. It would be equally difficult to maintain that the benefits are insignificant, and that promotion is wasteful. This is a first estimate of the benefits and costs of promotion, and further refinement of the parameters on which it is based would enable better assessments.
5. CONCLUSIONS

While the traditional economic justifications for government support for an industry provide a *prima facie* case for government support of tourism promotion, the costs and benefits of tourism promotion have hitherto received inadequate attention in the literature. This paper represents an attempt to remedy this neglect. The model of tourism demand and supply as illustrated in figure 1 shows the rents accruing to tourism operators as a result of tourism promotion and the losses received by domestic tourists from higher prices. It shows that a country as a whole can gain from promotion but not to the extent of the gains to owners of tourism resources. While an individual country can gain through promotion the world-wide effects on welfare are ambiguous.

Consideration of the effects of tourism promotion on an economy with no major distortions shows that the existence of a free rider problem is not a sufficient condition to warrant government support. In addition to the financial cost of the promotion there are losses incurred by domestic consumers. The higher the proportion of domestic to foreign tourists, the lower the net gains from promotion to the country as a whole. Indeed, in the case where the free rider problem does not prevail, it is possible that government intervention might be warranted to discourage promotion. This applies to circumstances where the net gains to the economy are less than the cost of promotion. This case is more likely to occur, the larger the ratio of domestic to foreign tourists.

The analysis also showed that there are several distortions that could be present in an economy which result in resource costs of providing for tourists exceeding tourist expenditure. These distortions include the marginal cost of government revenue exceeding its nominal value, the presence of taxes or subsidies on tourism services, positive and negative externalities, unemployed resources and the shadow price of foreign exchange exceeding the market rate.

An attempt was also made to assess the benefits and costs of tourist promotion. The results must be treated as very tentative given that the impacts of promotion expenditure on tourism flows and tourism expenditure are uncertain, as are the net benefits flowing from additional tourism expenditure.
Nevertheless, some orders of magnitude can be determined and the analysis suggests that additional promotion expenditure by the government would produce net benefits using benefit-cost criteria.

Although the empirical analysis employed Australian data, the underlying theory is applicable to tourism promotion activity by all nations. Further research is appropriate both to develop the theoretical analysis and to determine specific costs and benefits of tourism promotion in different countries.
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