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**by**

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# Economics and Tourism Development: Structural Features of Tourism and Economic Influences on its Vulnerability*

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**June 2002**



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# Economics and Tourism Development: Structural Features of Tourism and Economic Influences on its Vulnerability


## ABSTRACT

To a large extent, economic factors explain the global growth of the tourism industry, the concentration of tourism in high-income countries, and the high degree of cross-border tourism between higher income countries themselves. This is discussed. In doing so, shortcomings of tourism statistics reported by the World Tourism Organisation are examined. These statistics can be quite misleading as a means of identifying the relative importance of tourism to different nations. This is shown by rank correlations and conceptually. Economics not only influences the geographical spread of tourism but it is a major determinant of market structures in the tourism industry. These industrial market structures, such as those involving monopolistic competition, combined with high overhead costs experienced by pivotal sectors of the modern tourism industry, make this industry highly vulnerable to sudden declines in demand for its services. These supply-side vulnerability factors are additional to those that contribute to volatility in the demand for tourism itself. Combined supply-side and demand factors have, in particular, made the international tourism industry highly vulnerable to shocks, such as terrorist attacks, unexpected political events and so on. Economic analysis can enhance our understanding of the factors involved.

# Economics and Tourism Development: Structural Features of Tourism and Economic Influences on its Vulnerability

## 1. Introduction

The size of the tourism industry is difficult to measure precisely because it is a composite industry involving airlines, hotels, restaurants, natural attractions and so on, many of which are also used by non-tourists. Globally, it is amongst the top three industries in terms of its contribution to economic activity. According to Sinclair (1998), tourism was the third largest activity in the world in 1996, surpassed only by oil and motor vehicles.

According to the definition accepted by the United Nations Conference on International Travel and Tourism held in 1963, tourists are "temporary visitors who spend more than 24 hours in destinations other than their normal place of residence, whose journey is for the purpose of holiday-making, recreation, health, study, religion, sport, visiting family or friends, business or meetings". Those who make journeys for less than 24 hours are designated as excursionists. However, the delineation of this latter group is far from precise.

The focus in this article is on international tourism, partly because statistical data and information about it globally is more readily available than for domestic tourism. In addition, many governments take a greater interest in international tourism than domestic because of the impacts of international tourism on foreign exchange reserves. Nevertheless, domestic tourism accounts for more that 80 percent of total tourism worldwide.

This article provides information about the growth of international tourism, examines its broad geographical distribution, and considers factors that influence this distribution. The countries that the WTO identifies as the top international tourist destinations are specified and limitations of its selection criteria are discussed.

The tourism industry, since it is a composite industry, involves a variety of market structures. Some sections of it are relatively concentrated and others are not. Evidence about industry structure is reviewed and cost and other conditions that make the industry highly vulnerable to demand fluctuations are outlined.

## 2. Growth in International Tourism and the Broad Geographic Distribution of International Tourism

Because the demand for international tourism tends to be income elastic (has an income elasticity of greater than unity) as, for example, supported by the review of Crouch (1995), the rate of growth in international tourism in recent decades has outpaced the rate of growth in global production. Other factors contributing to this result have been the falling real cost of international travel, the increasing globalisation of industry (this tends to increase business travel), and general improvement in communication systems.

In 2000, international tourist arrivals amounted to 699 million and receipts from international tourism equalled US$476 billion. Despite the repercussions of the September 11, 2001 terrorist attacks in the US, the World Tourism Organization (2001) still stands by "its previous forecast as set out in *Tourism 2020 Vision* of an average annual growth rate in international arrivals of 4.1 in the period to 2020. The number of international tourist arrivals is still expected to reach 1 billion by the year 2010 and 1.6 billion by the year 2020.

International tourism remains highly concentrated geographically. In 2000, Europe accounted for 57.7 percent of all international tourist arrivals and America (mostly the United States and Canada) for a further 18.5 percent. East Asia and the Pacific are next with 16 percent of arrivals, and the relative importance of this region is rising. On the other hand, the market share of Africa, the Middle East and South Asia were relatively low in 2000, as Table 1 indicates. By 2020, the WTO believes that the relative importance of Europe and America for international tourist arrivals will decline and that the relative importance of all other regions will increase. In particular, East Asia/Pacific will overtake America for second place as a destination (see Table 1).

**Table 1**

Market Share in Terms of World International Tourist Arrivals for 2000 and as Predicted by WTO for 2020

| Region | Market Share % | |
|---|---|---|
| | **2000** | **2020** |
| Africa | 4.0 | 5.0 |
| Americas | 18.5 | 18.1 |
| East Asia/Pacific | 16.0 | 25.4 |
| Europe | 57.7 | 45.9 |
| Middle East | 2.9 | 4.4 |
| South Asia | 0.9 | 1.9 |
| TOTAL | 100.0 | 100.0 |

*Source: WTO (2002)*

In America, the majority of tourist arrivals are accounted for by the United States, Mexico and Canada. In any case, it is clear that European and nations (such as the USA, Canada and Australia) in which a large proportion of the population is of European origin account currently for the bulk of international tourist arrivals. While their preponderance is expected to decline by 2020, they are still expected to receive the major proportion of tourist arrivals.

International tourist receipts also show a marked skew in favour of these nations. However, when international receipts are used to measure tourism, the relative share of Europe is significantly reduced whereas that for the Americas is increased substantially. Table 2 shows the comparative shares of the main geographical regions in the global international tourism market on an arrivals basis and on an expenditure basis.

**Table 2**
International Tourist Arrivals and International Tourism Receipts by Regions in 2000 by Market Share in Percent

| Region | Arrivals (%) | Receipts (%) |
|---|---|---|
| Africa | 4.0 | 2.2 |
| Americas | 18.5 | 28.7 |
| East Asia/Pacific | 16.0 | 17.3 |
| Europe | 57.7 | 48.6 |
| Middle East | 2.9 | 2.0 |
| South Asia | 0.9 | 1.1 |
| TOTAL | 100.0 | 100.0 |

*Source: WTO (2002)*

The largest number of international tourist arrivals travelled within their own geographical region. In 1995, they accounted for 82.1 percent of international tourist arrivals. Consequently, only 17.9 percent travelled between geographical regions, as identified in Table 2. While the WTO expects a relative increase in interregional travel to almost 25 percent in 2020, intra-regional travel is still expected to account for a little over three-quarters of all international tourist arrivals.

While shorter rather than longer journeys predominate when it comes to travel, one may wonder why Europe's share of international tourist arrivals is so high. While a number of factors contribute, one influence undoubtedly is the large number of nation states in Europe as compared to say the area of China or the USA. If the EU were to constitute a single nation, Europe's number of international arrivals would fall because a large number would then constitute domestic travel. Conversely, if all the provinces of China or states of the United States were to become separate nations, international tourist arrivals in the regions containing these nations would rise.

David Harrison (2001) points out a number of limitations of WTO statistics. He states "Tourism statistics constitute a minefield not to be entered lightly, and it is also necessary to be circumspect about other tourism data. Short flights across the Mediterranean from southern Europe to north Africa are examples of inter-regional travel, while a journey from north-west to eastern Europe may be considerably longer but remain within the region", Harrison (2001, p.9)

There is a tendency for international travel to be most intense between high-income countries, particularly when they have a high degree of cultural affinity. Gray (1992, 1970) seems to have been the first to point out this relationship. This observation resulted in the further observation that more developed countries tend to trade in like commodities rather than different commodities, whereas the latter is predicted if the law of comparative advantage holds (Gray, 1977). It is possible that the high intensity of tourism between higher income countries will decline but not be eliminated by 2020. For example, as China continues to experience economic growth, more tourists from high-income countries may visit it (cf. Wen and Tisdell, 2000).

According to Harrison (2001, p.11), it is also true that most tourists to less developed countries are from developed countries. Higher income countries are the major generators of international tourism.

Even if one accepts nations as the basis for determining the geographical importance of international tourism, statistics reported for nations can give a quite misleading picture of the relative importance of international tourism for each. This can be seen, for instance, by examining the statistics of the WTO for nations that constitute the world's major tourist destinations on the basis either of the number of their international tourist arrivals or international tourist receipts.

## 3. The Comparative National Importance of International Tourism – Observations Using WTO Statistics for Top Tourist Destinations

Higher income countries account for a disproportionately high share of global international tourist arrivals and an even higher share of international tourist receipts. They are also the major source of international tourists and of international tourist expenditure. Nevertheless, when we consider the world's top 15 international tourism destinations using numbers of international tourist arrivals and international tourism receipts as indicators, not all countries in this group are high income countries. China, for example, is a low-income country but in the top 15 on both scores. Mexico also is not a high-income country.

Table 3 ranks the world's top 15 tourist destinations in 2000 by their number of international tourist arrivals and Table 4 ranks those by international tourism receipts. While Poland and

Hungary are in the first set, they are not in the second set. Conversely, Australia and Turkey are in the tourism receipts table but not in the first set based on numbers of tourist arrivals.

**Table 3**
World's Top 15 Tourism Destinations
Ranked by Number of International Tourist Arrivals

| Rank | Country | International Tourist Arrivals (million) | | % Change 2000/1999 | Market share (%) 2000 |
|---|---|---|---|---|---|
| | | 1999 | 2000 | | |
| **1** | France | 73.0 | 75.5 | 3.4 | 10.8 |
| **2** | United States | 48.5 | 50.9 | 4.9 | 7.3 |
| **3** | Spain | 46.8 | 48.2 | 3.0 | 6.9 |
| **4** | Italy | 36.5 | 41.2 | 12.8 | 5.9 |
| **5** | China | 27.0 | 31.2 | 15.5 | 4.5 |
| **6** | United Kingdom | 25.4 | 25.2 | -0.8 | 3.6 |
| **7** | Russian Federation | 18.5 | 21.2 | 14.5 | 3.0 |
| **8** | Mexico | 19.0 | 20.6 | 8.4 | 3.0 |
| **9** | Canada | 19.5 | 20.4 | 4.9 | 2.9 |
| **10** | Germany | 17.1 | 19.0 | 10.9 | 2.7 |
| **11** | Austria | 17.5 | 18.0 | 2.9 | 2.6 |
| **12** | Poland | 18.0 | 17.4 | -3.1 | 2.5 |
| **13** | Hungary | 14.4 | 15.6 | 8.1 | 2.2 |
| **14** | Hong Kong (China) | 11.3 | 13.1 | 15.3 | 1.9 |
| **15** | Greece | 12.2 | 12.5 | 2.8 | 1.8 |

*Source: World Tourism Organization (2002)*

**Table 4**
World's Top 15 Tourism Destinations
Ranked by US$ Value of International Tourism Receipts

| Rank | Country | International Tourist Receipts (US$ billion) | | % Change 2000/1999 | Market share (%) 2000 |
|---|---|---|---|---|---|
| | | 1999 | 2000 | | |
| **1** | United States | 74.9 | 85.2 | 13.7 | 17.9 |
| **2** | Spain | 32.4 | 31 | -4.3 | 6.5 |
| **3** | France | 31.5 | 29.9 | -5.1 | 6.3 |
| **4** | Italy | 28.4 | 27.4 | -3.2 | 5.8 |
| **5** | United Kingdom | 20.2 | 19.5 | -3.4 | 4.1 |
| **6** | Germany | 16.7 | 17.8 | 6.5 | 3.7 |
| **7** | China | 14.1 | 16.2 | 15.1 | 3.4 |
| **8** | Austria | 12.5 | 11.4 | -8.7 | 2.4 |
| **9** | Canada | 10.2 | 10.8 | 5.9 | 2.3 |
| **10** | Greece | 8.8 | 9.2 | 5 | 1.9 |
| **11** | Australia | 8 | 8.4 | 5.3 | 1.8 |
| **12** | Mexico | 7.2 | 8.3 | 14.8 | 1.7 |
| **13** | Hong Kong (China) | 7.2 | 7.9 | 9.4 | 1.7 |
| **14** | Turkey | 5.2 | 7.6 | 46.8 | 1.6 |
| **15** | Russian Federation | 7.5 | | | |

*Source: World Tourism Organization (2002)*

The total number of international tourists to a country seems to be a poor indicator of the importance of tourist visits in relation to its population. Estimation of the Pearson rank correlation coefficient for nations in Table 3 ranked according to total number of international tourist arrivals and those tourist arrivals ranked according to number per 1000 of population of the host country (see Table 5) indicates that it is –0.36. So the correlation coefficient is negative and low. Again, the ranking of the top 15 international tourist destinations according to the total value of their international tourism receipts is poorly correlated with their rank based on tourism receipts per capita (see Table 6). While the Pearson correlation coefficient is positive, it is only r = 0.21.

**Table 5**
World's Top Tourism Destinations
Re-ranked Using Number of Tourists per 1000 Population

| Rank | Country | Population 2000 (millions)* | International Tourist Arrivals 2000 (millions)** | Tourists per 1000 population |
|---|---|---|---|---|
| **1** | Austria | 8.080 | 18.0 | 2,228 |
| **2** | Hong Kong (China) | 6.860 | 13.1 | 1,910 |
| **3** | Hungary | 9.968 | 15.6 | 1,565 |
| **4** | France | 59.238 | 75.5 | 1,275 |
| **5** | Spain | 39.910 | 48.2 | 1,208 |
| **6** | Greece | 10.610 | 12.5 | 1,178 |
| **7** | Italy | 57.530 | 41.2 | 716 |
| **8** | Canada | 30.757 | 20.4 | 663 |
| **9** | Poland | 38.605 | 17.4 | 451 |
| **10** | United Kingdom | 59.415 | 25.2 | 424 |
| **11** | Germany | 82.017 | 19.0 | 232 |
| **12** | Mexico | 98.872 | 20.6 | 208 |
| **13** | United Sates | 283.230 | 50.9 | 180 |
| **14** | Russian Federation | 145.491 | 21.2 | 146 |
| **15** | China | 1,275.133 | 31.2 | 24 |

* *Source: United Nations. 2001*
** *Source: World Tourism Organisation (2002)*

Footnote

| | | | |
|---|---|---|---|
| Australia | 19.138 | 4.946 | 258 |

Although Australia is not ranked in the top fifteen countries based on total international tourist arrivals, on these calculations it is ranked at number 11, ahead of Germany, when using tourist numbers per head of population.

**Table 6**

Worlds Top Tourism Destinations
Re-ranked Using International Tourism Receipts per head of Population

| Rank | Country | Population 2000** (millions) | International Tourist Receipts 2000*** (US$ millions) | International Tourist Receipts per head of population (US$) |
|---|---|---|---|---|
| **1** | Austria | 8.080 | 11,440 | 1,415.84 |
| **2** | Hong Kong (China) | 6.860 | 7,886 | 1,149.56 |
| **3** | Greece | 10.610 | 9,221 | 869.09 |
| **4** | Spain | 39.910 | 31,000 | 776.75 |
| **5** | France | 59.238 | 29,900 | 504.74 |
| **6** | Italy | 57.530 | 27,439 | 476.95 |
| **7** | Australia | 19.138 | 8,442 | 441.11 |
| **8** | Canada | 30.757 | 10,768 | 350.10 |
| **9** | United Kingdom | 59.415 | 19,544 | 328.94 |
| **10** | United States | 283.23 | 85,153 | 300.65 |
| **11** | Germany | 82.017 | 17,812 | 217.17 |
| **12** | Turkey | 66.668 | 7,636 | 114.54 |
| **13** | Mexico | 98.872 | 8,295 | 83.90 |
| **14** | Russian Federation | 145.491 | 7,510 | 51.62 |
| **15** | China | 1,275.133 | 16,231 | 12.73 |

It should also be observed that international tourism receipts are merely gross receipts. Since import leakages associated with inbound tourism are liable to vary between countries, net receipts from inbound tourism will not be in proportion to gross receipts. In addition, to this it might be argued that other indicators of the relative economic importance of international tourism to nations should be considered. Such measures could include the relative contribution to inbound tourism to GDP or to foreign exchange earnings of the country concerned.

Countries in the top 15 international tourist destinations show some variation with the passage of time and their relative position may change. However, major changes in position do not occur quickly. For example, the fourteen leading destinations in terms of international tourist receipts in 2000 were also in this list for 1990. Russia was number 15 in the WTO's 2000 list but is not in the 1990 list because of political change. Following the terrorist attacks

in the US on September 11, 2001, tourist arrivals in the US have fallen substantially and for 2001 and 2002 the relative rank of the US as a major international tourism destination has declined but it will still remain in the top 15, towards the top. The persistence of this decline will depend on traveller's perceived exposure to risk as a result of travel involving the US.

An earlier in-depth econometric study of the impact of terrorism on tourism has been completed by Enders and Todd (1992). Even as early as 1992, they were able to show that terrorists had been very successful in deterring tourism in Europe. They point out also that "an incident in one nation acts to deter tourism in neighbouring nations. The negative externality has important consequences for the proper amount of expenditures used to thwart terrorism. In absolute amount the revenue losses appear sizeable." The losses amounted to several billion dollars in Europe in the period studied. Another pre-September 11, 2001, article (Sonmez et al., 1999) that examined problems involved in managing tourism given the effects of terrorism, warns that such terrorism is permanent and requires widespread preparedness; preparedness that was inadequate in the US. Sonmez et al. (1999) end their article with this recommendation: "Each crisis situation is unique and difficult to resolve with simple formulas; nevertheless, destinations need to be prepared with a plan of action. Having such a blueprint promises to save valuable time, energy, and other resources for a tourist destination. In light of societal and global complexities, no destination is immune to negative occurrences, thus adhering to an "it can't happen to us" philosophy can only be described as naïve, if not reckless. It may be difficult, even impossible, to fully control terrorism, but nations cannot ignore the problem either" (Sonmez et al., 1999, p.17).

## 4. Industry Structures in Tourism and Managerial Features Faced by Tourism Businesses

Because the tourism industry is a composite industry, a variety of industry structures are usually present in the tourism sector. The degree of market concentration and market power of businesses in the tourism industry varies with its sub-sectors (Sinclair, 1998; Tisdell, 2000, Vol.1, pp.xxiv-xxxiii) but business concentration appears to be increasing, for example, as a result of the growing importance of chains in the hotel industry (Go, 1989), and the general expansion of franchising arrangements. The tour operator industry has also become more concentrated (Sheldon, 1986) but it does not seem that significant market power exists yet in this industry. In addition, economies of scale in the airline industry combined with increased competition due to deregulation are likely to reduce the number of international airlines.

International airline alliances combined with frequent flyer points may reinforce this trend (Bruechner and Whalen, 2000).

The managerial constraints encountered by businesses in different parts of the industry, for example, inescapable or fixed costs as percentage of total costs) can vary considerably. Nevertheless, it seems likely that key sectors of the modern tourist industry involve monopolistic competition and most major businesses experience a high degree of fixed cost or inescapable costs in relation to total costs. This seems to be true of the international airline sector and hotels. It is probably true of long distance bus transport. While the rail sector has high overhead costs, varied institutional structures exist for it. Presumably, also most transport by international shipping, including ferries, involves a high degree of overhead costs.

As government deregulation of transport has gathered pace globally, it seems possible that transport industries catering for tourists have increasingly developed monopolistically competitive structures. Although the industry situation that emerged prior to terrorist attacks in the USA on September 11, 2001, does not exactly mirror the large group monopolistic competition case of Chamberlin (1950), it appears to have displayed features of it. Prior to deregulation, for instance, of the airline industry a comparatively large number of airlines existed. But after deregulation, as a result of increased competition, the number declined and eventually most reached the position where they were only able to make modest profits. So it seems that in the typical case, a representative airline was in a position akin to that predicted for long equilibrium in the large group monopolistically competitive case. This arose not because entry conditions into this industry are easy (as is assumed in the large group monopolistically competitive case) but because there were already ‘an excess’ number of companies in the airline business due to pre-existing levels of regulation of the industry. So essentially the pre-existing conditions influenced the evolution of the industry to a situation like that predicted to evolve in the large group monopolistically competitive case. This seems to have happened even though the international airline industry is still far from completely deregulated.

In such a circumstance, it is clear that this industry is highly vulnerable to changes in its economic conditions.

According to the *Far Eastern Economic Review*, August 23, 2001 (Granitsas and Westlake, 2001), "Rapid growth in airline fleets in the 1990s – both in Asia and in the rest of the world – has turned the supply-and demand equation on its head. Too many aircraft have knocked passenger yields profit margins of the world's carriers ever lower – on average most commercial airlines squeak by with profit margins of just 2% - 3% of revenues".

Thus, even before the terrorist attacks on the US on September 11, 2001, commercial airlines had very low profit margins and excess capacity. Consequently, they were in a highly vulnerable economic position.

If we suppose airlines were in a position analogous to that of representative firms in long-run large-group monopolistic competition, they were vulnerable for two reasons:

(a) Any reduction in demand for their services would inevitably bring a loss and
(b) because inescapable costs, especially in the (very) short run, are a high proportion of total costs, it is difficult to moderate business loss in the (very) short-term.

Figure 1 illustrates the long-run equilibrium position of a representative firm under conditions of large-group monopolistic competition. Curve DBF shows the long-run average cost of the firm and line ABC represents the demand for its product. Its profit-maximising position corresponds to point B. In fact, it is the only point where the firm can make a normal profit. Its plant or equipment is operated at less than minimum per unit cost (that is, with excess capacity) and it does not operate at maximum efficient scale. Taking a representative airline as an example, it needs to sell $x_1$ passenger flight at $P_1$ each to make enough to cover its costs.

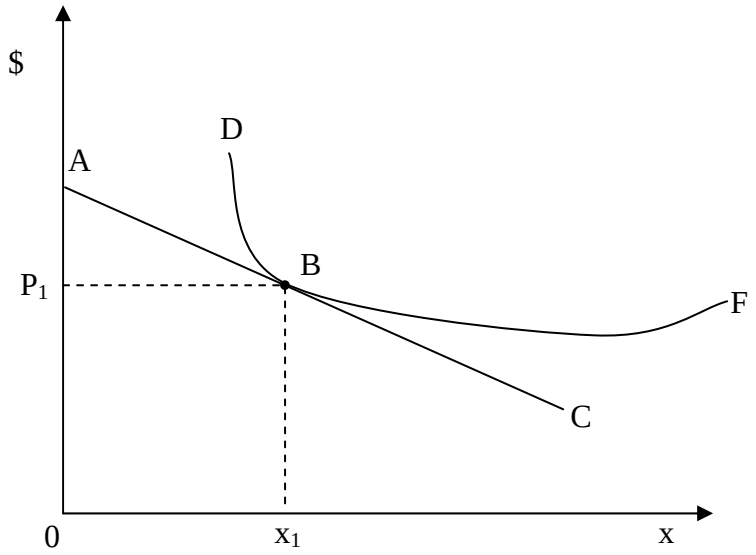


**Figure 1** A representative firm in long-run equilibrium under monopolistic competition is highly vulnerable (in terms of its economic viability) to a general collapse in demand for its product, especially if such a collapse is unanticipated.

Now if the demand for the representative firm's product suddenly falls, the firm suffers a loss if its cost conditions remain unaltered.

In the very short-term, almost all of the costs of an airline company may be inescapable. Even in somewhat longer period, a very high proportion of its costs may be inescapable. This may also be true for hotels, airport facilities, car rental businesses, and local tour operations. In such cases, the consequence of a reduction in demand is to generate large losses. For example, if all costs are inescapable in the very short run, the effective average cost curve of the firm is a rectangular hyperbole. In such a case, a one-third reduction in quantity sold results in an increase of per unit cost of 50 percent. Thus, given the initial equilibrium in Figure 1 at B, and supposing the firm keeps to a price of $P_1$, a fall in quantity sold to $\frac{2}{3}x_1$ would result in a loss equivalent to 50 percent out of its total revenue, or a loss on each flight of half the fare.

Because firms in many segments of the modern tourist industry have a high ratio of inescapable costs to total costs, and face increasing competitive pressures with widespread

deregulation of competition, they face the type of vulnerable economic situation illustrated by Figure 1.

## 5. Further Features of the Economic Vulnerability of the Tourism Industry

The discussion in the previous section assumed that after demand collapses for the tourism product considered in Figure 1, its price will be held at its pre-existing level. While this may be so for short while, a loss-minimising firm when all (or most) of its costs are inescapable, will reduce the market price of its product to a level that maximises its total revenue. Inevitably, this places even more economic strain on all of its competitors in the tourism market.

This is illustrated in Figure 2. As in Figure 1, point B shows the equilibrium position of the representative firm prior to a collapse of the demand for its tourist product. Suppose, however, that as a result of an unexpected event, the demand curve for it product suddenly collapses to $Gd_2$. Its corresponding marginal revenue curve is $Gmr_2$. In this case, the firm will maximise its total revenue and minimise its loss by slashing the price of its product form $P_1$ to $P_0$. But if all other firms act in the same way, the benefits of each from this strategy will be reduced, although total revenue in the whole industry might still rise compared to a situation where prices remained fixed at their levels prior to collapse in demand.

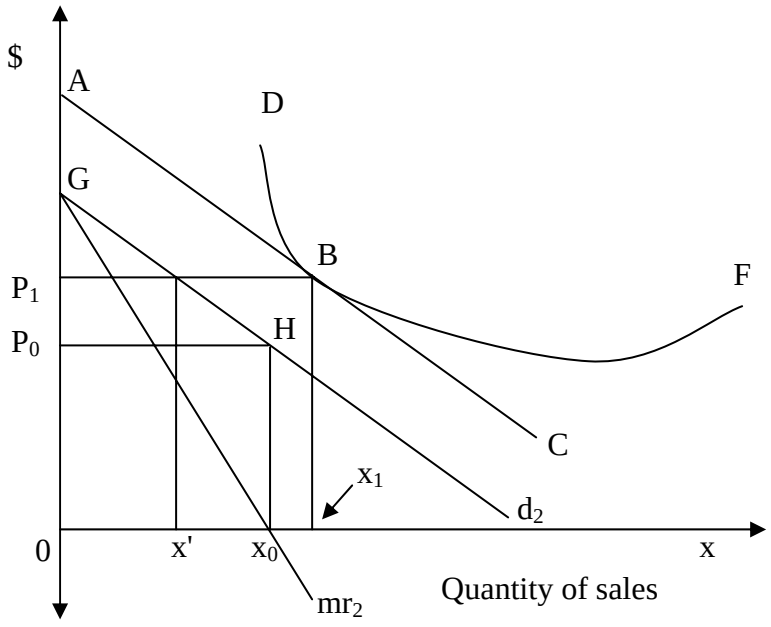


**Figure 2** Illustration of price-cutting by a representative firm to minimize losses following a collapse in demand

Of course, the short-turn or very short-run situation depicted in Figure 2 cannot last. In the long-term, a greater proportion of business costs will become escapable and some firms will exit the industry so reducing the economic pressure on remaining firms. Furthermore, demand may begin to recover once the dangerous events that triggered a reduction in demand becomes increasingly a past event and measures are taken to counteract its recurrence.

So it seems that supply-side features of the modern tourism industry make it highly vulnerable to unexpected declines in the demand for its services. At the same time, the demand for tourism, especially for foreign tourism, can be highly volatile. There are several reasons. For instance, because the demand for tourism is highly income elastic, fluctuations in the general level of economic activity have major influences on it, more so because current conditions often impact on expectations about future income levels and employment. For example, the Asian Financial Crisis in the 1990s reduced inbound tourism to most East Asian countries. Secondly, tourists have to visit destinations away from their home to enjoy tourism services. In undertaking their journey, they are to a considerable extent at the mercy of situational factors over which they have little or no control and depend in a similar fashion for their safety and experiences at their destination. Furthermore, the perceived situational risk that travellers face is usually higher in foreign countries than in their own. Whereas foreign exchange can be earnt from the export of most commodities without buyers visiting their country of origin, this is not true of foreign exchange receipts from tourism. The need for foreign tourists to be present in the country where they intend to enjoy tourism services involves special risks for the buyer of such services.

A deterioration in law and order conditions or in health conditions in country can be expected to reduce its inbound tourism considerably. Terrorist attacks in the USA in 2001, for example, significantly reduced inbound tourism to the USA in 2002, and have reduced the relative importance of the United States as a global tourist destination.

A study by Sinclair and Tsegaye (1990) highlights the economics risks resulting from dependence on tourism for foreign exchange. Sinclair and Tsegaye (1990, p.847) found in their sample of developing and industrialised countries that their diversification into tourism as a means to earn foreign exchange did not decrease the instability of such earnings, and indeed, net instability rose in several cases.

## 6. Concluding Comments

International tourism has developed at a rapid rate in recent decades and overall will continue to do so if the WTO's predictions prove to be correct. International tourists arrivals are predicted to be more than double between 2000 and 2020, and reach 1.6 billion in 2020. While most international tourism arrivals are accounted for by Europe and North America, their relative position is expected to decline by 2020 with that of East Asia/Pacific expanding substantially as further economic development occurs in East Asia. Still, however, Europe and North America will account for more than half of all international tourist arrivals and in all probability more than half of international tourist receipts.

WTO statistics for international tourism receipts and arrivals have shortcomings as indicators of the comparative national importance of tourism for countries. They do not effectively highlight the intensity of tourism in different countries and its economic significance. This is also so for WTO's comparisons between geographical regions. Estimates of Pearson rank correlation coefficients were used to show the inadequacy of aggregate national tourism statistics as indicators of the relative importance of tourism to the WTO's 15 leading international tourist destinations.

Despite the rapid growth of the modern tourism industry, it is an economically vulnerable industry. Businesses in significant segments of it find that they have a high proportion of costs that are inescapable in the short-term. In addition, major and key portions of the industry operate in conditions akin to those under large group monopolistic competition. In long-term equilibrium, they therefore have only normal profit, have excess capacity and operate at less than minimum efficient scale This seems to be usual for hotels. However, even the airline industry appears to have been in a similar position prior to September 11, 2001. In such circumstances, a fall in demand can generate large losses. Companies have no leeway to cope with falling demand and retain a profit. Furthermore, in the very short-term, businesses experiencing an unexpected fall in demand may actually reduce prices to attract business and minimise their losses. This tends to place increased pressure on competitors even though it can result in the revenue of all rising compared to a circumstance where they do not reduce prices.

At the same time, as supply-side factors make businesses in the tourism industry economically vulnerable, the volatility of tourist demand in response to disastrous

occurrences that are difficult to predict adds to vulnerability of this industry. Furthermore, economic interdependence within the tourism sector tends to magnify economic changes. For instance, events that target the transport sector and reduce travel, flow-on strongly to hotels, restaurants and local tourist business. Countries that depend heavily on foreign tourist arrivals by plane, as in the case of Australia, are likely to be seriously impacted if incidents occur that make tourists believe that international flights to such countries are unsafe. The economic flow-on effect is very large, probably much greater than would occur for exposure of tourists to risks further down the tourist chain.

Furthermore, important backward economic repercussions often arise from a collapse in demand for a segment of the tourist industry, such as travel by plane. For instance, after the events of September 11, demand for civilian aircraft plunged. This, however, was subsequently offset to some extent by increased orders for military aircraft arising partly from the US led 'war on terrorism'. Strong economic interdependence between the segments that constitute the tourism industry, normally make all segments vulnerable to an economic disaster or similar disaster that arises for any important segment of it.

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