



CASE STUDY OF THE SULTANATE OF OMAN, 2003-2007: EMPLOYING THE MACROECONOMIC INDICATORS IN ANALYSIS AND TSA DEVELOPMENT

Summary

The case study illustrates the two complementary ways in which the UNWTO macroeconomic indicators can be employed to provide valuable information. The first is in making an analytical overview of the importance of tourism in an economy, and the second is in enhancing the developments towards an experimental Tourism Satellite Account (by offering a frame of reference and verification).

Firstly, the analysis shows that tourism has a persistent importance in the general macroeconomic performance of the Sultanate of Oman. As a matter of fact, in its non-oil economy, the importance of tourism is greater than what the related general macroeconomic indicators for 2003-2007 suggest. Moreover, the tourism sector has to a large extent not reflected the turbulence of the international situation¹. To a certain degree, this is due to the fundamental stability of the economy, independently from the fact that the oil market has been favourable. This may be an explanation for the recurrence of a certain segment of inbound tourism that apparently does not change its preferences in the short term. In other words, Oman may be enjoying a quite inelastic tourism demand.

Secondly, the early developments towards Oman's experimental TSA have benefited from iterative comparison to the macroeconomic indicators and have resulted in an aggregate estimation of the economic contribution of tourism, presented here, that prospects a quite auspicious future.

**Statistics and Tourism Satellite Account Programme
Madrid, 18th May 2009**

¹ It must be noted that the present study has been elaborated in March 2009.

INTRODUCTION

This case study of the Sultanate of Oman is a reference exercise on employing the dataset of internationally comparable macroeconomic indicators², as envisaged by the World Tourism Organization (UNWTO). The aim of these indicators is to provide pragmatic information, based on currently available quantitative data, to those responsible for public tourism policies and for sectoral associations. This pragmatic information bears two aspects, each requiring the indicators to be employed in a special way: (1) advancing the understanding and political awareness of the economic *importance* of tourism in the short run by using the indicators in analysis, and (2) enhancing the initial developments towards a Tourism Satellite Account (TSA) by using the indicators as a frame of reference in estimations on the economic *contribution* of tourism³. The case study illustrates both aspects by, in the first part, providing an analytical overview of the economic importance of tourism in Oman and, in the second part, presenting a first official aggregate of the economic contribution of tourism as part of the process towards an experimental TSA.

The choice to examine Oman in a context of macroeconomic indicators emerged from a UNWTO technical assistance mission in the country that had as a purpose instigating the initial phase of a TSA: the experimental TSA. This was an ideal case setting because it allowed the consultant to employ the indicators in both way (1) and (2), thus reaping their full informative benefits. The macroeconomic indicators have complemented the work towards an experimental TSA, and it is natural that some results from the experimental TSA, in turn, complement this case study. Consequently, it must also be noted that as is the case here, the macroeconomic indicators can be molded to better reflect country specificities⁴.

In a similar manner, a case study had been previously made for Central America⁵. This exemplifies how macroeconomic indicators and other related information collected during technical collaborations can be used and combined for producing case studies, and valuable information, at the national and regional levels.

The case study is structured in two parts. Part I provides the analytical overview based on the macroeconomic indicators where Section 1 sets the scene by describing some main macroeconomic indicators of Oman, Section 2 describes the country's aggregate tourist flows, and Section 3 presents the macroeconomic indicators of tourism that are currently available for the Sultanate. Part II wraps up and contextualizes all this information to present an initial aggregate estimating the economic contribution of tourism, which forms an element in Oman's experimental TSA. Finally, the Annex provides a descriptive list of macroeconomic indicators where special mention is made of their relevance for policy and research purposes.

² This dataset has been compiled in a collaborative effort between the UNWTO and the Economic Commission for Latin America and the Caribbean (ECLAC) and will hereafter be referred to as the UNWTO/ECLAC dataset. It consists of basic aggregate data extracted from different sources: mainly Balance of Payments, but also National Accounts and official tourism statistics. The indicators provide an indication of how tourism interacts with other goods and services producing activities in an economy, thus permitting a preliminary analysis of the economic importance of tourism.

³ The macroeconomic indicators are a *proxy* of the economic *importance* of tourism across countries. This must be differentiated from a TSA, which *measures* the economic *contribution* of tourism. While the former deals with the *approximation* of a *quantification*, the latter is more encompassing since it implies the *measurement* of a *causal relationship*. Thus the economic contribution of tourism can be estimated as an initial step in TSA development.

⁴ Indeed, the Oman case study presents additional information on inbound and outbound tourism, and some macroeconomic indicators have been updated with more recent data from the Ministry of the Economy.

⁵ Refer to (ECLAC et al., 2008). Both of these initiatives have been under the responsibility of Mr. Juan Falconi, UNWTO consultant.

PART I. ANALYTICAL OVERVIEW OF THE IMPORTANCE OF TOURISM

Section 1. Oman: a stable economy

During the period 2003-2007, the economy of the Sultanate of Oman showed clear signs of stability as observed from fundamental economic indicators that relate to its international trade position (the current account), its fiscal position (the budget), inflation, and income (Gross Domestic Product – GDP) growth. As an economy based on oil production (more than 50% of its GDP comes from oil), such positive economic indicators (shown in Table 1), especially in the last three years, are essentially the outcome of the performance of precisely this sector. However, non-oil activities also posed interesting and increasingly important results over this period.

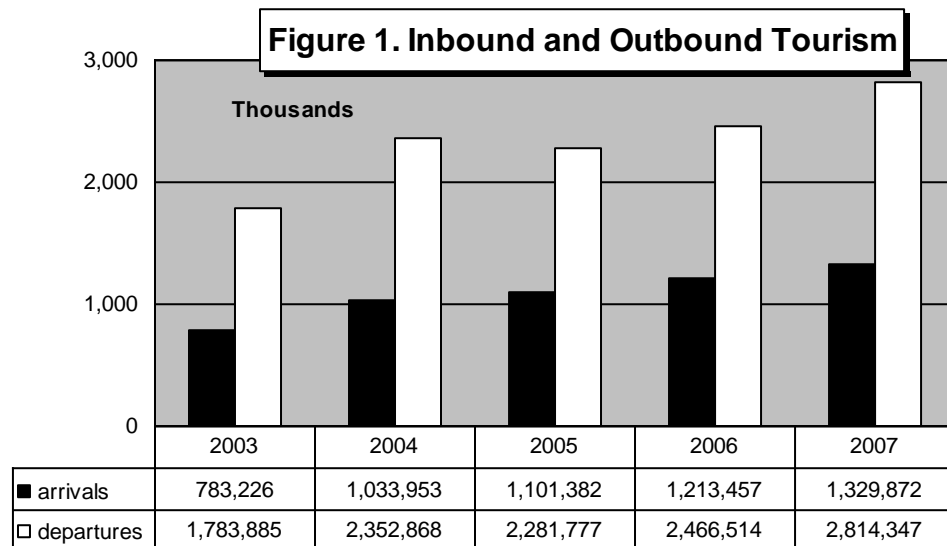
year	GDP growth	annual inflation	current account balance / GDP	budget surplus /GDP
2003	0.5	0.3	6.7	140.2
2004	3.4	0.7	5.9	235.8
2005	6.7	1.9	4.7	302.9
2006	5.0	3.4	4.0	43.8
2007	7.7	5.9	3.5	40.2

Source: Ministry of the Economy, Oman

The economic importance of tourism, in terms of its relation to GDP and its international trade position can be inferred in a preliminary manner from an analysis of tourism related (macroeconomic) indicators calculated on the base of information from the national accounts and the balance of payments.

Section 2. Tourist flows

The information available relative to the tourism sector shows that over the past several years there has been a substantial increase in tourist flows into the Sultanate. Figure 1 shows that *inbound tourism* (measured in terms of the arrivals of non-resident visitors) increased constantly over the period and amounted to nearly 1.4 million in 2007 (compared to 0.8 million in 2003, which constitutes a 75% increase over this period).



Source: Ministry of National Economy, Sultanate of Oman

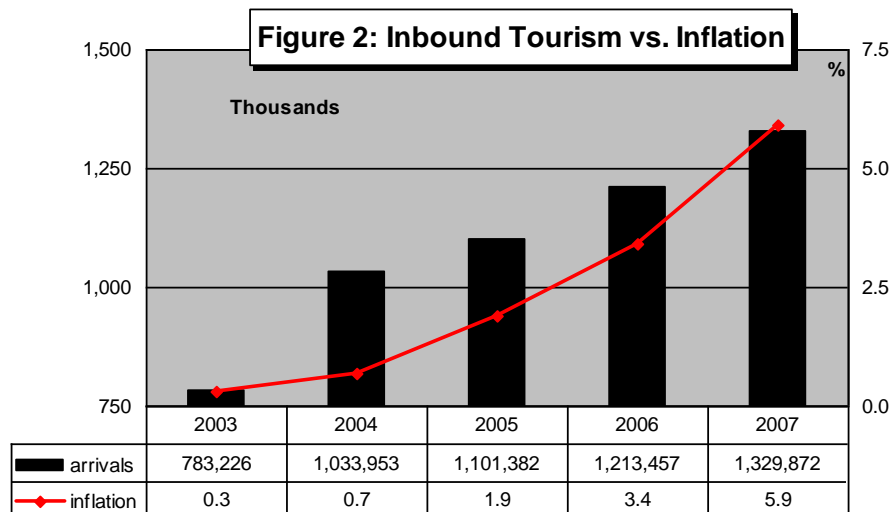
Outbound tourism (measured in terms of the departures of resident visitors) was likewise dynamic: the increase from 1.7 million in 2003 to 2.8 million in 2007 represents a 65% increase. This can be explained by the Sultanate's specific characteristics of (relatively high) wealth generation and distribution which makes the propensity for foreign travel very marked, as well as its frequency.

Preliminary estimates from Oman's experimental TSA show that *domestic tourism* (the activity of resident visitors within Oman) is very important and that it has had a very large impact as a specific form of tourism in the Sultanate—domestic tourism could amount to more than 50% of *internal tourism* (the activities of resident and non-resident visitors within Oman).

The increased inbound tourism in the past years demonstrates the effectiveness of promotion policies implemented by the national tourism authorities and also to a large extent shows the benefits of being a stable and safe destination, which makes it highly attractive in foreign markets.

The case of the Sultanate shows that the source markets of tourists do not necessarily react pro-cyclically to distortions from down-cycles at the international level—such as those related to the current international crisis—or to the quite significant domestic price adjustments which, after 2007, were reflected in the inflation rate and particularly in the prices of tourism-related services. On the contrary, the inbound tourism is experiencing sustained expansion, despite such inflation (see Figure 2). It appears that this growth trend in inbound tourism will continue in the coming years, as confirmed by initial estimates made as part of the experimental TSA for 2005-2009⁶.

⁶ In 2008, for example, domestic inflation surpassed 12% but the tourism sector continued to show a positive growth trend.



Source: Ministry of National Economy, Sultanate of Oman

Section 3. Analyzing the economic importance of tourism

The flows of tourists discussed in the previous section give a first idea of the tourism market in Oman. To obtain a better grip on what tourism means for its economy, one can explore the macroeconomic indicators that proxy the weight of the combined tourism activities in relation to important economic aggregates⁷. The most important indicators are inbound and outbound tourism consumption over GDP, the tourism balance, tourism coverage, tourism openness, tourism as part of international trade, and tourism growth. All of these are described in Annex 2.1 and their results are discussed next.

3.1. Inbound and outbound tourism consumption

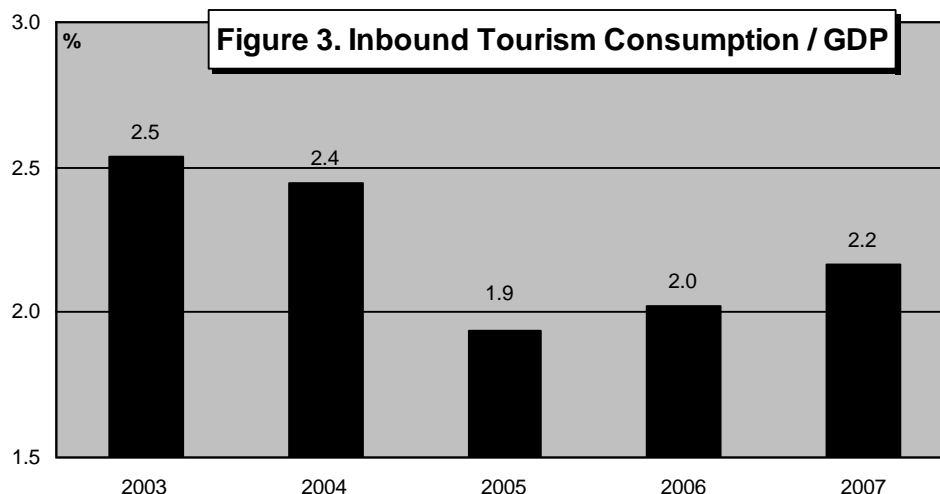
Inbound tourism consumption is the consumption of non-resident visitors within the economy of reference, while outbound tourism consumption is the consumption of residents abroad. Though their precise value can only be measured within the framework of a TSA exercise, it can be approximated by summing their corresponding Balance of Payments items of “travel” and “passenger transport”⁸.

Oman's *inbound tourism consumption*, which may be thought of as foreign exchange receipts from tourism, has remained relatively constant around the 2% of GDP (see Figure 3). Even so, it seems to be recovering from a small fall experienced in 2005. At first sight, this may seem a bit puzzling when considering the increase in tourist arrivals over the same period. However, this trend is likely to be due to the rapid increase in oil prices which resulted in a greater relative importance acquired by the oil sector in terms of current GDP⁹.

⁷ See Falconi (2003) for a broad overview of possible macroeconomic indicators as envisaged by the UNWTO.

⁸ Tourism related expenditures in the Balance of Payments refers to both these terms; for a more detailed reasoning for this approach and its implications, please refer to the Annex.

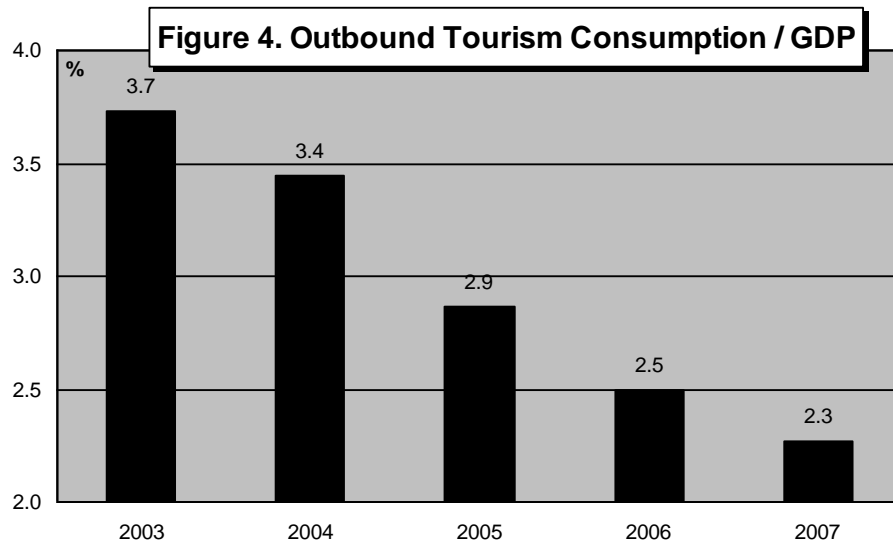
⁹ Please note that when considering prices, the trend is much smoother and reflects a generally higher economic importance of tourism. Calculations show that when adjusting GDP and inbound tourism consumption for prices (by means of the GDP deflator and the Consumer Price Index -CPI, respectively), the percentages are roughly: 2.5 in 2003, 2.6 in 2004, 2.4 in 2005, 2.6 in 2006, and 2.8 in 2007.



Source: Ministry of National Economy, Sultanate of Oman

If these numbers are adjusted for the change in oil prices and its weight in terms of its contribution to GDP, the trend of the indicator would be quite different; changing from, *grosso modo*, nearly 5% of GDP in 2003 to almost 4.5% in 2007.

Figure 4 shows that, during the same period, *outbound tourism consumption* (which may be tough of as foreign exchange outflows by means of tourism) persistently decreased from 3.7% to 2.3% of GDP.

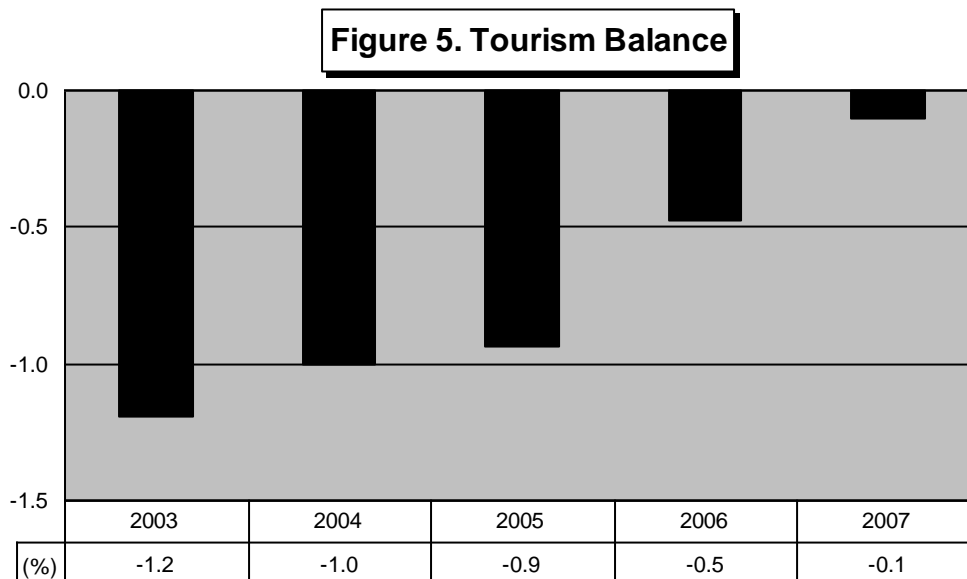


Source: Ministry of National Economy, Sultanate of Oman

This decline in relative importance in the face of increasing numbers of tourists and/or possibly the frequency of trips abroad could likewise correspond to the oil-price effect. This time, however, it works in two directions: on the one hand, a regulation of expenditure abroad by tourists residing in the Sultanate as a result of the adjustment of prices observed during these years; and on the other hand, a higher GDP value which has been rising significantly in annual terms since 2003.

3.2. Tourism balance

This indicator shows the net result of the aforementioned inbound and outbound tourism consumptions, and produces consistently negative results as depicted in Figure 5. However, as pointed out earlier, the trend can be explained given the high propensity for foreign travel due to the socio-cultural and economic particularities of the Sultanate. But then again, Oman is in the privileged position that it can afford periods of negative tourism balance due to its vast oil revenues which, year after year, have ensured a positive balance of trade.

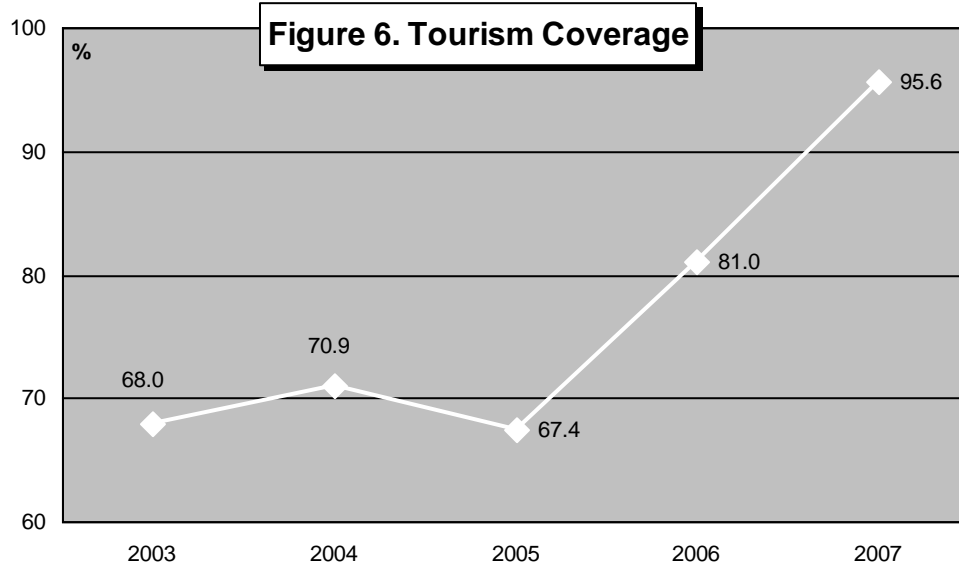


Source: Ministry of National Economy, Sultanate of Oman

Nevertheless, the period shows a continuous improvement of tourism balance vis-à-vis GDP: from -1.2% in 2003 to an imbalance of only -0.1% in 2007. This points to an auspicious performance of inbound tourism consumption and, at the same time, a certain rationalization of consumption abroad by Omani residents.

3.3. Tourism coverage

A counterpart of tourism balance can be found in the trend present in *tourism coverage*, shown in Figure 6 below. This indicator aims to show to what extent inbound tourism consumption “funds” or “covers” the tourism expenditure of Omani residents abroad. Just as before, this indicator shows an imbalance, meaning that tourism inflows are not enough to cover the reciprocal consumption in the rest of the world. However, over time and owing to the good performance of inbound tourism consumption, the imbalance has had the tendency to decrease.

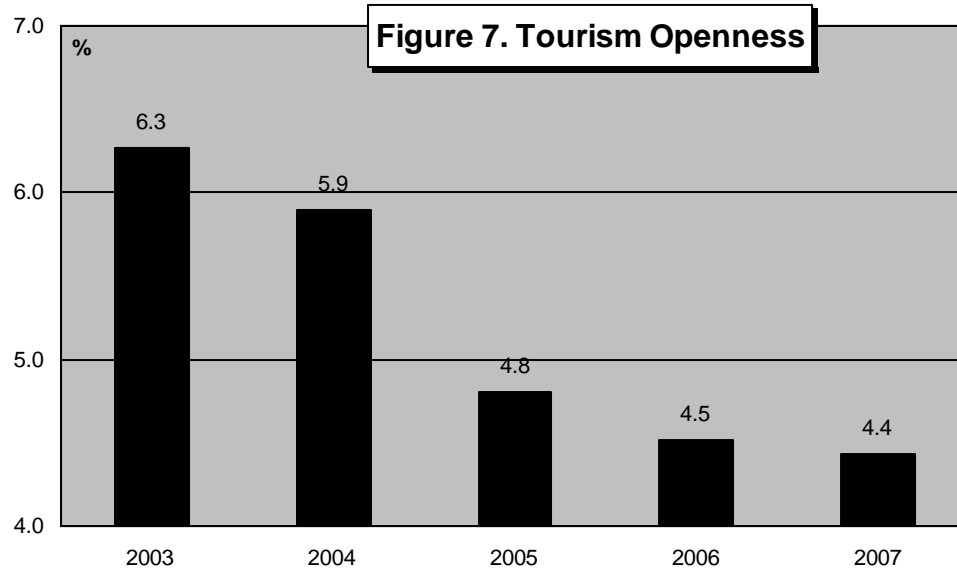


Source: Ministry of National Economy, Sultanate of Oman

At just 68% in 2003, tourism coverage reached 96% in 2007 according to updated data of the Central Bank of Oman presented here. If one assumes that much of the Omani outbound tourism has traditionally been, however indirectly, financed by oil exports, it could be deduced that Omani outbound tourism has exchanged part of its oil dependency for a heavier reliance on financing from inbound tourism.

3.4. Tourism openness

Although it reflects the definition of *international tourism* as exposed in the *International Recommendations for Tourism Statistics 2008* (IRTS 2008), the term *tourism openness* is used here to draw an analogy with the well-known *trade openness* indicator. Just as trade openness is the sum of imports and exports over GDP, tourism openness is the sum of inbound and outbound tourism consumption over GDP and reflects the importance of international tourism in an economy. Figure 7 identifies the downward trend in this indicator: from 6.3% in 2003 to 4.4% in 2007. Once again, these results are linked to price trends, above all, in oil prices, which influence the level of GDP at current prices.

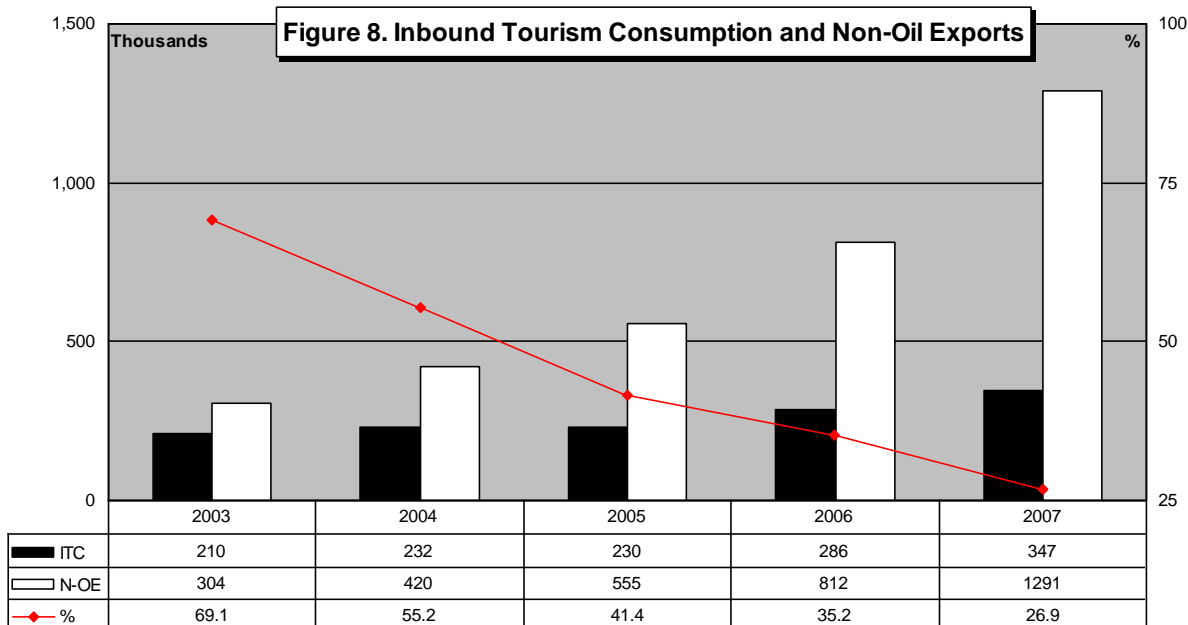


Source: Ministry of National Economy, Sultanate of Oman

3.5. Tourism as an internationally traded service

When tourism takes the perspective of international trade, inbound tourism consumption represents foreign exchange inflows and is thus comparable to exports, while outbound tourism consumption represents outflows being thus comparable to imports. Consequently, the magnitude of inbound and outbound tourism consumption will contribute towards determining the trend of the current account of the balance of payments. More specifically, tourism is considered an internationally traded service of great importance (Smith, 2004). Estimates of the World Trade Organization (1998) show that tourism accounts for more than one-third of total trade value in global services and that tourism is among the top five export categories for 83 percent of nations.

In the case of the Sultanate, inbound tourism consumption in 2007 represented 8.9% of exports of goods, 76.9% of exports of services, and 26.9% on non-oil exports. These are undoubtedly considerable percentages that reflect the weight of the sector in the economy of Oman. Even so, the figures may still be understated due to the prevalence of oil producing activities and its linkages to other sectors of the economy. Moreover, these figures do not account for the trend in oil prices and it is possible that in 2009, with a significant decline in oil prices, the proportion of tourism in exports may be even larger. Figure 8 shows the evolution of inbound tourism consumption, non-oil exports and their ratio. Both inbound tourism consumption and non-oil exports have grown over time and, although the importance of tourism relative to non-oil exports has steadily decreased, it remains substantial.



Source: Ministry of National Economy, Sultanate of Oman

If one of the objectives of the economic policy of the Sultanate is the diversification of the economy, the results suggest that tourism is one of the sectors whose stimulation should certainly be considered. Given its impending impact on employment and income, tourism's contribution could be even more decisive.

Because of its lesser importance to the domestic economy, *outbound tourism expenditure* will only be touched upon slightly. In 2007 it was equivalent to 6.6% of the imports of goods, while its share of imports of services was 18.9%. These figures highlight the much greater importance of inbound tourism in the export of services (77%) relative to that of outbound tourism in the import of services (19%).

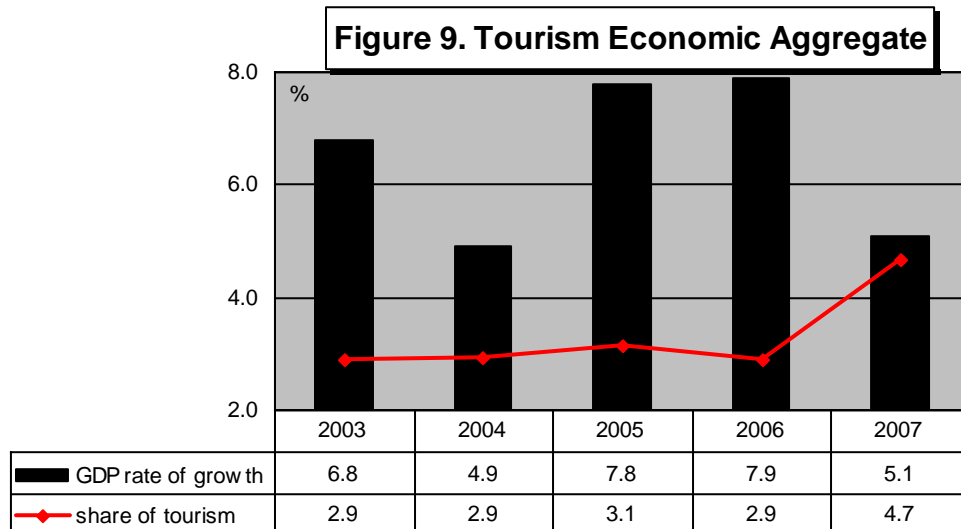
PART II. THE FRAME OF REFERENCE AND THE ESTIMATE OF TOURISM'S ECONOMIC CONTRIBUTION

It was previously pointed out that Oman has the characteristics of a well-performing economy: sustained economic growth, a steady budget surplus and a positive current account balance. Also, recent inflationary pressures will likely be under control towards the end of 2009¹⁰. Though official figures are not available, initial estimates of the experimental TSA for Oman exposed in Figure 9 illustrate that the share of the tourism sector's value added, in other words: tourism's contribution to the economy, has been constant but is expected to increase over 2009¹¹. This is despite the expected decrease in the growth of the value added of the economy at large for the same year¹².

¹⁰ Inflation is expected to fluctuate, according to the Central Bank of Oman, at around 5% in terms of annual slide towards the end of the year.

¹¹ For the case of tourism value added, the volume and price indices in annual terms is in progress of verification. These are used in the initial estimates carried out as part of the experimental TSA figures shown here. Though the indicators in Figure 9 have different units, the interest in this presentation is the evidence of positive trends for the case of tourism, even in the midst of the international crisis.

¹² This is the forecast of the Central Bank of Oman.



Source: Ministry of National Economy, Sultanate of Oman

Regarding this favourable economic scenario for Oman’s tourism sector for 2009, there are two different issues that should be considered. On the one hand, the fact that inbound tourism has not felt the effects of the international crisis is due precisely to the generally good state economy which generates other positive externalities like domestic security, improved provision of tourism services, and continued investments in the sector. It would be difficult for tourism activities to prosper in the midst of uncertainty and instability. The relationship between these two domains seems to be consolidating itself, an aspect that has been observed in other countries.

On the other hand, and judging from the high share of tourism in GDP growth, tourism could be functioning as a means to sustain the Omani economy during a crisis. According to the Central Bank of Oman (2008), tourism received considerable support over the years under analysis because of its strong potential and its identification as a key sector for sustainable development and economic diversification. Due to the same reasons, the Development Plan of the Sultanate directly supports the continuity of this strategy through increased sectoral investment. The development of tourism activities is being carried out within a framework that promotes efficiency, competitiveness and productivity, and a state of openness, orientation of domestic policies towards diversification, privatization, and fostering sustainable development in the Sultanate. This strategic combination of tourism economic policy that caters to the social characteristics of Oman is what the Central Bank (2007) refers to as “Omanization” of the economy. Such strategic vision may help Oman position itself in the market of world tourism and, indeed, the evidence presented seems to point to a certain inelasticity of tourism demand for Oman as a destination.

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ANNEX: Macroeconomic indicators for the measurement of the economic importance of tourism

The indicators from the UNWTO/ECLAC dataset that have been examined in this study appear in the following table¹³.

Table 2. Macroeconomic Indicators used in the Case Study of Oman*	
1	Inbound tourism consumption over GDP
2	Outbound tourism consumption over GDP
3	Tourism balance (inbound minus outbound tourism consumption) over GDP
4	Tourism openness (inbound plus outbound tourism consumption, over GDP)
5	Tourism coverage (inbound over outbound tourism consumption)
6	Inbound tourism consumption over exports of goods
7	Inbound tourism consumption over exports of services
8	Inbound tourism consumption over exports of goods and services
9	Outbound tourism consumption over imports of goods
10	Outbound tourism consumption over imports of services
11	Outbound tourism consumption over imports of goods and services

* 'Domestic tourism' is not included in the UNWTO/ECLAC dataset due to the difficulty in its data collection: it is not possible to proxy it through BoP or National Accounts items because it deals with the activities of resident visitors *within* the country of reference. This does not mean that domestic tourism is not important, on the contrary, in many countries estimates have shown it to amount to large portions of internal tourism.

Given the importance of the use of Balance of Payments data, the following paragraphs refer to the relationship between tourism and the Balance of Payments (BoP).

The *International Recommendations for Tourism Statistics 2008* (IRTS, 2008) contains the unifying the concepts, definitions, and classifications for measuring tourism. It defines tourism as the activities of *visitors* (IRTS 2008, para.1.9). A visitor is not the same as a traveller. Whereas a *traveller* is someone who moves between different geographic locations for any purpose and any duration (IRTS 2008, para.2.4), a *visitor* is someone who is travelling under certain conditions: he or she takes a trip to a main destination outside his-her usual environment, for less than a year, for any main purpose (holiday, leisure and recreation, business, health, education or other purposes; IRTS 2008, para.3.4) other than to be employed by a resident entity in the country or place visited (IRTS 2008, para.2.9).

The 'travel' heading under 'services' of the Current Account credits of the BoP gives a first proxy of receipts from non-resident visitors to the country. More specifically, the 'travel' heading is the value that covers the goods and services acquired by non-resident travellers in an economy during their stay in the reference country (and vice-versa) for business, study or personal reasons. Such travellers might not all be visitors (examples are frequent border-crossers and long-term students and patients), and expenditure by certain categories of visitors is excluded (like nationals residing abroad). Consequently, only part of this item should be considered as tourism.

¹³ Other indicators have been used (e.g. inbound tourism consumption over non-oil exports) but since these were specifically tailored to the Oman case, they do not appear in the UNWTO/ECLAC dataset and thus neither in Table 2.

Those tourism related expenditures should be complemented with the BoP item of 'passenger transport' as a best proxy for tourism consumption. This approach has been officialised in the forthcoming Sixth Edition of the Balance of Payments and International Investment Position Manual (BPM6). Thus; 'travel' plus 'passenger transport' debits approximate inbound tourism consumption, and 'travel' plus 'passenger transport' credits estimate outbound tourism consumption. The closer the BoP posts capture the concept of 'visitor' as outlined in the IRTS 2008 (meaning that distorting posts like 'nationals residing abroad' or 'short-term students' are relatively small or cancel each other out), the better the indicator. Even though this sum is only in part truly tourism related (an explanation for this conceptual difference between the tourism concept of the IRTS and the BoP items can be found in the IRTS 2008, para.8.10-8.25), its evolution can be taken as reasonable proxy of the evolution of inbound and outbound tourism consumption.

Table 3 on the next page provides a description of the specific relevance for policy and research purposes of each of the macroeconomic indicators in the UNWTO/ECLAC dataset¹⁴.

Table 3. Description of Macroeconomic Indicators and their Policy and Research Relevance
<p>(1) Inbound tourism consumption over GDP:</p> <p>Reflects the weight of the value of inbound visitors' activities in the total value of economic activity, and is therefore the main indicator of the static importance of tourism on an economy. It may be argued that, since tourism can be seen as an internationally traded service, inbound tourism consumption over GDP captures the economic importance of the inflow of foreign exchange created by the tourism sector.</p> <p>This indicator is crucial for analysis and decision-making dealing with the evolution or development of the tourism sector in an economy. If tourism policy focuses on expanding the tourism sector, this indicator should be closely followed. The underlying causes of changes in this indicator, as well as relations between this indicator and other economic, political, social, demographic, etc. variables constitute some of its analytical possibilities. An example is relating this indicator to sustainability issues in tourism destinations.</p>
<p>(2) Outbound tourism consumption over GDP:</p> <p>Reflects the weight of the value of outbound visitors' activities in the total value of economic activity; in other words: the importance of resident tourism activities abroad in terms of the national economy. It may be argued that, since tourism can be seen as an internationally traded service, outbound tourism over GDP captures the economic importance of the outflow of reserves by means of resident visitors going abroad.</p> <p>This indicator serves to provide a picture of the magnitude of transfers leaving the country due to tourism and may be interesting for policy makers if their purpose of developing the tourism sector is, among possibly others, the attraction of transfers from abroad. If this indicator is too large, a large portion of transfers leave the country and may even outweigh those generated by inbound tourism, in which case it serves as a warning sign for policy makers. For purposes of analysis, the sources of variation in this indicator may be explored: is an increase due to increasing numbers of departures, to the country's exchange rate, to inflation, etc.? On the other hand, it may be explored what repercussions this indicator has on other economic (e.g. trade balance), political, social, demographic, etc. variables.</p>

¹⁴ Note that some indicators have not been used in the Oman study because they lack relevance to the case at hand.

(3) Tourism balance:

Reflects the economic importance of tourism in contributing to a surplus or deficit on the country's balance of trade, and thus the current account and the balance of payments. Needless to say, a negative (positive) tourism balance decreases (increases) a positive balance of trade or accentuates (alleviates) a negative balance of trade.

For countries struggling to stabilize their balance of trade, inbound tourism (thus, positive tourism balances) may be an important means to work away the deficit. Alternatively, countries that have historically positive balances of trade may be able to afford negative tourism balances. To sustain such policy issues, analysis should uncover whether variations in this indicator are primarily due to changes in inbound or outbound tourism consumption and, correspondingly, what the causes and effects of such changes may be.

(4) Tourism openness:

Draws a parallel with the prevalent 'trade openness' indicator to show just how important *international* tourism is in terms of the domestic economy. It could also be used as a measure of economic freedom (free trade) in the domestic tourism market. It may be argued that sizeable tourism openness is more beneficial only if inbound consumption exceeds outbound consumption.

For policy, this indicator serves the purpose of reflecting how integrated the national economy is in the market of world tourism and when compared to values in other countries its significance truly gains in importance. Care must be taken in always differentiating between the components of this indicator as a higher value is not always positive. Analysis may show whether such a high value is a cause of mass tourism (i.e. large flows of visitors, which may in turn lead to negative effects on the domestic economy, society, environment, etc.) or whether low values reflect a select tourism market instead of a closed market (i.e. small flows of visitors that spend more money and/or time in the reference economy). In addition, tourism openness could be compared with openness measures of other economic segments (e.g. trade openness, financial openness) to display an economy's relative economic inclination.

(5) Tourism coverage:

Reflects the proportion between incoming and outgoing monetary flows as a result of international tourism. A value higher than 100 means that inbound tourism finances more than all the consumption of outbound visitors; a value lower than 100 means that inbound tourism is not able to cover the consumption of residents abroad.

The policy relevance of this indicator is similar to that of the tourism balance, but captures better the ability of tourism 'auto'-finance itself. A value of exactly 100 would mean that tourism does not affect the balance of trade and any value higher than that means that tourism actually contributes towards strengthening the balance of trade.

**(6) Inbound tourism consumption over exports of goods,
(7) Inbound tourism consumption over exports of services, and
(8) Inbound tourism consumption over exports of goods and services:**

These three measures (and additional, more specialized, ones are conceivable) reflect the same basic idea: the importance of tourism as an internationally traded service relative to other categories of exports or total exports. At the same time, such measures reveal the degree of tourism specialization in a country's export structure.

This type of indicators reveals the ability of tourism in generating foreign exchange through trade. Policy makers may want to pay special attention to the (development of and/or good maintenance of the) tourism sector if it turns out to weigh heavily relative to exports. It may also be relevant as a benchmark in international politics (e.g. free trade agreements). Analytically, this indicator may (decomposed or not) serve to explore the relation between tourism and (elements of or issues in) international trade. An interesting venue in analysis could be exploring the potential of inbound tourism in strengthening (through e.g. increasing foreign exchange) or weakening (through e.g. negative effects on the exchange rate) a country's international trade position.

(9) Inbound tourism consumption over Balance of Payments current account credits:

The current account credits of the Balance of Payments refer to all inflow of goods and services into a country. It is composed of four sub-groups: merchandise trade, services, income and unilateral transfers. The larger the share of tourism in this aggregate, the larger the importance of tourism as a generator of foreign exchange inflows to the real economy.

Because this indicator captures the importance of tourism in the non-financial, in other words: real economy, inflows it is valuable to all policy makers interested in understanding and shaping tourism as a part of, and possible contributor to, the real economy. This aspect is especially relevant during the current times of (financial) crisis when stimulating the real economy is becoming a priority to policy makers world wide. For analytical purposes, the indicator places tourism in the conceptual framework of the Balance of Payments and can serve to explore how tourism relates to the real economy versus, for example, the 'asset' or 'financial' economy.

**(10) Outbound tourism consumption over imports of goods,
(11) Outbound tourism consumption over services, and
(12) Outbound tourism consumption over goods and services:**

These three measures (and additional, more specialized, ones are conceivable) reflect the same basic idea: the importance of tourism as an internationally traded service relative to other categories of imports or total imports. At the same time, such measures reveal the degree of predilection for tourism in a country's import structure.

The policy and analytical applications of this type of indicators are similar to those discussed in the previous set of indicators, but now relating the other side of the coin. Outbound tourism that is important relative to (other types of) imports may be taken as an alarm bell by policy makers to indicate a significant amount of leakage due to tourism. This may lead to increasing efforts towards developing inbound or domestic tourism in order to generate income that offsets these leakages. The indicator may also be relevant as a benchmark in international politics (e.g. free trade agreements). Analytically, the indicator may (decomposed or not) be used to explore the relation between tourism and (elements of or issues in) international trade.

(13) Outbound tourism consumption over Balance of Payments current account debits:

The current account debits of the Balance of Payments refer to all outflows of goods and services from a country to the world. It is composed of four sub-groups: merchandise trade, services, income and unilateral transfers. The larger the share of tourism in this aggregate, the larger the importance of tourism in the leakage of foreign exchange from the national real economy to the rest of the world.

Because this indicator captures the importance of tourism in the non-financial, in other words: real economy, outflows it is valuable to all policy makers interested in understanding and shaping tourism as a part of a beneficial element in the real economy instead of one that harms it. As discussed for indicator (9), this aspect is especially relevant during the current times of (financial) crisis when stimulating the real economy is returning to the priority lists of many policy makers. For analytical purposes, the indicator places tourism in the conceptual framework of the Balance of Payments and can serve to explore how tourism relates to the real economy. A research venue could include exploring future sustainability aspects of tourism patterns when considering its relation to real inflows and outflows.

(14) Inbound tourism consumption over worker's remittances:

This indicator reflects the importance of inbound tourism relative to another foreign exchange generator that assumes sizeable proportions in many, especially developing, countries: remittances.

In terms of policy, the indicator is relevant because it relates tourism inflows to inflows of another phenomenon that has recently gained much policy attention. It is conceivable that in many countries where remittances constitute an important source of income, policy makers may monitor this indicator to benchmark the evolution of the tourism sector. In terms of research, the indicator can help promote a comparative perspective on tourism's role in many economic issues that have also been applied to remittances: ranging from development to entrepreneurship to foreign exchange dependency, etc. Additionally, it may be interesting to explore possible substitution effects between remittances and inbound tourism consumption—as they both share many characteristics: ability to generate foreign exchange earnings, activities that relate to a similar workforce, etc.