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Accommodation portfolio and market differentiation: The case of Aruba

Abstract

The island of Aruba just north of Venezuela has become one of the most prosperous small islands in the world due to tourist expansion as a strategy for economic growth. To develop its tourist sector Aruba has successfully relied on international hotel chains to open up the North American market. The downside of this success is the reliance on a single market which makes the island economically vulnerable. Another drawback of the international chains is that they typically cater for short-stay package tourists, contributing to the already dense air traffic to the island. A further uncontrolled expansion along these lines could imply that the island will develop into a mass tourism destination that is less attractive to the more affluent tourists. The literature on tourism destinations suggests that the tourist's choice is determined to a large extent by the accommodation on offer and that islands with more small and medium sized accommodation have a different and more stable clientele. If that is true, then the accommodation portfolio of the destination might be an important tool to arrive at market differentiation. The results confirm the hypothesis that each type of accommodation attracts its own clientele. These outcomes give support to a policy aimed at diversifying the accommodation portfolio in order to arrive at market differentiation. Half of the accommodation on Aruba is locally owned. Managed growth of this type of accommodation could contribute to a better market mix and to an increase in the share of long-stay tourists on the island.

Keywords:

market differentiation; length of stay; purpose of visit; geographical market; CHAID; Aruba

Introduction

Small tropical islands in the Caribbean show that most tourist destinations are characterized by the dominance of international hotel chains which leads to a reliance on a single geographic market (Wilkinson, 1989; Albuquerque & McElroy, 1992). Reliance on a single market is risky as economic difficulties in the source country have direct and adverse impacts on the receiving countries (UNEP, 1996). In addition, the international hotel chains typically cater for short-stay package tourists from North America to fill the hotel rooms all year round (Wilkinson, 1989; Albuquerque & Mc Elroy, 1992; Grandoit, 2005). This kind of tourist development has been criticized, because of the significant risks for the islands in terms of economic and ecological vulnerability. The economic vulnerability stems from an excessive reliance on a single major source of

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tourists, such as North America (Albuquerque & Mc Elroy, 1992; Briguglio, 2004). The problem of an excessive reliance on a single international tourist market can be addressed according to the literature by applying accommodation portfolio management.

Wilkinson (1989) asserts that small tropical islands with small and medium sized accommodations attract a different, more stable clientele than the islands that depend heavily on short-stay mass tourism. The type of accommodation does not only affect the economic impact in terms of benefits, but also the recruitment of different categories of tourist (Rodenburg, 1980; Kontogeorgopoulos, 1998; Holloway, 1998; Plog, 2001). As different types of accommodation attract different tourist-market segments, the aim of this study was to demonstrate how a diversified accommodation portfolio leads to market differentiation and attracts more long-stay tourism.

The island of Aruba, just north of Venezuela (Figure 1) provides an interesting case study due to the fact that the island has been successful in tourist development during the last 20 years. Aruba, like most other islands in the Caribbean, depends on the North American market. The research question that arises in this context is to what extent the various accommodation types available on the island cater for different segments of the international tourist market.

Figure 1
LOCATION OF ARUBA



**Accommodation
mix:
Single market
or market
differentiation
strategy?**

Butler's (1980) classical tourism theory assumes that destinations undergo an irreversible process of evolutionary development in six stages. Plog (2001) criticized Butler's lifecycle model, since the decline of mature destinations is not an inevitable process, but happens as a result of uncontrolled growth. This, according to Plog (2001), causes destinations to lose their distinctive character. This loss will eventually discourage tourists from visiting the destination.

Literature about small tropical islands in the Caribbean shows that most tourism destinations are characterized by the dominance of international hotel chains that cater

for short-stay mass tourists coming from North America (Wilkinson, 1989; Albuquerque & McElroy, 1992). The share of the international chains in these tourism destinations is more than 60 percent of all accommodations. Many authors state that the international chains have more resources (financial, technological, personnel) and are more capable of achieving economies of scale (Main, Chung, & Ingold, 1997; Kusluvan & Karamustafa, 2001). An important aspect of the strategy of the international hotel chains is the direct link that this kind of accommodation has with the tour operators. Kusluvan and Karamustafa (2001) point out that the international hotel chains are often integrated with tour operators, travel agencies and airlines, owing to their long experience and established image within the international tourist industry. Many tourists look for familiarity in unknown environments. This familiarity is a strong point for the international chains in a variety of tourist destinations.

The role of tour operators and travel agencies in advertising is vital in mass tourism, bringing back-to-back groups to a destination (Culpan, 1987). Tour operators are experienced organisations with capable personnel who know the tourist markets, airlines, accommodation companies and car rentals (Carey, Gountas, & Gilbert, 1997). To remain competitive, most large tour operators have signed a management contract with the large international chains to sell the hotel rooms (Medina-Muñoz & Garcia-Falcon, 2000). According to Carey *et al.* (1997), small tour operators focus on specialised or alternative tourist markets and play a vital part in opening up new markets (see also Medina-Muñoz, Medina-Muñoz & Garcia-Falcon, 2003). The overdependence on international hotel chains and tour operators is sometimes seen as a serious problem for the small and medium-sized hotels (Farsari, Butler & Prastacos, 2007). The domination of mass tourism leads to a saturated market with fewer benefits for the small and medium-sized hotels (Rodenburg, 1980; Butler, 1980; Albuquerque & McElroy, 1992).

In contrast to the international hotels, small and medium-sized enterprises are mostly locally owned and employ more family members (Andriotis, 2002; Thomas, 2000). Wilkinson (1989) stated that the share of small and medium-sized hotels can be seen as a measurement of local involvement in the tourist industry. Locally-owned accommodations are supposedly also more sustainable as they do not attract the high-volume package tours, but rely on individual arrangement made by tourists who stay longer at the destination (Weaver, 2000). The experience of the Commonwealth Antilles like the British Virgin Islands, Anguilla, Cayman Islands, and the Turks and Caicos islands has demonstrated that, with a low proportion of large hotels in the total accommodation portfolio, a steady pattern of tourist arrivals was accomplished. From these examples one could deduce that these islands attract a different, more stable clientele than those islands that depend heavily on mass tourism/tour operator markets.

Nevertheless, Jenkins (1982) claimed that it is precisely the international chains that activate tourism development in the Third World countries by creating the conditions for the small and medium hotels to emerge. The large hotel chains present countries with the opportunity to join in the international tourist market, and are therefore beneficial to the economy of those countries. In line with Jenkins and Sharpley (2003) states that the international hotel chains have proven to be an effective vehicle of development of Cyprus. Far from being a solution, the current policy for promoting quality tourism is not only inappropriate, but may actually hinder the further development of tourist destinations (Sharpley, 2003; Farsari *et al.*, 2007). Integration of the different accommodation types in order to arrive at market differentiation is offered as a solution for small islands (Sharpley, 2003). Empirical evidence of the integration strategies for market differentiation is scarce. Most researchers assess the economic and

environmental impacts associated with separate types of accommodation (Rodenburg, 1980; Kontogeorgopoulos, 1998; Albuquerque & Mc Elroy, 1992), and a few see integration of the different accommodations as a consolidation of the island's position in the international tourist market (Sharpley, 2003).

From the beginning of international tourism to Aruba, the typical establishment was a large hotel & casino, and only a few small hotels. Later on, the introduction of local chains and timeshare operations gave Aruba a more diversified accommodation portfolio (Cole & Razak, 2003). Most of the American international-franchise hotels on Aruba have casinos, since these accommodation styles attract more affluent visitors to the island. To maintain their annual volume of tourists, most international hotel chains in Aruba depend on tour operators from North America that specialize in short-stay packages (Morrison, Hsieh & O'Leary, 1994).

Short-stay tourism may harm the tourism industry, because it has to work harder to keep a steady occupancy rate year-round by attracting more short-stay tourists instead of focusing on the long-stay ones. The increased volume of short-stay package tourists contributes to ecological damage by owing to the expansion of transport facilities over land as well as the increase in air traffic (Albuquerque & McElroy, 1992). Since local resorts and small hotels have lower costs and charge lower prices, it can be expected that they are more able at attracting tourists who stay for a longer period and tourists from more distant origins like Europe and Latin-America.

Since the 1990s, most of the Caribbean tourism destinations have searched for more upscale tourists to increase the tourist expenditure and government revenue. In this context, specialized tour operators focus their marketing efforts on new markets like the business and convention tourists and the honeymooners (ECLAC, 2003), since these are less concerned about expenses (Holloway, 1998). Therefore it can be expected that the international chains are very active in these markets. It is also likely that these markets will be dominated by short-stay tourists. This is self-evident for the business and convention market, but also holds for the honeymooners, given the fact that many islands have reduced the waiting period for couples to be married to less than three days in order to capture a share of this market.

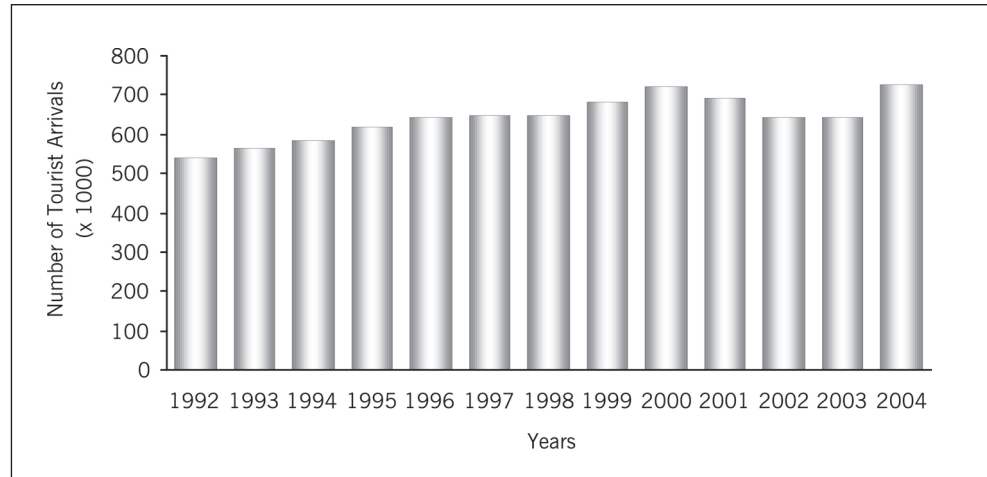
The application of more general insights from the literature to Aruba shows that a close relationship can be expected between the type of accommodation and the type of tourist. It can be expected that the tourists who opt for the international chains will do so for a short stay and will come from North-America. The tourists who come from Europe and Latin-America can be expected to stay in the locally-owned types of accommodation and remain on the island for a longer period.

The tourism data of Aruba

Through tourism development Aruba has become one of the most successful and prosperous small island in the world (Baldacchino, 2006). McElroy (2006) notes that, tourism-wise, Aruba is the third most developed small island in the world. At the time of the switch from oil industry to tourism in 1985, the estimated number of tourist arrivals in Aruba was around 200,000. Aruba experienced a growth of hotel rooms from 2,500 in 1985 to an estimated 5,200 rooms in 1992 and 7,500 in 2004 (Caribbean Tourist Organisation - CTO, 2007). With the expansion of the number of hotel rooms, the number of tourist arrivals has also increased steadily to 540,000 in 1992, reaching a peak of more than 700,000 in 2000. After 2000, the arrivals declined to 690,000 in 2001, 640,000 in 2002 and in 2003 (Figure 2). This decline can be ex-

plained by the fact that tourism destinations worldwide have suffered from the attacks in the United States on September 11, 2001 (WTO, 2004). In 2004, the number of tourist arrivals have recovered to more than 700,000 that was recorded in 2000.

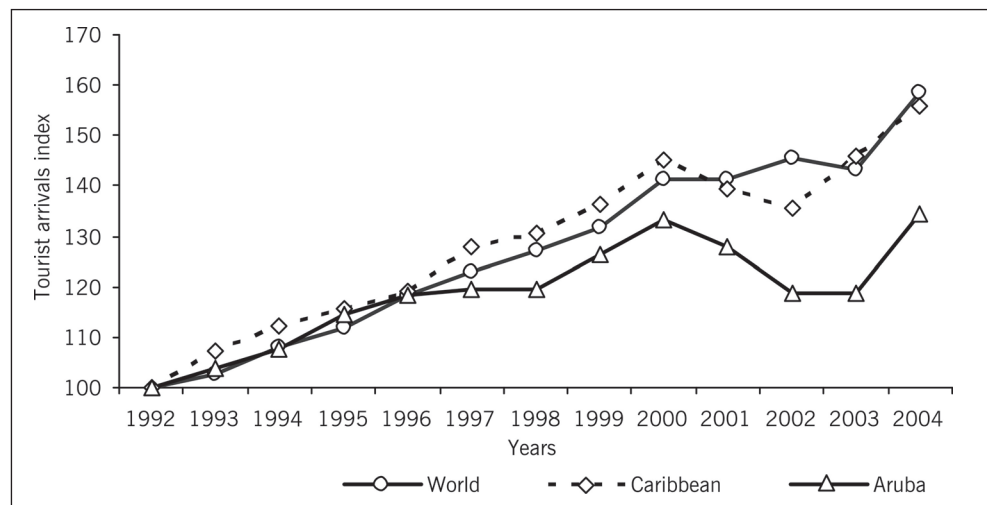
Figure 2
ARUBA TOURIST ARRIVALS, 1992 - 2004



Source: CTO (2007)

Comparing the performance of Aruba in terms of tourist arrivals with the Caribbean and the world trends with 1992 as the reference year (Figure 3) an interesting observation is obtained. From 1992 to 1997, the indexes for Aruba were higher than the world's rates, but lower than the Caribbean's growth. From 1998 to 2004, average growth rates for the world and for the Caribbean were both higher than for Aruba. Figure 3 suggests that the September 11 attacks caused a sharper decline of tourist arrivals in 2001, 2002 and 2003 in, both, the Caribbean and Aruba, since the global trend seems to be more stable. In this context the question arises whether Aruba and the Caribbean in general are too heavily dependent on the North American market.

Figure 3
ARUBA PERFORMANCE IN COMPARISON WITH THE GLOBAL TRENDS

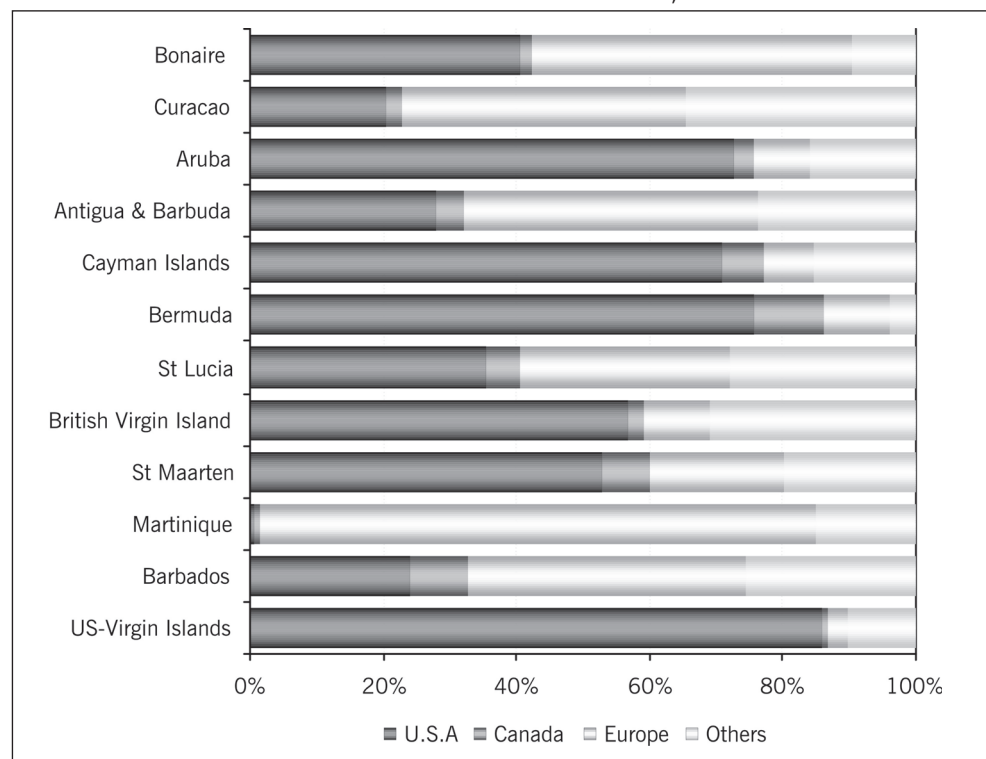


Source: WTO (2003); CTO (2003, 2007)

Data in Figure 4 demonstrate the reliance on the North American market. For Aruba, this is more than 70 percent of the total number of tourist arrivals to the island. Twelve of these islands are former territories of the five colonial powers - Aruba, Bonaire, Curacao and St Maarten belonged to the Netherlands; Virgin Islands to the United States; Antigua & Barbuda, Cayman Islands, Bermuda, St Lucia, Barbados and British Virgin Islands to the Great Britain and Martinique and Guadeloupe to France.

Europe (the Netherlands) could be expected to be the most important tourist market for Aruba, as for the other Dutch islands in the Caribbean, because of the historic relationship with the Netherlands. Nevertheless, Aruba – together with the British Commonwealth islands – seems to have a different market pattern. The United States also accounts for more than 70 percent of the main market for the Cayman Islands and Bermuda. The other Dutch islands - Bonaire, Curacao and St Maarten have Europe as one of their most important markets. The main market (80 percent) for the American territories like the US Virgin islands is the United States. The islands of Martinique, a former colony of France, and Barbados, an ex colony of Great Britain, depend on Europeans for more than 50 percent of the market. To understand why Aruba relies so heavy on the American market, an in-depth survey of the role of the accommodation in the tourism development should be done.

Figure 4
THE CARIBBEAN ISLANDS WITH THEIR MAIN TOURIST MARKETS, 2004



Source: CTO (2002, 2003, 2007)

Study method

The data used in this study was derived from the visitor's disembarkation cards processed by the Aruba Tourism Authority (ATA). People who visit the island for less than three months are required to provide information on the purpose of their visit, country of origin, place, and length of stay on the island. The number of arrivals is approximately 700,000 per year. From the more than 2 million visitor's disembarkation cards

for the years 2000-2002, a random sample of 200,000 visitors that could be classified as *tourist* was obtained.

For the purpose of this study the accommodation was classified as follows: international hotels, local resorts and small hotels. International hotels are defined as the hotels that have a management contract with an international hotel chain. Local resorts are holiday resorts owned by local entrepreneurs. In contrast to the high rise hotels of the international chains, the local resorts are holiday parks with bungalows. Small hotels are family-owned hotels, guesthouses, and self-catering apartments. The important difference between small hotels and the local resorts is that the small hotels are usually stand alone accommodations that do not have casino facilities.

The length of stay was classified as passing tourists (1 or 2 nights), short-stay tourists (3 to 7 nights) and long-stay tourists (8 nights or more). The country of origin or geographic market was classified as Latin America, North America and Europe. In this study Latin America includes the Hispanic countries, Brazil, and the Caribbean islands, including the Netherlands Antilles. North America captures the USA and Canada, and Europe is defined as the Netherlands and all other countries. The purpose of visit in this study has been classified in the categories: vacation, honeymoon, and business or other. The category vacation includes tourists on vacation or visiting friends and relatives. The category business includes attending conventions.

Simple cross tabulation was used to analyse two-dimensional relationships between the nominal categorical variables. To calculate the strength of association between two nominal categorical variables, the statistic Cramer's V was used. Cramer's V ranges from 0 to 1, with 0 indicating no relationship and 1 indicating a perfect relationship. We did not calculate any measures of significance as with a sample of close to 200,000 any modest association will also be significant. For the multivariate analysis Chi-square Automatic Interaction Detection (CHAID) was used. The CHAID technique is an effective approach for obtaining meaningful segments from a large number of categorical variables (Kass, 1980).

In this study, the dependent variable was the accommodation type and the independent variables (predictors) are the tourist's length of stay, purpose of visit and country of origin. From the set of independent variables, the software chooses the strongest predictor (on the basis of the chi-square value) as the first to segment the sample. Categories that do not show a significant difference are taken together. The procedure is repeated for each segment and the result is a tree-like partitioning into mutually exclusive, exhaustive segments that best describe the choice of a type of accommodation. The next step was to rank the segments per type of accommodation. For this ranking, the gain index was used. This index is defined as the proportion in the segment that chooses the accommodation divided by the overall proportion of tourists in this accommodation. The higher the gain index, the higher the market share of the accommodation in this segment.

Results and discussion

Result of the cross-tabulation between the tourist's length of stay and different accommodation types is presented in Table 1. The column totals show that slightly over 50 percent of all tourists arriving on Aruba choose to stay in a hotel belonging to an international chain. The small hotels have a market share of only 13.5 percent. However, these hotels are the most popular among passing tourists (1 to 2 nights) with 71.8 percent of those staying in small accommodation establishments. International chains

are the most popular among the short-staying tourists (74.9 percent). At the same time, international chains were the least popular accommodation choice for the long-stay tourists, who clearly show preference for local resorts (61.6 percent) or small hotels (32.6 percent). The Cramer's V of 0.492 confirms the moderately strong link between the variable length of stay and the accommodation type. Cramer's V also confirms the expectations that the locally-owned accommodation establishments are more successful in attracting long-stay tourists and that the international chains depend on the short-stay packages.

Table 1
LENGTH OF STAY BY ACCOMMODATION TYPES

	International chains		Local resorts		Small hotels		Total	
	Count	%	Count	%	Count	%	Count	%
1 or 2 nights	303	19.1	146	9.2	1,141	71.8	1,590	100.0
3 to 7 nights	93,859	74.9	28,447	22.7	3,063	2.4	125,369	100.0
8 nights or more	3,890	5.8	41,681	61.6	22,040	32.6	67,611	100.0
Total	98,052	50.4	70,274	36.1	26,244	13.5	194,570	100.0

The accommodation choice by tourists from different geographical markets is displayed in Table 2. The North American tourists choose the international chains more often, but are also slightly overrepresented in the local resorts. Tourists from Latin America can be found in each of the accommodation types, but show a clearer preference for the small hotels than do the North American tourists. This difference is even stronger for the tourists from Europe. No less than 40 percent choose a family-owned hotel or apartment. The international chains have the lowest share in this market. The local resorts have a relatively high share in each of the markets. People from all over the world seem to choose this type of accommodation, making it less vulnerable to sudden shifts in demand from the various countries. The CHAID tree provides a more detailed analysis that also uncovers the niche markets for the various types of accommodation.

Table 2
GEOGRAPHICAL MARKET BY ACCOMMODATION TYPES

	International chains		Local resorts		Small hotels		Total	
	Count	%	Count	%	Count	%	Count	%
Europe	3,499	26.3	4,243	31.9	5,557	41.8	13,299	100.0
Latin America	21,197	41.2	15,219	29.6	15,044	29.2	51,460	100.0
North America	73,959	55.6	51,029	38.4	7,919	6.0	132,907	100.0
Total	98,052	50.4	70,274	36.1	26,244	13.5	194,570	100.0

Results CHAID analyses are presented in Figure 5, as a tree diagram. Not surprisingly, the length of stay is the strongest predictor of accommodation choice. The first split shows the same figures as the bivariate analysis presented in Table 1. The further splits are more informative. Passing tourists are concentrated in the small hotels. The next step for this segment shows that this concentration applies particularly to the tourists from North America and Europe. They choose the small hotels almost exclusively. Passing tourists from Latin America are also located in the international chains (19.2 percent).

Figure 5
TREE DIAGRAM



The large group of short-stay tourists (close to 65 percent of the total sample) shows a very different pattern. Three quarters of these tourists stay in the international chains; the rest choose local resorts. This segment is split by the purpose of the visit: business, vacation, and honeymooning. Both the North-American and the European business tourists have a clear preference for the international chains, while the business tourists from Latin America on the other hand choose various types of accommodation including the small hotels (21.3 percent). The very large group of short-stay vacationers stays in the international chains almost exclusively (90 percent). Again, the Latin-American tourists form an exception. Many of these short-stay vacationers opt for the local resorts (47 percent). Among the honeymooners, a surprisingly large share of the short-stay tourists choose the local resorts, in particular the tourists from North America and Europe (53 percent).

At first sight, the long-stay visitors seem to mirror the short-stay tourists. Overall, only 5 percent of the long-stay tourists find accommodation in the international chains. Both the small hotels and the local resorts cater for this market. However, the next split shows that the American sub-markets are fully polarised. The North-American market is in the hands of the local resorts (83.8 percent), while the small hotels service the Latin-American market exclusively (99 percent), regardless of whether people come for business, vacation or honeymoon. For the North Americans, the purpose of the visit affects the choice of accommodation. People on business also opt for the small hotels (43.5 percent) or the international chains (21.7 percent). Honeymooners from North America who stay longer than a week do so in the international chains (96 percent) and not in the local resorts (0 percent). This differentiation is a clear example of niche marketing, where tour operators offer long-stay honeymoon packages to the North-American market. It turns out that these packages are on sale in the off-season when fewer vacationers come to the international chains. The long-stay tourists from Europe are again a very different category. They are overrepresented in the small hotels, particularly if they are on business (67.4 percent). If they are on their honeymoon, they prefer the local resorts (63.7 percent).

The conclusion is that the market is far more complex than it appears at first sight. Nevertheless, a number of inferences can be drawn. It is indeed the case that the international chains are highly dependent on the North-American market for short-stay package tourists, with the exception of the small group of honeymooners. The locally-owned accommodation is more successful in attracting long-stay tourists, both from North America (the resorts) and from Latin America (the small hotels). This differentiation is further illustrated in Table 3. Table 3 shows the five best market segments for each type of accommodation. For the international chains these segments account for 71 percent of all tourists. The dominant segment is the short-stay vacationers. The other segments are niche markets for business travel from each of the three continents. These tourists also only stay for a few nights and it can be claimed that the international chains account for much of the air traffic to the island.

The local resorts, on the other hand, also have a stronghold on the North-American market, but for the long-stay rather than the short-stay visitor. The lower number of arrivals for these resorts is not indicative of the number of nights spent by these tourists on the island. The short-stay tourists in these resorts come from Latin America for a vacation or from North America for their honeymoon. The five best segments account for 82 percent of all tourists. The small hotels show a larger degree of market differentiation. The five best segments only account for 44 percent of all tourists. These hotels have been very successful in catering for the market of long-stay vacationers from Latin

America. The business travellers to these accommodations are either passing tourists (a small number) or tourists who stay on the island for a longer period.

Table 3

RESPONSE INDEX RATE OF THE SELECTED GROUPS

International Chains							
Segment	First	Second	Third	Market	Number	Gain index	Share %
1	> 8 nights	N. America	Honeymooners	96.01	505	192	
2	3 – 7 nights	Bus. & others	Europe	93.41	510	187	
3	3 – 7 nights	Vacation	N. America & Europe	90.32	63,294	181	
4	3 – 7 nights	Bus. & others	N. America	87.73	4,018	176	
5	3 – 7 nights	Bus. & others	L. America	57.48	1,868	116	
Total					70,195		71
Local Resorts							
1	> 8 nights	N. America	Vacation	87.11	36,846	244	
2	> 8 nights	Europe	Honeymooners	63.67	191	179	
3	3 – 7 nights	Honeymooners	N. America & Europe	53.42	6,245	150	
4	3 – 7 nights	Honeymooners	L. America	41.08	422	115	
5	3 – 7 nights	Vacation	L. America	40.71	13,903	114	
Total					57,607		82
Small Hotels							
1	> 8 nights	L. America	Vacation/honey mooners	99.63	9,238	690	
2	> 8 nights	L. America	Bus. & others	99.09	1,413	687	
3	1 / 2 nights	N. America & Europe		92.28	227	640	
4	1 / 2 nights	L. America		71.72	1,177	467	
5	> 8 nights	Europe	Bus. & others	67.39	587	201	
Total					12,642		44

Source: ATA

Conclusion

To what extent does the result of this research help in the design of a policy to reduce the economic and ecological vulnerability of the island in further developing the tourist sector? The first answer is that the analyses confirm the dominant role of the accommodation sector in the planning and the management of tourism. The tourist's choice is determined to a large extent by the type of accommodation on offer. The various types of accommodation service different tourist markets. Diversifying the portfolio can therefore lead to a differentiated market mix.

The second answer is that the frequently-documented reliance of the international chains on a single market for mass tourism is not a cliché. Uncontrolled expansion of

this type of accommodation in its present form could lead to even more pressure on the infrastructure of the island, owing to the many arrivals and departures generated by the short-stay tourists. However, it would be interesting to see whether a shift from package tours to timeshare accommodation could lead to more repeat visitors who stay for a longer period in the international chains.

The third answer is that there seems to be a trade-off among the tourists between the price of the accommodation and the length of stay. The local resorts have been far more successful in attracting the North-American market for long-stay tourism than the international chains have. This success might well be the result of the lower price for accommodation. The same holds for the Latin-American market. Here, the local resorts attract the short-stay tourists and the small hotels are more successful in attracting the long-stay visitors, again probably because they charge lower prices. A policy aimed at attracting fewer, but more upscale tourists might not be the best way to prolong the stay of tourists on the island.

The fourth answer is that the European market could be promising as travellers from Europe almost inevitably stay for a longer period. It certainly looks as though there is a relationship between the duration of the journey and the duration of the stay. Aruba serves the European market far less than other islands like Curacao and Martinique do. There seems to be no reason why Aruba could not increase its market share from the European region. The fifth answer is that niche markets of businessmen, conventioners, and honeymooners may lead to more tourists, although the numbers are inevitably low, but hardly to more long-stay tourists..

A limitation of this research is that the results concern only the island of Aruba. It would be interesting to replicate the analyses in this contribution to compare Aruba with the other islands in the Caribbean. Another limitation is the lack of analysis of the seasonality of the accommodation portfolio in Aruba. It is important to know if the diversified accommodation portfolio not only leads to market differentiation and but also to a stable occupancy rate over the year. Other important issue is the benefit of accommodation portfolio especially the international chains for the local economy. Many authors point out limited beneficial effects for the local community due to the fact that small islands import goods and services from outside the economy. Further research about this issue would be interesting.

References

- Albuquerque, K. & McElroy, J. L. (1992). Caribbean Small-Island Tourism Styles and Sustainable Strategies. *Environmental Management*, 16(5), 619-632.
- Andriotis, K. (2002). Scale of Hospitality Firms and Local Economic Development: Evidence from Crete. *Tourism Management*, 23, 333-341.
- Baldacchino, G. (2006). Island, Island Studies, *Island Studies Journal*, 1(1), 3-18.
- Butler, R. W. (1980). The Concept of a Tourist Area Cycle of Evolution: Implications for Management of Resources. *Canadian Geographer*, 24(1), 5-12.
- Briguglio, L. (2004). Economic Vulnerability and Resilience: Concepts and Measurements. *Paper presented at the International Workshop on "Vulnerability and Resilience of Small States" organised by the Commonwealth Secretariat and the University of Malta, University Gozo Centre, Malta, 1-3 March 2004.*
- Carey, S., Gountas, Y. & Gilbert, D. (1997). Tour Operators and Destination Sustainability. *Tourism Management*, 18(7), 425-431.
- Caribbean Tourism Organization, CTO (2003). *Caribbean Tourism Statistical Report, 2002-2003 Edition.*

- Caribbean Tourism Organization, CTO (2007). *Caribbean Tourism Statistical Report, 2007*.
- Cole, S. & Razak, V. M. (2003). *A Framework for Sustainable Tourism in Aruba*, Conference draft, November 2003. Prepared for the National Tourism Council of Aruba and the Minister of Tourism and Transportation.
- Economic Commission for Latin America and the Caribbean, ECLAC (2003). *A Review of Caribbean Tourism in the 1990s and at the Beginning of the New Century*.
- Culpan, R. (1987). International Tourism Model for Developing economies. *Annals of Tourism Research, 14*, 541-552.
- Farsari, Y., Butler, R. & Prastacos, P. (2007). Sustainable Tourism Policy for Mediterranean Destinations: Issues and Interrelationships. *International Journal Tourism Policy, 1*(1), 58-78.
- Grandoit, J. (2005). Tourism as a Development Tool in the Caribbean and the Environmental By-products: The Stresses on Small Island Resources and Viable Remedies. *Journal of Development and Social Transformation, 1*, 89-97.
- Holloway, J. C. (1998). *The Business of Tourism* (5th Ed.). 197 Harlow and New York: Addison Wesley Longman Limited.
- Jenkins, C. L. (1982). The Effects of Scale in Tourism Projects in Developing Countries. *Annals of Tourism Research, 9*, 229-249.
- Kass, G. (1980). An Exploratory Technique for Investigating Large Quantities of Categorical Data. *Applied Statistics, 29*, 119-127.
- Kontogeorgopoulos, N. (1998). Accommodation Employment Patterns and Opportunities. *Annals of Tourism Research, 25*(2), 314-339.
- Kusluvan, S. & Karamustafa, K. (2001). Multinational Hotel Development in Developing Countries: an Exploratory Analysis of Critical Policy Issues. *International Journal of Tourism Research, 3*, 179-197.
- Main, H., Chung, M. & Ingold, A. (1997). A Preliminary Study of Data Utilisation by Small to Medium-sized Hotels. *International Journal of Contemporary Hospitality Management, 9*(2), 92-96.
- McElroy, J. L. (2006). Small island tourist economies across the life cycle. *Asia Pacific Viewpoint, 47*(1), 61-77.
- Medina-Muñoz, D. & Garcia-Falcon, J. M. (2000). Successful Relationships Between Hotels and Agencies. *Annals of Tourism Research, 27*(3), 737-762.
- Medina-Muñoz, R. D., Medina-Muñoz D. R. & Garcia-Falcon, J. M. (2003). Understanding European Tour Operators' control on Accommodation Companies: An Empirical Evidence. *Tourism Management, 24*, 35-147.
- Morrison, A., Hsieh, S. & O'Leary, J. T. (1994). A Comparison of the Travel Arrangements of International Travellers from France, Germany and the UK. *Tourism Management, 15*(6), 451-463.
- Plog, S. (2001). Why Destination Areas Rise and Fall in Popularity: an Update of a Cornell Quarterly Classic. *Cornell Hotel and Restaurant Administration Quarterly: an invited paper pp.* 13-24.
- Rodenburg, E. (1980). The effects of scale in economic development: Tourism in Bali. *Annals of Tourism Research, 7*(2), 177-196.
- Sharpley, R. (2003). Tourism, Modernisation and Development on the Island of Cyprus: Challenges and Policy Responses. *Journal of Sustainable Tourism, 11*(2&3), 246-265.
- Thomas, R. (2000). Small Firms in the Tourism Industry: Some Conceptual Issues. *International Journal of Tourism Research, 2*, 345-353.
- United Nations Environment Program, UNEP (1996). *Sustainable tourism development in small island developing States. Commission on sustainable development. Fourth session.*
- Weaver, D. B. (2000). A Broad Context Model of Destination Development Scenarios. *Tourism Management, 21*, 217-224.
- Wilkinson, P. (1989). Strategies for Tourism in Island Microstates. *Annals of Tourism Research, 16*(2), 153-177.
- World Tourism Organization, WTO (2004). *Making Tourism Work for Small Island Developing States.* Department of Sustainable Development of Tourism.

Submitted: 10/17/2007

Accepted: 05/26/2008