

Czech University of Life Sciences Prague

Faculty of Economics and Management

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Bachelor Thesis

Tourism in Aruba

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Thesis title

Tourism in Aruba

Objectives of thesis

The primary objective of this thesis is to investigate the economic aspects of tourism on Aruba, which is located in the Caribbean, by determining the effects of tourist spending in Aruba.

The secondary objective is to examine the dependency of the United States tourists coming to Aruba with the United States GDP and how this has an impact on the Aruban GDP.

Then according to findings, a connection is established between the dependency of the tourist coming to Aruba and the American GDP and what impact this has to the Aruban GDP.

Methodology

The first part of the thesis consists of a literature review constructed using primary (research monographs, academic journals, conference reports, research reports, magazines, university dissertations) and secondary sources (textbooks, academic journal review articles, abstracts, open access journals) concerning the history, politics and government, geographical location and tourism of Aruba.

This then followed in the second part of the thesis by an analysis of the tourism and hospitality industry, with their status and connection to the United States tourist market. Furthermore, detailed attention is paid to some of these stakeholders. Through the use of both quantitative and qualitative research methods.

Then according to findings, a connection is established between the dependency of the tourist coming to Aruba and the American GDP and what impact this has to the Aruban GDP.

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Aruba, Tourism, GDP, Economic Dependency and Vacation

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Aruba History and Culture: Tourism, Art, Custom and Tradition. New York: CreateSpace Independent Publishing Platform, 2016. ISBN 1533671729, 9781533671721.

BUTLER, Richard. The tourism area life cycle. Buffalo: Channel View Publications, c2006. ISBN 9781845410261.

Cole, Sam & Razak, Victoria. (2018). A Framework for Sustainable Tourism in Aruba. 10.13140/RG.2.2.12850.04808.

Neil LEIPER. Tourism Management. 3rd edition. Pearson Education Australia, 2004. ISBN 1862505330, 9781862505339.

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Declaration

I declare that I have worked on my thesis titled “Tourism in Aruba” by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break copyrights of any person.

In Prague, on 17th of March 2020

Matthijs Nino van Reek

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Tourism in Aruba

Abstract

This bachelor thesis aims to analyze and evaluate the actual situation of the tourism industry in Aruba, using regression analysis to determine what factors affect the tourism industry on Aruba the most, find the dependency of different markets that influence the tourism of Aruba and how this has an impact on the Aruban economy.

This thesis is divided into two main parts. The first part is theoretical and contains general characteristics of tourism such as: basic terms, basic characteristics, factors and principles that affect the demand on tourism. And general information about Aruba.

The second part, practical part, contains analyses of the tourism on Aruba, and identification of factors that determine the current situation and prospects of further development.

The final part of the thesis is a summary of the results of tourism as a key economical factor, and an estimate of the development of the market in the future.

Key words

Aruba, Tourism, GDP, Economic Dependency, Vacation

Cestovní ruch na Arubě

Tato bakalářská práce si klade za cíl analyzovat a zhodnotit skutečnou situaci cestovního ruchu na Arubě, pomocí regresní analýzy zjistit, jaké faktory nejvíce ovlivňují cestovní ruch na Arubě a zjistit závislost různých trhů, které ovlivňují cestovní ruch na Arubě a jaký to má dopad na ekonomiku Aruby.

Tato práce je rozdělena do dvou hlavních částí. První část je teoretická a obsahuje obecné charakteristiky cestovního ruchu, jako jsou: základní pojmy, základní charakteristiky, faktory a principy ovlivňující poptávku po cestovním ruchu. A obecné informace o Arubě.

Druhá část, praktická část, obsahuje analýzy cestovního ruchu na Arubě a identifikaci faktorů, které určují současnou situaci a perspektivy dalšího rozvoje.

Závěrečnou částí práce je shrnutí výsledků cestovního ruchu jako klíčového ekonomického faktoru a odhad vývoje trhu v budoucnosti.

Klíčová slova

Aruba, Cestovní ruch, HDP, Ekonomická závislost, Dovolená



One happy
island

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List of Abbreviations

USD United States Dollar

B Billion(s)

GDP Gross Domestic Product

AWG Arubans Local Currency

US United States of America

USA United States of America

AHATA Aruba Hotel and Tourism Association

SQ Squared

KM Kilometers

1. Introduction

Tourism is a rapidly growing sector, that contributes significantly to the world's economy and to the economy of many individual countries. Due to higher incomes, standards of living, more free time and better infrastructure, traveling has become a part of people's day to day lives. Globalization, lower barriers to travel, and a desire to explore the world reinforce the development of tourism.

Tourism is a mean of cultural education and education itself. It motivates individuals to learn foreign languages and to explore different cultures and habits. Tourism is a phenomenon that both affects its environment and reversely, this environment affects tourism. From an economic point of view, tourism influences multiple other sectors such as: accommodation, transportation and the food and beverage sector, creating a multiplier effect.

Tourism takes an influential share in the world's gross domestic product and provides many job opportunities. It also has a positive impact on the balance of payments and the balance of foreign currency.

The economy of Aruba is an open system, with tourism currently providing the largest percentage of the country's income; as of 2017, over 1 million tourists visited Aruba annually, with the large majority (60-70%) of those from the US. Because of tourism's rapid growth in the last 80 years, related industries like construction have also flourished in Aruba. Other primary industries include oil refining and storage, as well as offshore banking.

The number of tourists, visiting Aruba, has increased significantly in the past years, this increase has made a significant contribution to the Aruban economy and has become an inseparable part of Aruba in general. The tourist's arrival pattern has changed during time and the results can be elucidated by the economic indicators of Aruba.

2. Thesis Objectives and Methodology

2.1 Objectives

The primary objective of this thesis is to investigate the economic aspects of tourism on Aruba, which is in the Caribbean, by determining the effects of tourist spending in Aruba.

The secondary objective is to examine the dependency of the United States tourists coming to Aruba with the United States Gross Domestic Product and how this has an impact on the Aruban Gross Domestic Product.

Then according to findings, a connection is established between the dependency of the tourist coming to Aruba and the influence this has on the Aruban GDP.

2.2 Methodology

The first part of the thesis consists of a literature review constructed using primary (research monographs, academic journals, conference reports, research reports, magazines, university dissertations) and secondary sources (textbooks, academic journal review articles, abstracts, open access journals) concerning the history, politics and government, geographical location and tourism of Aruba.

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Then according to findings, a connection is established between the dependency of the tourist coming to Aruba and the American Gross Domestic Product and what impact this has to the Aruban Gross Domestic Product.

3. Theoretical Part

3.1 Introduction to Tourism

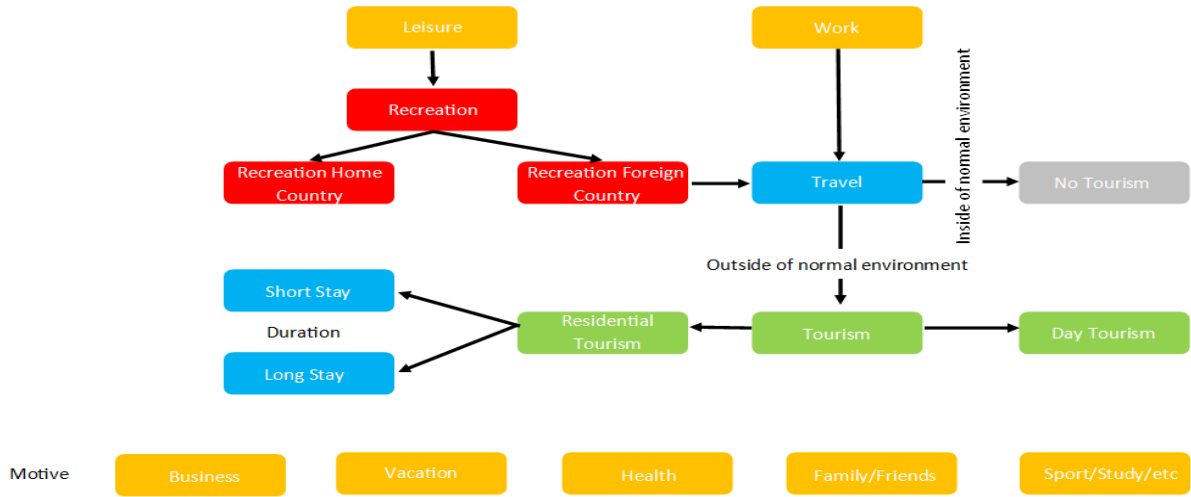
“Tourism is traveling to a destination outside the normal environment due to recreation or business and does not last longer than a continuous year.¹” It is one of the most profitable industries in the economy.

Many tourists travel to see something of the culture and nature of other countries.

According to TourismSociety.org *“Tourism is not just about people traveling for leisure in their free time. It is also about people traveling for other reasons, such as for their health, for sports, for study, or for visiting relatives and acquaintances. Business travelers also count as tourists, on the condition that they are not paid from the place of destination. People who transport commuters, freight or travel as a seller do not count as tourists. After all, they are in their ‘normal (work) environment.’²”*

Because there are different motives for traveling, there are also different forms of tourism, such as beach tourism, cultural tourism, winter sports holiday, business tourism, nature tourism, and family visits. *“These different subdomains of tourism all have their own characteristics and differ in their profile of the tourist. In addition to the tourist, another important element of tourism is the vacation or trip.²”* This does not only concern holidays where you spend the night in an accommodation (residential tourism), but also day trips or excursions where the tourist is on the road for no more than a day (day tourism). Residential tourism is usually divided in short breaks and long vacation. *“A short vacation lasts one, two or three nights and a long vacation lasts at least four nights and goes up to a year.²”* Figure 1 shows the relationship between the concepts.

Figure 1: Tourist Graph: Own Data Processing



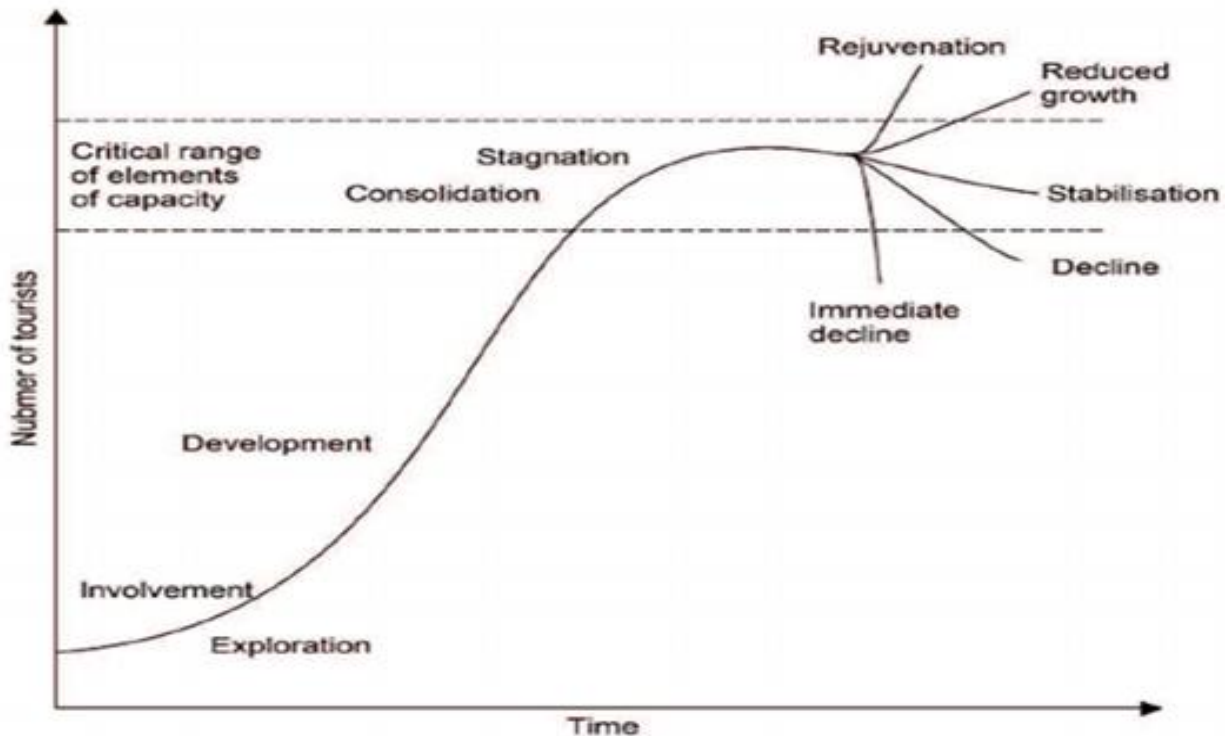
3.1.1 Tourism Life Cycle

According to ECLAC (2008), “one of the most widely used framework for determining the tourism evolutionary pattern is the concept of ‘tourism area life cycle’ (TALC) of Butler (1980).³” This framework is based on the product cycle concept. “In this concept, the sales of a product proceed slowly at first, then experience a rapid rate of growth, stabilize, and subsequently decline.⁴” Tourism as a product passes through similar stages. Specifically, the TALC comprises a total of six possible stages (see also Figure 6). Though the S-shape pattern shown in Figure 1 is the most known life cycle pattern, Butler (1980) notes that “not all areas experience the stages as clearly as others.⁵”

The following explanation of these stages is based largely on Butler’s TALC:

- 1) Exploration
- 2) Involvement
- 3) Development
- 4) Consolidation
- 5) Stagnation
- 6) Decline or rejuvenation

Figure 2: Butlers TALC: Own Data Processing



1) **Exploration:** a few hardy and adventurous people looking for something different in a holiday find a place that is special in terms of its culture, natural beauty, history or landscape. There may be no tourist services available and local people will not be involved in tourist money making activities.

2) **Involvement:** local people start to notice that there are increasing numbers of people coming to their local area. They start businesses to provide accommodation, food, guides, and transport.

3) **Development:** Big companies start to see the emerging potential of the area as a tourist resort and therefore start to invest money in the region. They build large hotel complexes and sell package holidays (a package might include travel, accommodation, food and excursions). This makes the numbers of tourists swell dramatically and massively expands the number of job opportunities for people in the local region, in both tourist related jobs and in construction and services.

4) **Consolidation:** The local economy is probably dominated by tourism at this stage, and many local people will make their money from this type of industry. However, this can remove people from other industries such as farming, and fishing and these industries can suffer as a result. There will be continued building and expansion of the resort but some of the older buildings will start to become unattractive and a lower quality client base might result.

5) **Stagnation:** competition from other resorts, rowdiness and a loss of the original features (e.g. if it had a great beach but that is now crowded and full of garbage) can cause the resort to stop growing. The number of people going levels off then starts to decline, threatening local businesses and services.

6) **Decline or rejuvenation?** From the stagnation point onwards there are 2 basic possibilities: Decline in various forms or rejuvenation (regrowth of the resort) Decline can be slow or rapid, and regular visitors are replaced by people seeking a cheap break or day trippers. Rejuvenation involves a cash injection from either a private company or the government, to create a new attraction within the original resort to boost its popularity.

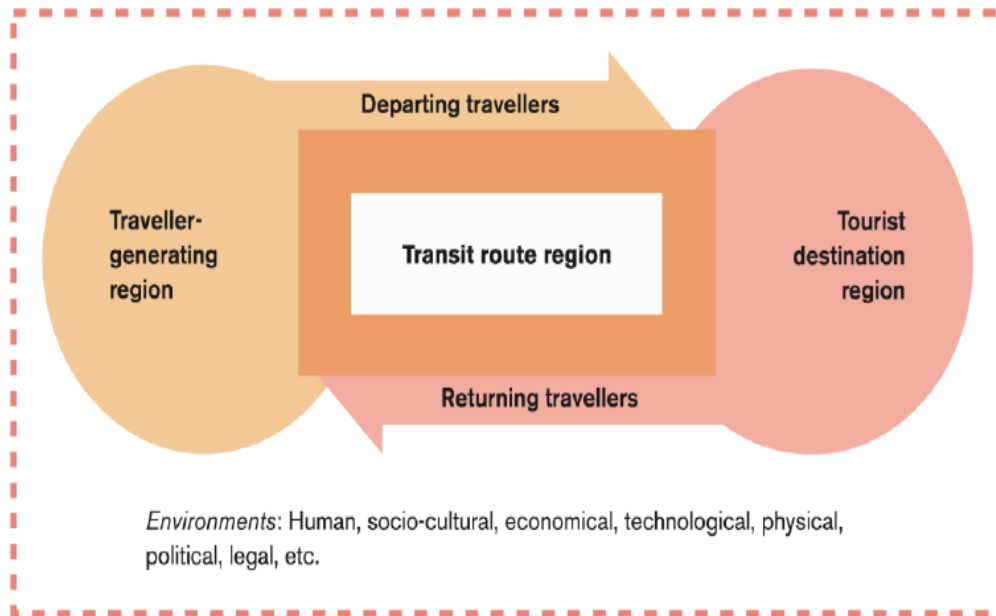
3.1.2 System of Tourism

Tourism does not only cover the journey and stay of the tourist. *“It also includes the actions that precede the journey: collecting information, making decisions and preparing, such as purchasing the necessary goods. Even after the journey, it continues to influence the tourist's future travel behavior. After all, a tourist takes back positive and negative travel experiences, which in turn have an influence on decisions that the tourist makes about a new journey.”*⁶

All these elements are interrelated and form a cyclical process. Leiper's⁶ "system of tourism" describes this relationship (Figure 3).

The Leiper system presents the three most important components of tourism as a cyclical system:” *the activities of the tourist (demand), traveling to and from the destination (the transit areas), and tourism as an industry (supply).*⁶”

Figure 3: Leiper's System



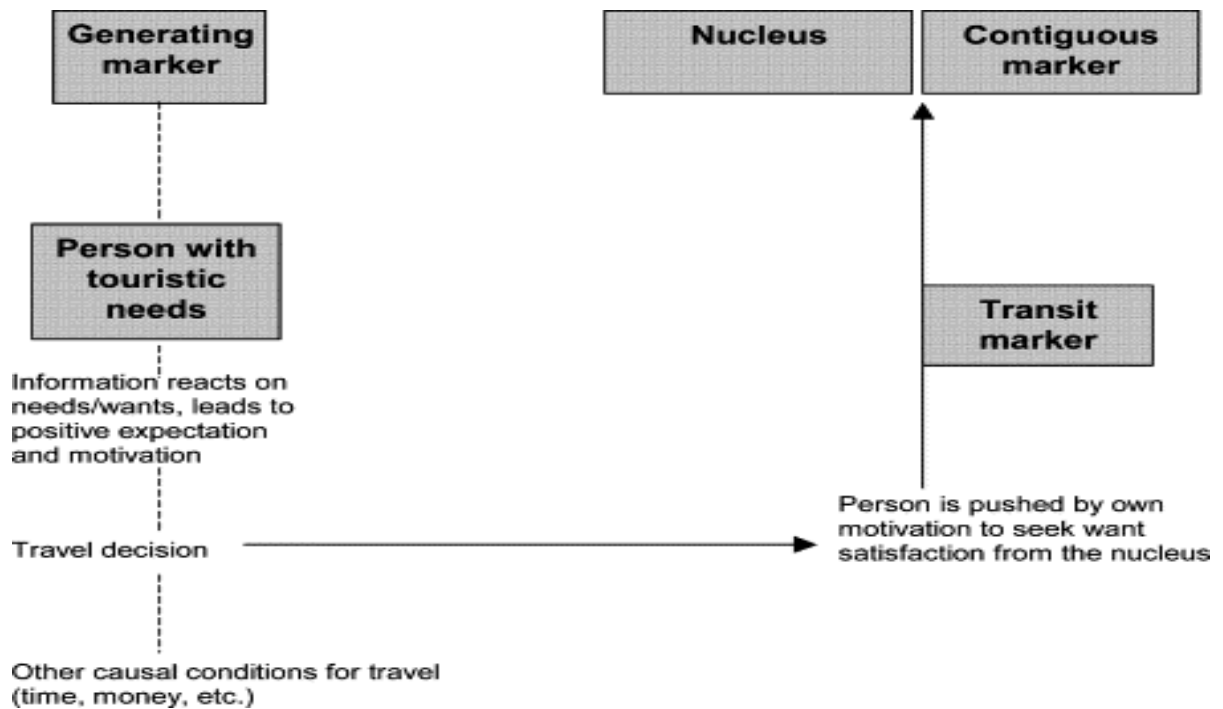
1. Traveler generation region / market.
 - Traffic agencies
 - Tour operators
 - Trade associations
 - Insurance
 - Trade press
 - Own transport
2. Transit region (transit areas).
 - Airlines
 - Shipping lines and ferries
 - Railways
 - Car and camper rental
3. Tourist destination region (by destination).
 - Accommodations
 - Attractions
 - Restaurants

Leiper's system also reflects the influence of the external environment on tourism. *“This environment includes, for example, demographic, technological and political developments. Also, the economic developments in disposable income and price levels. Leiper's tourism system*

*is therefore not an isolated system.*⁶” After all, external events such as a terrorist attack, a hurricane or a sharp fall in the currency rate can have a major impact on tourism.

Tourism is a human experience. Going on holiday has become a fixed part of our contemporary consumption pattern. This makes the tourist the central actor in the Leiper system. After all, the demand for tourism arises among tourists. The tourist experiences the motivation, makes decisions and has the time and resources at their disposal. *“In his decision-making, he is influenced by, among other things, the social environment, marketing and prevailing holiday trends.*⁶” This influence is increasingly taking place via channels such as the internet and social media. Figure 4 shows this decision-making process.

Figure 4: Tourist Decision-Making Process: Own Data Processing



Paid vacation days, compensation of heavy / stressful work, growth in purchasing power, industrialization and urbanization, transport facilities and accessibility and the emergence of mass media have played a key role in the socio-economic development from the 20th century.

3.1.3 Tourism as a Product

Tourists form a heterogeneous group, with different personalities, experiences lifestyles, and different social and economic characteristics. To statistically map the tourist demand, it is therefore important to gain insight into the background characteristics of tourists, such as age, income, family composition, gender and labor market position. Subsequently, various observable features can be attached to the vacation or day trip of a tourist, such as:

The target; the motivation of the tourist, the duration of the day trip or the holiday, the place of residence of the tourist and the destination of the day trip or holiday, whereby at least a distinction is made between domestic and foreign countries, the time period in which the day trip or vacation took place, the spending that the tourist has made, the type of accommodation in which the tourist may have spent the night, the means of transport used by the tourist, the activities that the tourist has undertaken and the method of booking

A product is heterogeneous “*if consumers think there is a difference between the products of the different providers. This not only concerns the product itself, but also all kinds of factors that are associated with it, such as the atmosphere in the store, savings campaigns, etc.*”⁷

Marketing theory views products as fulfilling two distinct tasks (Burkheiser)⁸:

- *Primarily, each product satisfies a need of its consumer through the benefit it incorporates. Or, to put it in the words of Theodore Levitt, It is the benefits that are the product (Levitt, 1969:9).*
 - *Primary tourist needs are those that urge a person to make a tourist trip in order to satisfy*
- *Secondarily, the products are the means to achieve the targets of the marketing organisation through their sale. Although the primary objective of an enterprise is to make a profit, this is the derived result of selling products that satisfy consumer needs. Tourist products are the means to satisfy tourist needs (Paul, 1977:18).*
 - *Secondary or derived tourist needs are those arising from the decision to make a tourist trip*

3.1.4 Accommodation

There are five main types of accommodation for tourists: hostels, guest house, apartments, hotels and timeshares

- **Hostels** may provide the cheapest accommodation. They normally offer shared rooms with bunk beds, but some also have private rooms available.
- **Guesthouses** generally have nice local furnishings and will make the guest feel like being home.
- **Apartments** are especially great for longer stays. Many apartments come with great furnishings and facilities allowing the guests to settle down for as long as they need.
- **Hotels** can offer the most facilities and come in different star levels, often from 1-5 with five being the highest. Star levels of hotels are often determined by the country and not defined by a worldwide authority, so what may be a five star in one country, may only be a four star in another. Generally, a one-star hotel will be a basic room with the essentials. Going up the star levels the hotel will offer benefits, such as the furnishings will be nicer, there will be more facilities in the room and around the hotel and the hotel might offer a swimming pool and complimentary breakfast.
- **Timeshare** is a resort or vacation property split into shared or fractional ownership. This ownership is usually in weekly increments. When someone buys or rents a timeshare, they purchase a certain amount of time at a given resort. Usually, that amount of time is one week. Resorts will create their own individual schedules or calendars of weeks.
- **Airbnb** is an online marketplace which lets people rent out their properties or spare rooms to guests.

3.1.5 Income from Tourism

First line (direct):

- Edition of the visitor in the areas of: Accommodation, food, beverages, entertainment, clothing, gifts and souvenirs, personal care, medicine, cosmetics, photography, recreation, excursions and sightseeing, guides, local means of transport.

Second line (indirect):

- Salaries, goods, commissions, insurance, taxes, maintenance, administration.

Third line (induced):

- Accountants, maintenance engineers, farmers, shops, etc.

Employment in tourism:

- Direct and indirect employment: Receptionist / construction worker.
- Tourism is labor intensive.
- Tourism also requires a lot of investment.

Socio-economic impact on tourism:

Changing labor market, type of employment and the potential for growth depends on the degree to which the local population is satisfied with tourism, migration issues, shift in economic power, country speculation. Social impact on tourism:

- Relations between population groups that would not normally meet.
- Confrontation with other cultures, values and norms and foreign languages.
- Adapting the local population to the behavior of the visitor.

Positive:

- Attempt to keep culture alive
- Pursuit of authenticity
- Contact between countries
- Rediscovering own culture

Negative:

- Drug and sex tourism
- Crime
- Gambling
- Begging

3.2 General Information About Aruba

Aruba is one of the most popular islands of the Lesser Antilles (= ABC islands = Aruba, Bonaire and Curaçao) and is the most westerly of that group. *“It is located approximately 24 km off the coast of Venezuela.”*⁹ On a clear day, the Venezuelan mainland is visible from the south-east coast, and *“about 67 km, 20 minutes by plane, away from the Caribbean island of Curaçao”*⁹

*“Aruba is one of the 4 countries that together form the Kingdom of the Netherlands, together with the Netherlands, Curaçao and St. Martin (Bonaire, Saba and St. Eustatius are special municipalities within the country of the Netherlands).”*⁹ The Arubans therefore have the Dutch nationality and passport.

*“The island has an area of 180 square kilometers and is 8 kilometers wide and 30 kilometers long at its widest point.”*⁹

3.2.1 Culture

Aruba has a rich culture. This rich culture is since the Caribbean island has attracted many different people over the centuries. Today, One Happy Island is *“populated with more than ninety different nationalities”*⁹. And there is no end to this for now. Aruba still works as an irresistible magnet for many people from the Caribbean region. They want to live and work on the island. In this way, further cultural enrichment takes place in Aruba.

*“The Aruban population shows influences from Arawak, African and European peoples, which are reflected in local food, architecture, holidays, and languages. You will also find a healthy mix of emigrants, more than 10,000 from Europe, the Caribbean, and Latin America working in various branches on our island.”*⁹ Culturally, Aruba has a strong bond with the Netherlands, the former colonial occupation and current partner in the Kingdom of the Netherlands. *“The official language of the island is Dutch, which is used for education, signposts and government.”*⁹ English is spoken by most Arubans, especially those who work in tourism. The local and second official language of the island is Papiamentu, *“a language developed from Spanish and Portuguese, Dutch, some French, English, and some influences of African languages.”*⁹

A first impression of the Papiamentu sounds Spanish, and it is not surprising that Spanish-speaking visitors from Venezuela and other Latin American countries have only a little problem understanding the local language. *“The language was developed in Curaçao during the 16th century, when slaves and their Spanish owners developed a common way of communicating”¹⁰.*”

Aruba has several national symbols including a flag, coat of arms and national anthem. *“The flag and the Aruban national anthem have been in use since 1976.”¹¹* The coat of arms of Aruba has an even longer history. This symbol has been in use since the fifties of the last century.

3.2.2 Flag

“Since March 18, 1976, Aruba has its own flag.” The flag consists of three elements. *“A light blue background (the sea and the sky), a four-pointed red star (the four languages spoken in Aruba: Papiamentu, Dutch, English and Spanish) and two yellow stripes (the two sectors that brought Aruba prosperity: industry and tourism).”¹¹*

Figure 6: Flag



Figure 5: Coat of Arms



3.2.3 Coat of Arms

“The Coat of arms of Aruba was originally designed in Amsterdam in 1955. Since then, it has been in use as the national symbol of Aruba. The symbol has seven main elements”¹²:

The lion crest symbolizes power and generosity. A white Cross divides the shield into quarters and represents devotion and faith. In the first quarter is an aloë plant, the island's first important export. In the second quarter, Hooiberg, Aruba's most recognizable and second highest hill, represents Aruba rising out of the sea. The third quarter depicts hands shaking, symbolic of Aruba's good relations with the world. In the fourth quarter, a cogwheel represents industry. Below the shield is a pair of laurel branches, traditional symbols of peace and friendship.

3.2.4 Anthem

Aruba Dushi Tera (Aruba Sweet Land) is the national anthem of Aruba. *“It is a waltz written by Juan Chabaya Lampe and composed by Rufo Wever. The last verse was written by Hubert (Lio) Booi. It was accepted as the anthem on March 18, 1976¹³.”* It is written in Papiamentu.

3.2.5 Government

“In 1986, Aruba was separated from the other five islands of the Netherlands Antilles and given separate status. Since then, Aruba has its own government and is a separate country within the Kingdom of the Netherlands¹⁴.” According to the Aruban constitution: *“a governor is appointed by the queen for a period of six years, who oversees the formation of the local government, which consists of a prime minister and a seven-member Council of Ministers.¹⁴”*

The ministers are led by the prime minister, who is also the chairman of the council of ministers. Each minister deals with a specific part of the government. They are the political head of their department. Ministers consult with each other about certain decisions and this must ultimately lead to a government policy. *“The government consists of the ministers and the governor. The minister (s) and the governor form the executive power in Aruba. The States form the legislature together with the government.¹⁴”*

3.2.6 Economy

Aruba is a prosperous island that receives a large part of its income through tourism. *“Since the closure of the Lago refinery in 1985, which was subsequently reopened as the much smaller Coastal Oil Refining in 1991 (closed again in 2009, and reopened in early 2011)¹⁵”,* Aruba has its economy through the most present means- beautiful beaches, sea and sunshine.

3.2.7 Currency

Aruba's currency is the florin denoted by the letters 'Awg.' but also widely known as 'Afl.'. the US dollar is also widely accepted. *“The official rate at which banks accept US dollar banknotes is Awg. 1.77 and checks at Awg. 1.78. The rate of exchange granted by shops and hotels ranges from Awg. 1.75 to Awg. 1.80 per US dollar. The florin is pegged to the US dollar and therefore its value versus other currencies fluctuates with the US dollar.”¹⁵*

3.3 Tourism

3.3.1 Beginning of Tourism

In the 1920s, Aruba received only a few visitors. Between 1924 and 1928, about 200 yachts, motor ships and tankers were registered, bringing American businessmen and visitors to the island.

Since its opening in 1924, the Lago oil refinery has been the main employer on the island for many years. But in the 1950s, many people lost their jobs as a result of automation. In order to give the economy a boost, a search was made for a new industry and the Dutch government proposed the most obvious choice for tourism.

In 1947, the Tourism Committee on Aruba was established to promote and direct tourism on the island, with Ernst Bartels at the helm. In 1953 the committee officially became the Aruba Tourist Bureau (ATB). *“This was a small organization with only two employees: Ernst Bartels remained in charge and Casper Wever became his assistant. The ATB continued the crucial work to promote Aruba as a tourist destination, especially in the United States,¹⁶”* one of the most important markets for the Caribbean.

3.3.2 Tourism in Aruba 80s and 90s

“In January 1983, the American firm Sasaki Associates, assisted by various government agencies, concluded a six-month investigation into the development of the main tourism corridor - the coastal area that extends from Oranjestad to California Point in the northwest corner of the island.¹⁶” With the wide beaches, the warm ocean water and the easily developed land, this area became the spearhead in the growth of tourism in Aruba. Major investments by the government in roads, water lines and other infrastructure made the large-scale development of resort hotels possible.

In 1984, tourism was a well-developed sector of the Aruban economy, with only the oil refinery contributing more to the gross national product. *“In 1985, the closure of the oil refinery, due to the crumbling market value and shrinking supply of Venezuelan oil, had a huge impact on the Aruban economy.¹⁶”* *“In 1986, Aruba acquired the Status Aparte, whereby the island withdrew*

from the Netherlands Antilles and became an autonomous entity within the Kingdom of the Netherlands. Within this context, tourism took over the role of the strongest economic force of Aruba.¹⁶”

After the oil refinery closed in 1985, “*the Aruban government decided to invest in tourism, as the main economic pillar of the island, and in 1986 replaced the ATB by the newly established Aruba Tourism Authority (ATA)¹⁶*” The ATA became more important and focused on the exploration of new markets and the expansion of marketing activities.

“In the period from 1986 to 1996, tourism in Aruba grew to almost twice the percentage of tourism in the entire Caribbean. From 1986, when the construction of hotels was resumed, until 1991, the number of hotel rooms doubled from 2,776 to 5,625. During the same period, the number of time-shares also increased fivefold, from 337 units to 1,967 units. At the end of 1996 there were 7,103 rooms, of which a total of 2,272 time-share units.¹⁶”

3.3.3 Tourism Currently

The hotels are concentrated in two major areas: the high-rise area in Palm Beach and the low-rise area in Eagle Beach and Punta Brabo. Most hotels are foreign owned, and many are international brands. The popularity of Aruba has remained consistent not only because of the perfect combination of sun, sand and sea, but also because of the hospitality of the islanders, the high degree of safety, the political stability and the success in various niches, such as activities, the nightlife, shopping and restaurants.

Tourism in Aruba is not only a source of income, it has also become part of the Aruban identity as a community. In education, the youth is taught the importance of tourism in Aruba, so that the population is service-oriented and hospitable. Many of the Aruban visitors come for the beautiful white beaches, but they come back mainly because they feel at home on Aruba.

3.3.4 Aruba ED Card

When visitors come to Aruba they have to fill in an arrival card, also known as a Embarkation Disembarkation card (ED)¹⁷, this is a legal document used by immigration authorities and the Aruba Tourism Authority to obtain information about incoming passengers not provided by the passenger's passport (such as health, criminal record, where they will be staying, purpose of the visit, etc.) and to provide a record of a person's entry into the country.

Figure 7: ED Card

The form is titled "IMIGRACION ARUBA" and "International embarkation/disembarkation card". It is divided into two main columns. The left column contains fields for: Last name (Apellido), First name (Nombre), Maiden name (Apellido de soltera), Date of birth (Fecha de nacimiento) with a calendar icon, Sex (Sexo) with radio buttons for male (m) and female (f), Country of birth (País de nacimiento), Nationality (Nacionalidad), Passport nr. (No. de pasaporte), Expiry date (Fecha de expiración) with a calendar icon, Address in Aruba (Dirección en Aruba), Flight nr. (No. de vuelo), Duration of stay (Duración de estadia) in nights (noches), Home address (Domicilio) including Street (Calle), City (Ciudad), State (Estado), Country (País), and ZIP code (Código postal). The right column contains: Occupation (Ocupación), Main purpose of visit (Propósito principal de su visita) with checkboxes for Business (Negocios), Incentive (Incentivo), Conference (Conferencia), Meeting (Reunion), Diving (Buceo), Shopping (Compras), Wedding (Matrimonio), Honeymoon (Luna de miel), Sun, Sand Sea (Sol, Playa y Mar), Board (Crucero), Land & Cruise (Isla y Crucero), and Event (Evento). It also has fields for Number of visits (Número de visitas) with checkboxes for 1, 2-5, 6-9, 10-14, 15-19, and 20+; Type of accommodation (Tipo de alojamiento) with checkboxes for Hotel, Timeshare, Own Propio, All inclusive (Todo incluido), House/Casa Villa, Rent Alquiler, Apartment (Apartamento), Condominium, Exchange Intercambio, and Visit friends & family; How did you book your visit? (Como reservó su visita?) with checkboxes for Travel agent (Agencia de viajes), Airline,hotel/Aerolínea,hotel, and Other Website/Otro Website; and Main source for choosing Aruba (Motivo principal para escoger Aruba) with checkboxes for Media ad (Publicidad de medios), Article (Artículo), www.aruba.com, Direct mail (Publicidad postal), Cruise (Crucero), Internet, Travel agent (Agencia de viajes), and Family/Friends. At the bottom, there are fields for Signature (Firma) and Email, both with the number 2027043270.

For non-citizens coming to Aruba the information requested on the arrival card includes:

- Full name, Nationality, date of birth, occupation, purpose of trip, type of accommodation, method of booking and main source of choosing Aruba

Travelers are generally required to sign, date, and declare the information is true, correct, and complete.

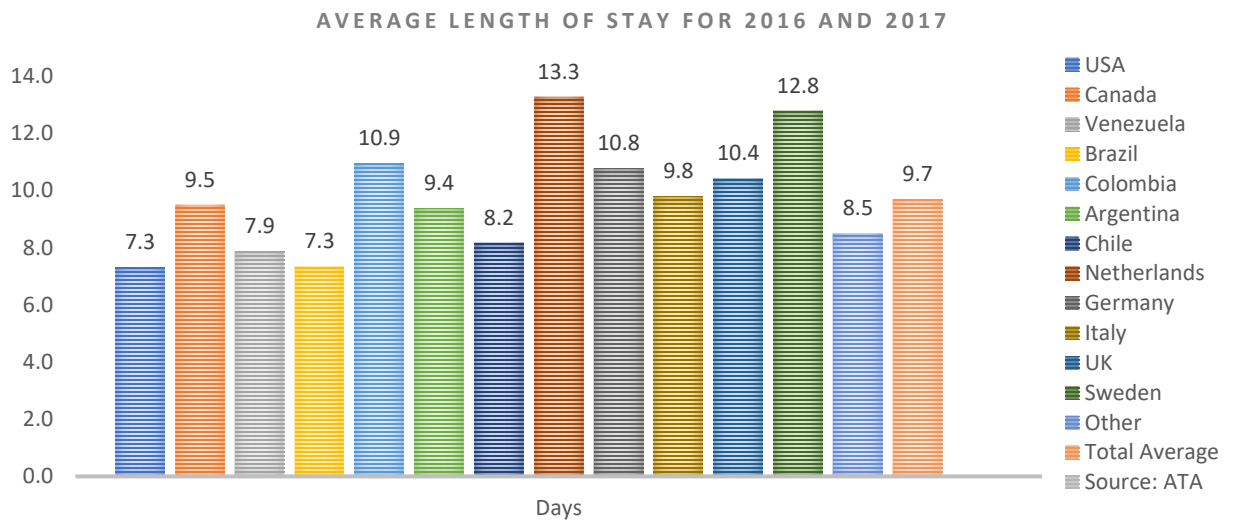
4. Practical Part

4.1 Tourist Information

4.1.1 Length of Stay

“Length-of-stay (LOS) is a key parameter in the measurement of international tourism, determining the total number of guest nights spent by a given number of visitors in a destination.¹⁸” Based on the information filled in by the visitors in the ED card for the period of 2016 and 2017, the Aruba Tourism Authority has released the following data for the average stays per person per country.

Figure 8: Length of Stay: Own Data Processing

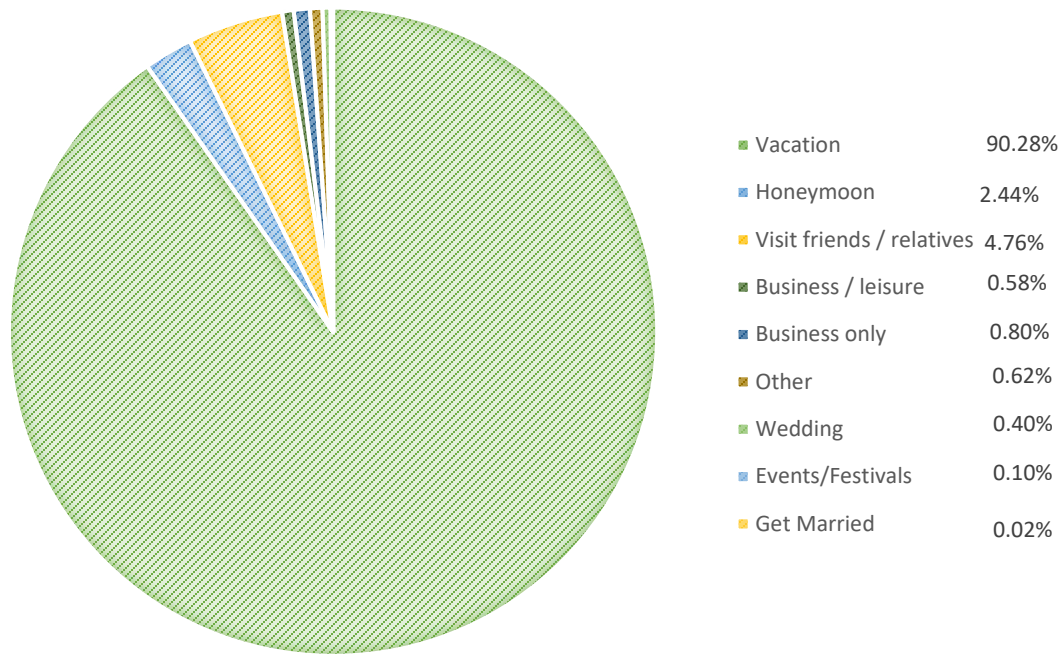


Visitors that are on average spending the most nights in Aruba are visitors from Netherlands (13.3 nights) and Sweden (12.8 nights). The possible explanation for this longer stay is that these two countries are also the furthest away from Aruba. It takes about 10 hours to fly from Europe to Aruba. The visitors staying the shortest on Aruba are visitors from the United States of America (7.3 nights), the possible reason for this shorter stay is that most of the American visitors have bought a 7 day a year time share. Or a package vacation / package holiday which means according to the Cambridge Dictionary: “holiday organized by a travel company for which you pay a fixed price that includes the cost of the hotel and travel, and sometimes food¹⁹”

4.1.2 Purpose of Visit

For Aruba based on the data gathered by the Aruban Central Bureau of Statistics, the average purpose of visits on Aruba from the years 2010 till 2015 are set below. ²⁰

Figure 9: Purpose of Visit: Own Data Processing



Vacation tourists are good for 9 in 10 booked nights. The other overnight stays are in the context of travel such as honeymoon 2.44% and friends-family visits 4.78%.

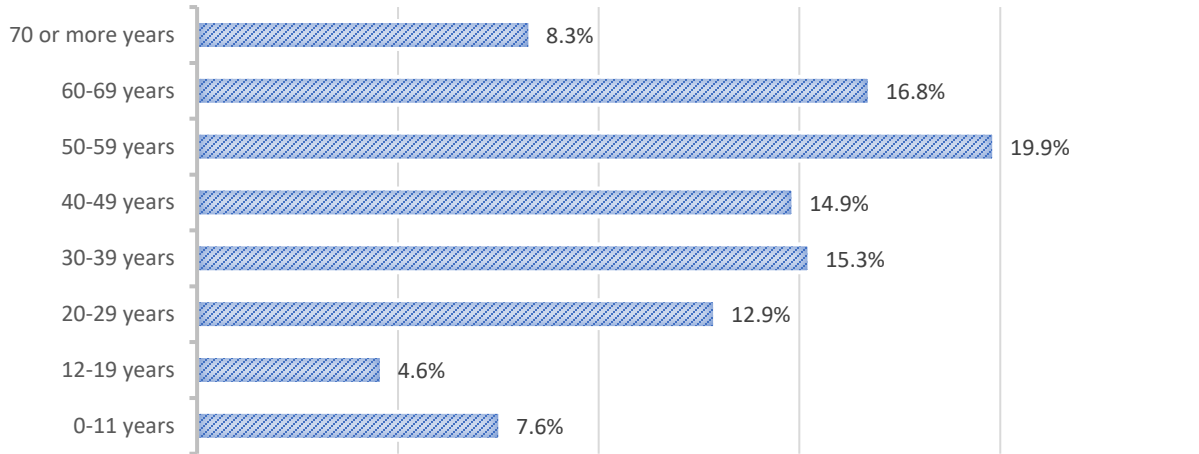
0.40% and 0.02% of visitors that come to Aruba come for wedding/marriage related purpose, this number might grow since the Aruban government signed a law on September 8th, 2016 that stipulates that it is allowed for same sex marriage on Aruba²¹. This new law will open the door to a new target audience.

Aruba attracts 0.1% of their visitors by events/festivals organized on the Island, these events include: Conferences, gala's, sport events, concerts, film festival and carnival.

4.1.3 Age of Visitors

Based on the data provided by Aruba Tourism Authority²² over the period of 2016 and 2017 the visitors age is divided into 8 segments:

Figure 10: Age of Visitors: Own Data Processing



In the period of 2016 and 2017 about one out of five visitors were between the age of 50 and 59 years old.

4.1.4 Visitors per Country

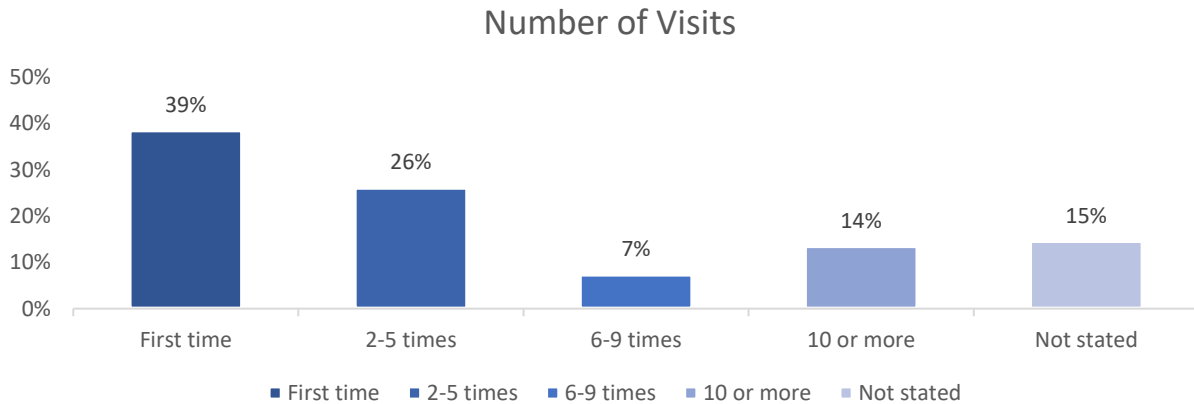
Table 1: Visitors per Country: Own Data Processing²³

Percentage of visitors per country							
	2013	2014	2015	2016	2017	2018	Average
U.S.	56.8%	53.8%	50.7%	57.1%	65.0%	68.6%	59%
Venezuela	19.2%	23.3%	28.6%	19.0%	9.0%	4.7%	17%
Canada	4.5%	4.1%	3.6%	3.8%	4.4%	4.7%	4%
Netherlands	3.9%	3.5%	2.9%	3.3%	3.5%	3.7%	3%
Colombia	2.0%	2.2%	1.7%	2.6%	3.1%	3.4%	3%
Brazil	2.4%	2.3%	1.6%	1.2%	1.4%	1.3%	2%
Other countries	11.2%	10.9%	10.8%	13.0%	13.6%	13.6%	12%

4.1.5 Number of Visits

When visitors fill in the ED card, the visitors must fill in the number of times they have been to Aruba²⁴. The visitor can choose between four options:

Figure 11: Number of Visits: Own Data Processing



More than half of the people in the period from 2016 and 2017 that answered this question of the visitors coming to Aruba are reacquiring visitors, meaning it will not be their first time coming to Aruba.

4.1.6 Aruba Ratings

Trip Advisor has made data²⁵ available to us which shows the total number of reviews received for the overall Caribbean and for five of our competitors (that is all reviews of hotels, restaurants, attractions and the destination as a whole) for full 2016. The ratings are out of 5.

Table 2: TripAdvisor Ratings: Own Data Processing

TripAdvisor Rating for Full 2016	
Aruba	75,467
Bahamas	55,629
Cayman Islands	35,916
Curacao	33,474
Puerto Rico	129,118
USVI	53,674

Average Rating	
USVI	4.5
Cayman Islands	4.5
Aruba	4.4
Puerto Rico	4.4
Curacao	4.3
Bahamas	4.3

4.2 Aruba Population

Chart and table of Aruba population from 1950 to 2020²⁶.

Figure 12: Aruban Population: Own Data Processing

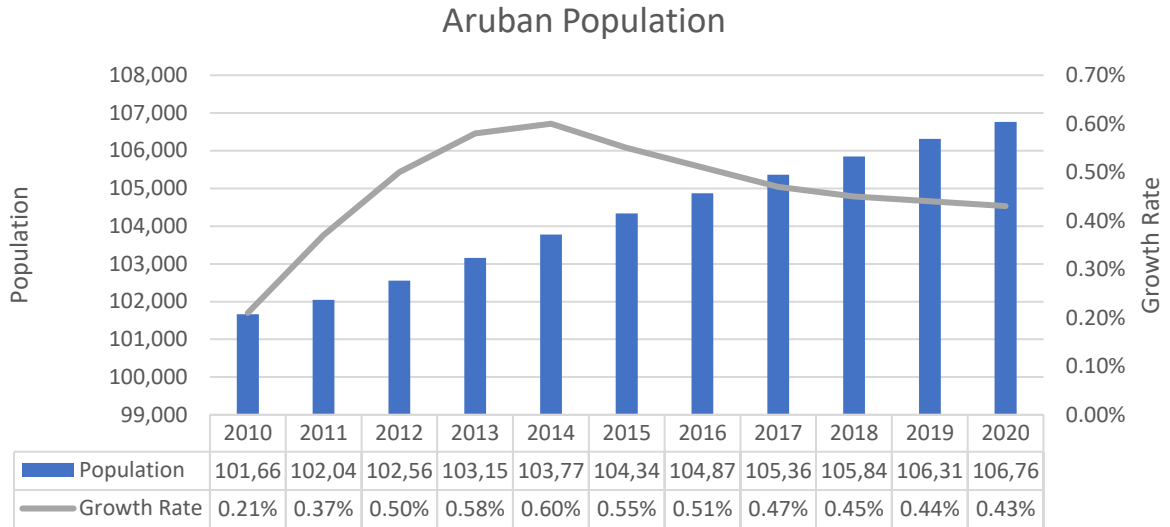


Table 3: Aruban Population

The current population of Aruba in 2020 is **106,766**, a **0.43% increase** from 2019 which was **106,314**.

Age Structure	Percentage
0-14 years	17.61%
15-24 years	12.53%
25-34 years	15.51%
35-44	12.27%
45-55	13.51%
55-64 years	14.51%
65 years and over	14.06%

Median age for Aruba is 39.5 years in total, 37.8 years for male and 41.2 years for females.

On Aruba there are 94 different nationalities of which: Aruban 66%, Colombian 9.1%, Dutch 4.3%, Dominican 4.1%, Venezuelan 3.2%, Curacaoan 2.2%, Haitian 1.5%, Surinamese 1.2%, Peruvian 1.1%, Chinese 1.1%, other 6.2%.

4.2.1 Population Density

“Population density tells you how crowded an area is, on average. It can help you figure out the resources that a certain area requires, and it can help you compare areas. To calculate the population density, it is necessary to gather data about the area and population size, then plug the numbers into the population density formula: **Population Density = Number of People / Land Area.**”²⁷

In the table above population number of people is given, this number divided by the land area of Aruba which according to the <https://data.worldbank.org/> has a land area of 180 square kilometer. The current population density of Aruba in 2020 is **593.14** people per square kilometer, a **0.43% increase** from 2019 which was **590.63**

593.14 people per square kilometer is a high density. “This high population density implies that the population is high relative to the size of the country.”

4.2.2 Tourism Density

The tourism density compares the number of tourists in perspective to the local population of Aruba. “The below formula is used when calculating the tourism density:”²⁸

Equation 1: Tourism Density

$$TD = \frac{\text{Inbound tourism} + \text{Domestic tourism}}{\text{Population}} \times \frac{\text{Population}}{\text{km}^2} = \frac{\text{Inbound tourism} + \text{Domestic}}{\text{km}^2}$$

For 2017 the number of tourists coming to Aruba was 1.07 million, the population was 105,366

And the population density was 585.37.

TD for 2017 was $1,070,000.00/105,366*585.37= 5924$ meaning Aruba has a high Tourism Density. Definitions for this density according to the WTO: “very high TD (mean greater than 10,000 tourists per km²), high TD (mean less than 10,000 tourists per km² and over 1000 tourists per km²), medium TD (mean less than 1000 tourists per km² and greater than 300 tourists per km²), or low TD (mean less than 300 tourists per km² and greater than 100 tourists per km²)”

4.3 GDP

“GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.²⁹” Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates.

Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. “GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.³⁵”

Figure 13: Aruban GDP: Own Data Processing

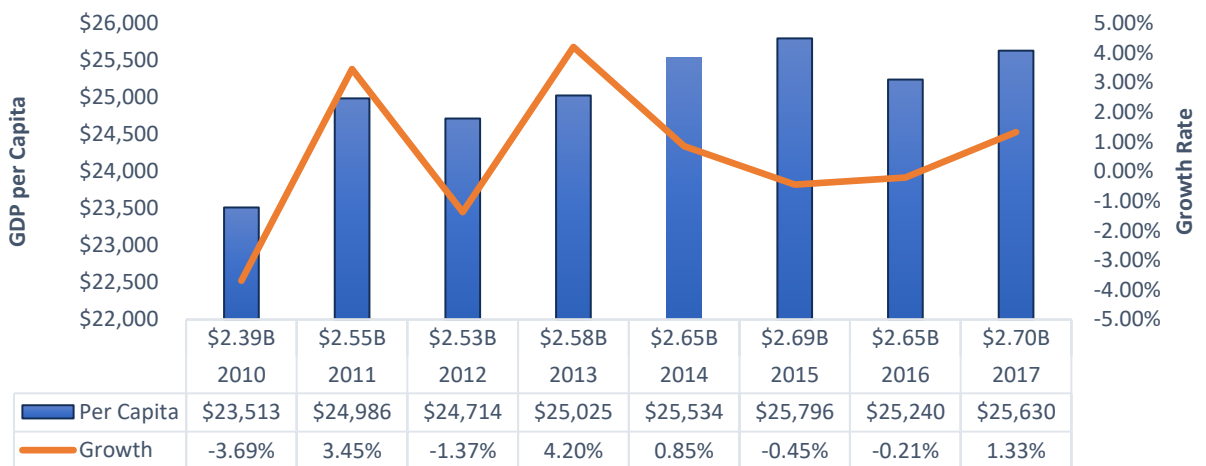


Table 4: Aruban GDP

One method of comparing a countries wealth is by looking at the Gross Domestic Product per capita. This is a good indicator of the general standard of living in the country. While GDP data is not available for every territory in the Caribbean, it is available for most independent and constituent countries. With a GDP of 2.7 billion USD and a GDP per capita of \$25,630 Aruba is on the “first place in the Caribbean followed by the Bahamas at \$22,217 and Trinidad and Tobago at 21,323 in the third.³⁰”

U.S. Economic Growth

Date	GDP	Per Capita	Growth Rate
2010	\$14,721.35B	\$47,657	1.54%
2011	\$15,285.83B	\$49,120	-0.96%
2012	\$16,019.76B	\$51,113	3.13%
2013	\$16,569.59B	\$52,503	3.54%
2014	\$17,102.93B	\$53,810	-1.01%
2015	\$17,970.42B	\$56,130	3.29%
2016	\$18,409.13B	\$57,087	1.54%
2017	\$19,162.55B	\$59,026	1.77%
2018	\$20,041.05B	\$61,350	2.20%

Since more than 60% of the tourists visiting Aruba are from the United States it is possible to statistically test for dependency between the GDP of these two countries. Since the spending of visitors from the United States has an impact on the GDP of Aruba, it is necessary to put Aruba as dependent variable and the United States as independent variable.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.06125	0.06125	27.62	0.0019
Error	6	0.0133	0.00222		
Corrected Total	7	0.07455			

Root MSE	0.04709	R-Square	0.8216
Dependent Mean	2.5925	Adj R-Sq	0.7918
Coeff Var	1.81627		

Parameters Estimates					
Variable	DF	Parameter Estimate	Standard Error	95% confidence Limits	
Intercept	1	1.57237	0.19481	1.09569	2.04904
US GDP	1	0.00006034	0.00001148	0.00003225	0.00008844

4.3.1 Aruba GDP in Relation to USA GDP

Y= Aruba GDP

X= USA GDP

$$y' = 1.57237 + 0.00006034 (x)$$

Aruban GDP and USA GDP have a positive relationship when, the value of USA GDP increases the value of Aruban GDP will also increase. In this case if the value of USA GDP increases by 1 billion USD then the value of Aruban GDP will increase by 60,340 USD. For ex: if the value of USA GDP increases by 5 billion USD then total Amount of credit will be $y' = 1.57237 + 0.00006034 = 301,700$ USD.

Coefficient of determination (R^2) = 0.8216 R^2 is used to evaluate the goodness of fit for the estimated regression equation.

R^2 = Estimated sum of squares/Total sum of squares

For this model, it can be concluded that 82.16% of the total sum of squares can be explained by using the estimated regression equation to predict the GDP. The quality of the model is satisfactory when, the estimated sum of squares exceeds 70% of the model.

T-Test Statistics

In order to check significance of relationship between variables in simple regression model it is necessary to use T-test. If X and Y are linearly related, then $\beta \neq 0$. The purpose of the T-test is to see whether it is possible to conclude that $\beta \neq 0$.

$$H_0: \beta = 0$$

$$H_1: \beta \neq 0$$

Since the p-value of (0.0019) is smaller than alpha level (0.05) it is necessary to reject H_0 thus, conclude that there is a statistically significant relationship between the United States GDP and the Aruban GDP.

4.4 Imports of Goods

Imports of goods and services “represent the value of all goods and other market services received from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services.³¹” They exclude compensation of employees and investment income (formerly called factor services) and transfer payments.

Figure 14: Aruba Imports: Own Data Processing

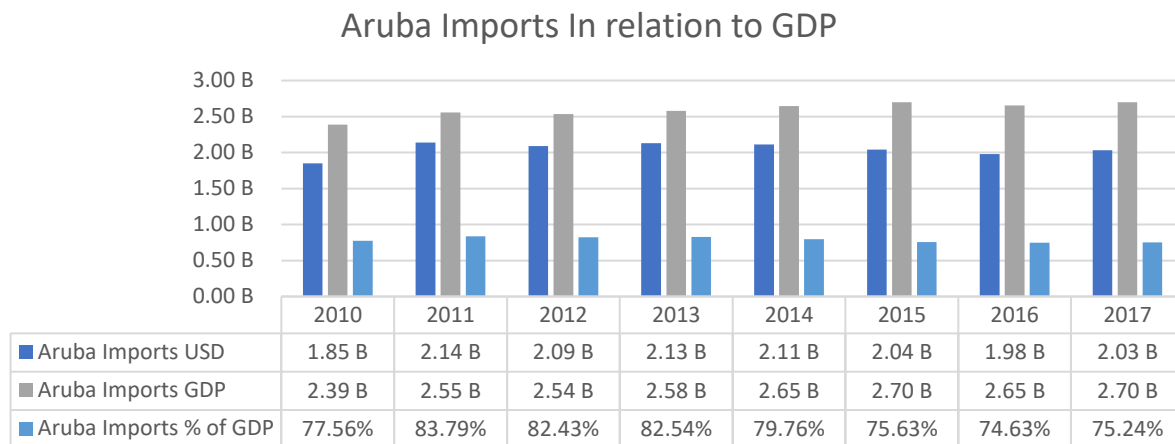


Table 5: Aruba Imports

Aruba imports for 2017 was **\$2.03B**, a **2.86% increase** from 2016.

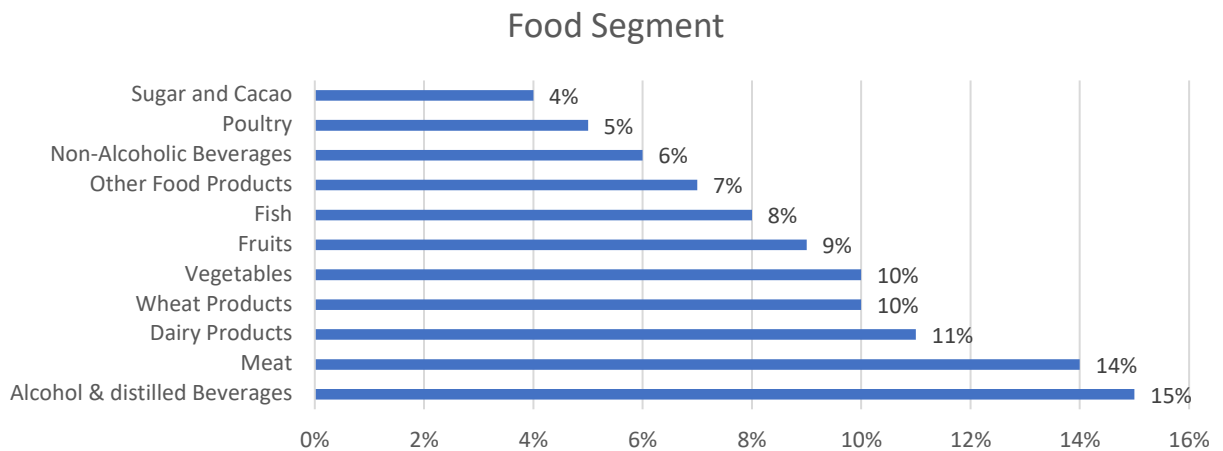
One of the many fundamental facts about the economy of a country is the significance of international trade to the economy. One indicator of the significance is the “trade-to-GDP ratio” which is the sum of exports and imports divided by the gross domestic product.

For Aruba in the period of 2010 till 2017 on average 78.95% of the Aruban GDP went to the import of Aruba. This trade-to-GDP-ratio of 78.95% says that in Aruba majority of the GDP goes to the import market. There is no specific cause and effect relationship between this ratio and the economic health of a country or funds that invest in the country. but it is probably safe to say that countries with a high ratio are more economically sensitive to changes in the level of global trade than countries with a low ratio.

4.4.1 Import per Segment

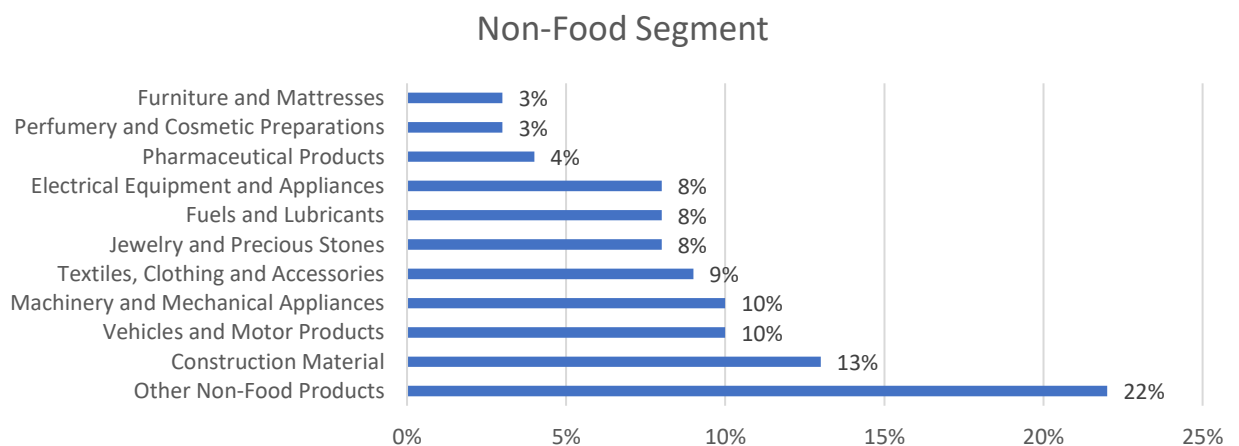
The following info-graphic report contains information about the average values of imported goods of the Aruban food segment between 2014 and 2018. The food segment import to the free circulation area of Aruba and the free zone, in terms of value, registered a total of approximately 1,61 billion USD between the 1st quarter of 2014 and the last quarter of 2018.

Figure 15: Imports on Food Segment: Own Data Processing



The average values of imported goods of the Aruban non-food segment between 2014 and 2018 are shown below. The total non-food imports to the free circulation area of Aruba and the free zone, in terms of value, registered a total of 4.33 billion USD between the 1st quarter of 2014 and the last quarter of 2018.

Figure 16: Imports on Non-Food Segment: Own Data Processing



4.5 Tourism Receipts and Expenditure

“International tourism receipts are expenditures by international inbound visitors, including payments to national carriers for international transport. These receipts include any other prepayment made for goods or services received in the destination country.³²” They also may include receipts from same-day visitors, except when these are important enough to justify separate classification. Data are in current U.S. dollars.

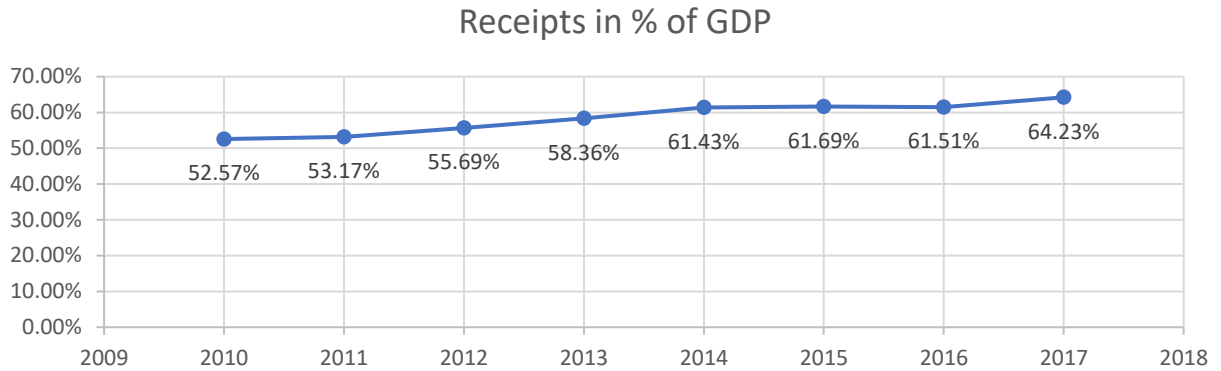
Year	Number of Tourists	Receipts in Billions	% of GDP	Expenses per person in USD
2010	824,000	1.254	52.57%	1,522
2011	869,000	1.358	53.17%	1,563
2012	904,000	1.412	55.69%	1,562
2013	979,000	1.506	58.36%	1,538
2014	1,070,000	1.625	61.43%	1,516
2015	1,230,000	1.664	61.69%	1,358
2016	1,100,000	1.632	61.51%	1,481
2017	1,070,000	1.733	64.23%	1,619

4.6 Revenues from Tourism

In 2010, tourism revenues amounted to 554.00 million USD, or about 41.95 percent of the gross national product. This corresponded to about 619,000 tourists at that time and roughly 895 USD per person. Within 22 years, the country's dependence on tourism has increased noticeably. In the year 2017, the revenue amounts to 1.733 billion USD, accounting for 64.23 percent of the gross national product.

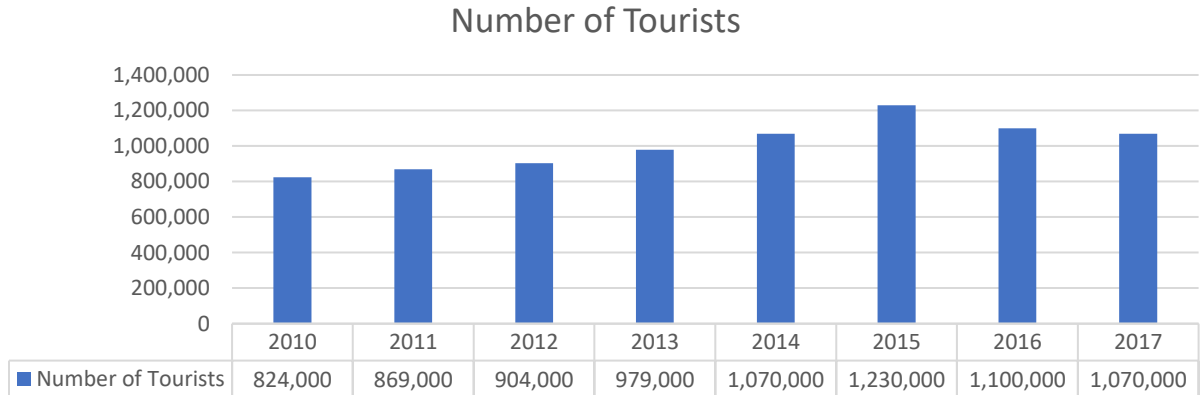
Each visitor in 2017 had spent an average of 1,619 USD for their holiday in Aruba which is 6.37% more than the average expense per person of 1,522 USD in 2010.

Figure 17: Tourism Revenue on GDP: Own Data Processing



The dependency of tourism revenue on the Aruba GDP grew from 52,57% in 2010 to 64.23% in 2017. This is a growth of 11.66% in eight years' time. Meaning that the dependency of tourism spending from 2010 till 2017 in relation to the Aruban GDP on average yearly grew with a rate of 1.67%.

Figure 18: Number of Visitors on Aruba: Own Data Processing



Aruba received an estimated 1.07 million international tourist arrivals in 2017, some 160 thousand fewer than the 1,23 million of 2015. A possible reason for this decline is due to the aftermath of the economic situation of the Venezuelan market.

Despite a decline of 13% from 2015 to 2017, there is still a growth of 29.85% from 2010 to 2017, a yearly average growth rate of 4.26%.

4.7 Relationship Between Tourist Revenue and Number of Tourists

Dependent (Y) = Revenues from tourism

Independent (X) = Number of Tourists coming to Aruba

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1386279	1386279	121.95	0.0001
Error	16	181881	11368		
Corrected Total	17	1568160			

Root MSE	106.61889	R-Square	0.8840
Dependent Mean	1253.75556	Adj R-Sq	0.8768
Coeff Var	8.50396		

Parameters Estimates					
Variable	DF	Parameter Estimate	Standard Error	95% confidence Limits	
Intercept	1	-144.15223	129.05687	-417.74	129.43612
US GDP	1	0.00164	0.00014883	0.00133	0.00196

$$y' = -144.152 + 0.00164 (x)$$

In model Tourist revenue and number of tourists has a positive relationship meaning if value of Tourists coming increases the value of revenue will also increase. In this case if value of tourists coming to Aruba increases by 1 then the value of revenues received from tourism will increase by 0.00164 million USD. For ex: if the value of number of tourists increases by 5 then total Amount of revenue will be $y' = -144.152 + 0.00164 (5) = 0.0082$ million USD.

Coefficient of determination (R^2) = 0.8840 R^2 is used to evaluate the goodness of fit for the estimated regression equation.

For this model, it can be concluded that 88.40% of the total sum of squares can be explained by using the estimated regression equation to predict the GDP. The quality of the model is satisfactory since it ESS should explain over 70% of the model. Therefore, it is possible to apply the following model.

T-Test Statistics

H0: $\beta = 0$

H1: $\beta \neq 0$

As its clear that p-value of b (.00001) < alpha level (0.05) therefore, reject H0 and conclude that there is a statistically significant relationship between the revenues coming from tourism and the number of tourists coming to Aruba.

4.8 Occupancy Rates

“In simple terms, occupancy rate refers to the number of occupied rental units at a given time, compared to the total number of available rental units at that time. It is one of the most popular KPI’s in the hotel industry for revenue management, highlighting how much of the available space in a hotel is being utilized.”³³

The occupancy rate of a hotel is expressed as a percentage. So, for example, if a hotel has 100 rooms available to be sold and 100 of those rooms are occupied, the occupancy rate would be 100 percent. If the same hotel had 60 rooms occupied, the occupancy rate would be 60 percent.

Based on the numbers from AHATA provided by the following 17 hotel members: Amsterdam Manor Beach Resort, Barceló Aruba, Boardwalk Boutique Hotel, Brickell Bay Beach Club, Bucuti & Tara Beach Resort, Courtyard by Marriott Resort, Divi & Tamarijn All-Inclusive, Eagle Aruba Resort, Holiday Inn Resort Aruba, Hyatt Regency Aruba, Manchebo Beach Resort, Marriott Aruba & Stellaris Casino, Renaissance Aruba Resort, The Ritz-Carlton Aruba, RIU Palace, RIU Antillas y Talk of the Town Hotel.

The hotel occupation rate for 2019 was 84.8% an increase of 0.9% from 2018. The average daily rate per room was 275.68 USD which is 6.2% higher than 2018. And the average revenue per available room was 233.89 USD and increase of 7.5% compared to 2018.

	2017	2018	% Change
OR	83.90%	84.80%	0.90%
ADR	\$ 258.59	\$ 275.68	6.20%
ARR	\$ 216.35	\$ 233.89	7.50%

4.9 Forecasted GDP

Based on this data the forecasted GDP Aruba using the Stepwise Autoregressive Method of Forecasting using the Aruba GDP data from 2000 till 2017, a forecast is made for expected GDP until the year 2023, this is done using a linear extrapolation with a 95% confidence level. Also showing the 95% low and high extrapolation. The GDP of Aruba in 2017 was 2.7 billion USD.

Year	Forecast	GDP in Billion USD	% Growth
2018	Low 95	2.515	
	Forecast	2.783	3.08%
	High 95	3.050	
2019	Low 95	2.540	
	Forecast	2.855	2.576%
	High 95	3.169	
2020	Low 95	2.582	
	Forecast	2.918	2.207%
	High 95	3.256	
2021	Low 95	2.626	
	Forecast	2.977	2.022%
	High 95	3.328	
2022	Low 95	2.672	
	Forecast	3.033	1.881%
	High 95	3.393	
2023	Low 95	2.716	
	Forecast	3.085	1.724%
	High 95	3.455	

Forecasted GDP for Aruba in 2023 will be 3.085 Billion USD, which will be a 14.27% increase from 2017.

- The 95% low forecasted GDP in 2023 will be 2.716 Billion USD which means an increase of 0,58% from 2017.
- The 95% high forecasted number of Tourist in 2023 is 3.455 Billion USD which means an increase of 27.96% from 2017.

4.10 Forecasted Number of Visitors

Based on the Stepwise Autoregressive Method of Forecasting using the Aruba Tourism data from 2000 till 2017, a forecast is made for expected Number of Tourists coming to Aruba until the year 2023, this is done using a linear extrapolation with a 95% confidence level. Also showing the 95% low and high extrapolation. The number of visitors in 2017 was 1.07 million.

Year	Forecast	# of tourist	% Growth
2018	Low 95	976,530.00	
	Forecast	1,133,690.00	5.95%
	High 95	1,290,860.00	
2019	Low 95	1,003,740.00	
	Forecast	1,163,500.00	2.629%
	High 95	1,323,250.00	
2020	Low 95	1,030,740.00	
	Forecast	1,193,300.00	2.561%
	High 95	1,355,860.00	
2021	Low 95	1,057,540.00	
	Forecast	1,223,100.00	2.497%
	High 95	1,388,660.00	
2022	Low 95	1,084,160.00	
	Forecast	1,252,910.00	2.437%
	High 95	1,421,660.00	
2023	Low 95	1,110,590.00	
	Forecast	1,282,710.00	2.378%
	High 95	1,454,640.00	

Forecasted number of Tourists for Aruba in 2023 will be 1,283 million, what will be a 19.88% increase from 2017.

- The 95% low forecasted number of Tourist in 2023 will be 1,110,590 which means an increase of 3,79% from 2017.
- The 95% high forecasted number of Tourist in 2023 is 1,454,640.00 which means an increase of 39.50% from 2017.

5. Summary

Tourism is traveling to a destination outside the normal environment due to recreation or business and does not last longer than a continuous year. One of the most widely used framework for determining the tourism evolutionary pattern is the concept of 'tourism area life cycle' (TALC) of Butler (1980).

This framework is based on the product cycle concept. In this concept, the sales of a product proceed slowly at first, then experience a rapid rate of growth, stabilize, and subsequently decline. According Butler there are 6 stages of tourism: Exploration, involvement, development, consolidation, stagnation and decline or rejuvenation.

There are three different forms of income from tourism: first line (direct), second line (indirect) and third line (induced).

Socio-economic impact on tourism due to changing labor market, type of employment and the potential for growth depends on the degree to which the local population is satisfied with tourism, migration issues, shift in economic power, country speculation. Social impact on tourism

For visitors to Aruba the Average day of stay is 9.7 days and 90.28% of the visitors coming to Aruba are there to spend their vacation. 20% of the visitors coming to Aruba are between 50 and 59 years old.

59% of the visitors coming to Aruba are visitors from the USA. More than half of the people of the visitors coming to Aruba are reacquiring visitors, the Aruban population grew to 106,766 in the year 2020, leading to a population density of 593.14 per square kilometer.

Based on the tourism density equation Aruba has a high tourism density of 5,924.

Aruba had a GDP growth of 1.33% from 2016 to 2017 to 2.7 Billion USD, giving Aruba a GDP per capita of 25,630 USD, which is the highest GDP per capita in the Caribbean.

With a p-value of 0.0019 it shown that there is significant relation between the GDP of the USA and the GDP of Aruba, meaning that if the value of USA GDP increases by 1 billion USD then the value of Aruban GDP will increase by 60,340 USD.

Imports for Aruba in 2017 was 2.03 billion USD, a 2.86% increase from 2016, in the period of 2010 till 2017 on average 78.95% of the Aruban GDP went to the import of Aruba. This trade-to-GDP-ratio of 78.95% says that in Aruba majority of the GDP goes to the import market.

In the year 2017, the tourism revenue amounts to 1.733 billion USD, accounting for 64.23 percent of the gross national product.

Each visitor in 2017 had spent an average of 1,619 USD for their holiday in Aruba which is 6.37% more than the average expense per person of 1.522 USD in 2010.

The dependency of tourism revenue on the Aruban GDP grew from 52,57% in 2010 to 64.23% in 2017. This is a growth of 11.66% in eight years' time. Meaning that the dependency of tourism spending from 2010 till 2017 in relation to the Aruban GDP on average yearly grew with a rate of 1.67%.

With a p-value of $0.00001 < \alpha$ level (0.05) we conclude that there is a statistically significant relationship between the revenues coming from tourism and the number of tourists coming to Aruba.

The hotel occupation rate for 2019 was 84.8% an increase of 0.9% from 2018. The average daily rate per room was 275.68 USD which is 6.2% higher than 2018. And the average revenue per available room was 233.89 USD and increase of 7.5% compared to 2018.

Based on Stepwise Autoregressive Method of Forecasting, Forecasted GDP for Aruba in 2023 will be 3.085 Billion USD, which will be an 14.27% increase from 2017. And the forecasted number of Tourists for Aruba in 2023 will be 1,283 million, a 19.88% increase from 2017.

6. Conclusion and Recommendation

The arguments commonly used to promote tourism are as follows.

First, tourists spend money in Aruba, including housing (hotels, apartments), food and drink, entertainment, souvenirs and transportation. This expenditure by tourists is income for the people with whom this expenditure is made, such as hoteliers and the owners of restaurants, supermarkets and small businesses in the tourist places.

Secondly, it is well known that in most tourist places hotels, restaurants, supermarkets and small businesses exist by the grace of tourism. If there were not many tourists coming to these places every year, these companies and businesses would not have enough customers to make a profit and therefore, would not exist. In these places, tourism therefore creates economic activity that would otherwise not exist. Tourism provides employment, because the hotels, restaurants, supermarkets and small businesses that serve tourists need workers. And because of this, tourism helps the entire economy of Aruba, because those who receive the profits from tourism, or the income from labor resulting from tourism, spend it on things like buying houses, cars, food, education, health care, etc.

And third, tourism also provides income for Aruba. Part of what tourists spend does not go to the owners of the hotels, restaurants, supermarkets and small businesses, but to the government. This is because the things that tourists spend their money on are usually taxed, such as the tourist tax on hotel rooms; excise duties and taxes on alcohol, cigarettes and petrol; and of course, by the Value Added Tax which is also demanded from tourists.

The often-forgotten influence of tourism on an economy

People who promote tourism usually overlook some important things when discussing the impact of tourism on the economy of Aruba. For example, people usually focus on what tourists spend in Aruba. However, not everything that tourists spend helps the economy Aruba. If, say, the tourists buy things that are not made in Aruba, then Aruba must import from other countries, meaning that most of the money that the tourists spend leaves Aruba. To illustrate, if the tourists want to eat things from their own country, Aruba must buy these products in the country where

the tourists are from. Therefore, a significant portion of the expenditure ends up in that country however Aruban's still gets the portion for services provided.

There are also the regularly ignored costs of tourism, such as the costs of building infrastructure for tourists such as airports, roads, electricity and water facilities, etc. Aruba is usually responsible for this expenditure. A further problem of tourism is that its revenues are distributed to a limited number of people in a limited area, while tourism has economic consequences beyond these people and this area. For example, building the infrastructure for tourism causes the price for things like cement, steel, brick and skilled labor for construction projects to go up. People who have nothing to do with tourism will feel the effects of this, for example if they want to build a house, office or factory.

As a result, the benefits of tourism in Aruba are usually overestimated, as the negative impact of tourism in Aruba and most people in the economy are usually ignored. And for the benefits that tourism does realize in an economy, a small select group of people receive the majority of this (the investors in and owners of the tourist complexes); that a slightly larger group of people will receive only a small portion of this (the small-scale middle-class and workers in the tourism industry); while the cost of tourism is shared among all the people in the Aruba, including those who do not take any advantage of tourism. Thus, tourism creates economic inequality and concentration of wealth in the hands of only a few.

An economic policy based on tourism makes the economic development of Aruba dependent on the economic development of other countries. As proven in this thesis, the economy of Aruba is dependent on the GDP of USA meaning that if things go well in the USA, the tourists come, and if things don't go well in the USA, the tourists don't come.

An economic policy based on tourism is therefore clearly shortsighted, when Aruba uses the resources available, such as capital, labor and knowledge, for tourism, Aruba cannot use these resources to produce what it needs. This not only diminishes the benefit of tourism for the country, but it also makes Aruba dependent on other countries. A country that bases its economic policy on tourism gives up its future in exchange for money now, because this policy makes a country dependent and makes self-sufficiency of the economy impossible.

7. Bibliography

- ¹Merriam-webster.com. 2020. *Definition Of TOURISM*. [online] Available at: <<https://www.merriam-webster.com/dictionary/tourism>> [Accessed 10 March 2020].
- ² www.directtourismservices.co.uk, D., 2020. *Tourism Definitions*. [online] TourismSociety.org. Available at: <<http://www.tourismsociety.org/page/88/tourism-definitions.htm>> [Accessed 5 May 2019].
- ³2020. [online] Available at: <https://www.researchgate.net/publication/287456244_The_Tourism_Area_Life_Cycle> [Accessed 18 May 2019].
- ⁴ tutor2u. 2020. *Marketing: Product Life Cycle (GCSE) | Business | Tutor2u*. [online] Available at: <<https://www.tutor2u.net/business/reference/marketing-product-life-cycle>> [Accessed 18 May 2019].
- ⁵ Coolgeography.co.uk. 2020. *Tourism Life Cycle Model*. [online] Available at: <<http://www.coolgeography.co.uk/GCSE/AQA/Tourism/Life%20cycle%20model/Tourism%20Model.htm>> [Accessed 15 May 2019].
- ⁶2020. [online] Available at: <https://www.academia.edu/223432/The_Contribution_of_Neil_Leiper_to_Tourism_Studies> [Accessed 6 June 2019].
- ⁷Study.com. 2020. *Heterogeneous Products: Definition & Overview - Video & Lesson Transcript | Study.Com*. [online] Available at: <<https://study.com/academy/lesson/heterogeneous-products-definition-lesson-quiz.html>> [Accessed 20 June 2019].
- ⁸ 2020. [online] Available at: <https://www.researchgate.net/publication/280317594_Understanding_the_Tourism_Product> [Accessed 20 June 2019].
- ⁹www.visitaruba.com. 2020. *General Aruba Facts - Visitaruba.Com*. [online] Available at: <<https://www.visitaruba.com/about-aruba/general-aruba-facts/>> [Accessed 11 September 2019].
- ¹⁰ www.visitaruba.com. 2020. *Aruba Language - Papiamentu - Visitaruba.Com*. [online] Available at: <<https://www.visitaruba.com/about-aruba/general-aruba-facts/language/>> [Accessed 13 October 2019].
- ¹¹ Aruba.com. 2020. *Aruba's Flag - History & Facts About The Flag Of Aruba | Aruba.Com*. [online] Available at: <<https://www.aruba.com/us/our-island/history-and-culture/aruba-flag>> [Accessed 13 October 2019].
- ¹² www.visitaruba.com. 2020. *Aruba Coat Of Arms - Visitaruba.Com*. [online] Available at: <<https://www.visitaruba.com/about-aruba/general-aruba-facts/coat-of-arms/>> [Accessed 13 October 2019].
- ¹³Aruba.com. 2020. *2020 National Anthem & Flag Day In Aruba*. [online] Available at: <<https://www.aruba.com/us/calendar/national-anthem-and-flag-day>> [Accessed 25 October 2019].
- ¹⁴ www.visitaruba.com. 2020. *Aruba Government And Politics - Visitaruba.Com*. [online] Available at: <<https://www.visitaruba.com/about-aruba/general-aruba-facts/government-and-politics/>> [Accessed 25 October 2019].
- ¹⁵ www.visitaruba.com. 2020. *Aruba Currency And Money - Conversion Rates, Banks, Service Charge - Visitaruba.Com*. [online] Available at: <<https://www.visitaruba.com/about-aruba/money-and-currency/>> [Accessed 25 October 2019].
- ¹⁶ Aruba.com. 2020. *Aruba Tourism - History Of Tourism & The Aruba Tourism Authority | Aruba.Com*. [online] Available at: <<https://www.aruba.com/us/our-island/history-and-culture/aruba-tourism>> [Accessed 31 October 2019].
- ¹⁷ Edcardaruba.aw. 2020. *Aruba Online ED*. [online] Available at: <<https://edcardaruba.aw/>> [Accessed 9 January 2020].
- ¹⁸ Taylor & Francis. 2020. *Global Trends In Length Of Stay: Implications For Destination Management And Climate Change*. [online] Available at:

<<https://www.tandfonline.com/doi/full/10.1080/09669582.2018.1529771>> [Accessed 15 January 2020].

¹⁹Dictionary.cambridge.org. 2020. *PACKAGE HOLIDAY | Meaning In The Cambridge English Dictionary*. [online] Available at: <<https://dictionary.cambridge.org/dictionary/english/package-holiday>> [Accessed 15 January 2020].

²⁰Cbs.aw. 2020. *Tourism – Central Bureau Of Statistics*. [online] Available at: <<http://cbs.aw/wp/index.php/category/tourism/>> [Accessed 15 January 2020].

²¹Loc.gov. 2020. [online] Available at: <<https://www.loc.gov/law/foreign-news/article/aruba-same-sex-partnerships-recognized-by-law/>> [Accessed 25 January 2020].

²²Caribbeanhotelandtourism.com. 2020. [online] Available at: <<http://www.caribbeanhotelandtourism.com/wp-content/uploads/2017/03/Aruba-January-2017-STATUS-OF-ARUBAS-TOURISM-INDUSTRY.pdf>> [Accessed 25 October 2020].

²³Statista. 2020. *Number Of Tourist Arrivals In The Caribbean | Statista*. [online] Available at: <<https://www.statista.com/statistics/816304/caribbean-number-of-tourist-arrivals/>> [Accessed 4 February 2020].

²⁴Cbs.aw. 2020. *Tourism – Page 8 – Central Bureau Of Statistics*. [online] Available at: <<https://cbs.aw/wp/index.php/category/tourism/page/8/>> [Accessed 5 February 2020].

²⁵Cbs.aw. 2020. *Tourism – Page 6 – Central Bureau Of Statistics*. [online] Available at: <<https://cbs.aw/wp/index.php/category/tourism/page/6/>> [Accessed 5 February 2020].

²⁶Worldometers.info. 2020. *Aruba Population (2020) - Worldometer*. [online] Available at: <<https://www.worldometers.info/world-population/aruba-population/>> [Accessed 11 February 2020].

²⁷Sciencing. 2020. *How To Calculate A Population Density*. [online] Available at: <<https://sciencing.com/calculate-population-density-5371741.html>> [Accessed 11 February 2020].

²⁸Mdpi.com. 2020. *MDPI - Publisher Of Open Access Journals*. [online] Available at: <<https://www.mdpi.com/>> [Accessed 10 February 2020].

²⁹Investopedia. 2020. *Gross Domestic Product – GDP*. [online] Available at: <<https://www.investopedia.com/terms/g/gdp.asp>> [Accessed 15 February 2020].

³⁰Staff, C., 2020. *The Caribbean'S Richest Countries*. [online] Caribbean Journal. Available at: <<https://www.caribjournal.com/2016/05/09/the-caribbeans-richest-countries/>> [Accessed 15 February 2020].

³¹The Balance. 2020. *Why Souvenirs Are Imports*. [online] Available at: <<https://www.thebalance.com/imports-definition-examples-effect-on-economy-3305851>> [Accessed 15 February 2020].

³²2020. [online] Available at: <<https://www.indexmundi.com/facts/indicators/ST.INT.RCPT.CD>> [Accessed 20 February 2020].

³³Revfine.com. 2020. *What Is An Occupancy Rate? | Revenue Management KPI'S*. [online] Available at: <<https://www.revfine.com/what-is-an-occupancy-rate/>> [Accessed 20 February 2020].