Small island tourism economies and the tourism area lifecycle
Why Aruba and Sint Maarten have exceeded their carrying capacity
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6. Conclusions

In this last chapter I come back to the main question of this thesis; namely,

How have governance and socio-economic factors contributed to the current unsustainable state of the SITE development model and its resistance to change in Aruba and St. Maarten? How can inclusion of these factors improve the descriptive and explanatory power of the SITE framework?

Butler’s Tourism Area Life Cycle (TALC) theory is a well-established and much built-upon theoretical framework of the evolution of tourism destinations, introduced in 1980 (1980). As the author indicates, the roots of the model were in geography (2006a, p.13), and build on earlier concepts of evolution of tourism areas. TALC proposes the characteristic S-shaped curve, which echoes the shape of the more general product-life cycle theory, and has become the model’s trademark.

At the core of the TALC model are the five stages that lead to the top of the S-curve; exploration, involvement, development, consolidation and stagnation. The latter two stages however, bring a tourism destination to the limits of its carrying capacity. Sustainability of tourism development, in the environmental sense as well as in the broader sense of ability to maintain socio-economic levels, has therefore been an essential part of the TALC framework from the start. The model foresees a range of possible scenarios after the stagnation phase, from reinventing the product/market combination(s) to achieve ‘rejuvenation’ on the positive side, to a negative spiral of product weariness and carrying capacity limitations leading to ‘decline’. From its inception, TALC was a cautionary tale regarding the limits of carrying capacity in tourism destinations, as well as offering a way out that implies an active governance model of public-private partnership (Butler 1980, p. 9). The carrying capacity message however, though theoretically widely adopted, has not led to the right actions in practice at a national governance level, according to the author of the model (Butler 1996, 283-293).

Tourism-oriented islands, being naturally limited geographical areas, appear to be obvious case studies for the TALC model. From the early 1990s onwards, McElroy and De Albuquerque, building on a simplified version of the TALC blueprint, started ranking tourism islands based on the ‘Tourism Penetration Index’, a benchmark composed of three different tourism intensity indicators (1998). This framework eventually evolved into the Small Island Tourism Economy (SITE) model proposed by McElroy (2006). As with Butler’s life cycle model, the concern about the ‘mature’ stages of development and the limits of carrying capacity were a main element of the SITE model since the early stages of its development. In a 1992 study on Sint Maarten/St. Martin and Bermuda, Sint Maarten is considered,
perhaps prematurely, to be in the stagnation phase and on the threshold of decline (de Albuquerque and McElroy 1992a, p.15).

The SITE model is a member of a small family of ‘island development’ paradigms. Previous studies into Pacific, Caribbean and other islands resulted in the MIRAB model, for islands relying on migration, remittances, aid and bureaucracy, described by Bertram and Watters (1985; 1986). Other islands seemed to fall into the ‘PROFIT’ category proposed by Baldacchino (2006a; 2006b), driven by local jurisdictional autonomy in the fields of ‘people, resource management, overseas engagement, finance, and transportation’.

The SITE model however, so far mainly offered confirmation that different islands in this group indeed fit the various phases of the tourism life cycle and expressed similar characteristics. In academic literature, however, there has not yet been extensive attention for the questions as to how and why islands follow this trajectory, and what determined their ‘success’ or ‘failure’ in doing so. This study addressed these questions.

After the 1992 UNCED conference, which formally linked environmental sustainability and development, islands were quickly recognized as a group that merits separate attention in the Barbados plan of action (United Nations 1994) and its successors. This gave rise to a body of literature on the topic of sustainable tourism on islands (Briguglio, Archer et al. 1996; Briguglio, Butler et al. 1996). This cemented the status of sustainability as a crucial concern, a topic that was in essence recognized earlier as central to the TALC model. Again, most literature on sustainable tourism in islands focused on adapting tourism products and strategies on islands, without explaining the dynamics of how unsustainable tourism developed or why it persists.

Numerically, most academic literature on tourism in islands is marketing-oriented. It explores the supply and demand relationships between destination and the economies of tourists’ origin and observes these islands through the economic lens of competition, market share and securing tourism revenue. Some authors from this school have ventured into the mutual relationships between quality of life, tourism development and external shocks in Aruba (Ridderstaat, Croes, and Nijkamp 2013; 2016) and Robertico Croes’ studies into an alternative approach to qualifying tourism development using Amartya Sen’s capability approach (2012). The work of Sam Cole, an advisor to Aruban governments for decades, deserves special mention here, going beyond the economic modeling and life cycle frameworks to explore the cultural and ecological impacts on society (Cole 1997; 2007; Cole and Razak 2009). In most cases however, the internal dynamics of the society hosting tourism were not the main object of research. By and large, tourism is treated as a factor external to the tourism island, driving its
development, rather than the island generating its own dynamics and making use of, or reacting to, external opportunities and threats.

Finally, a sociology-oriented body of literature is dedicated to the impact of tourism on host societies (Sharpley, R. and Telfer 2002; Sharpley, Richard 2018). Again, the focus is mainly on problems stemming from the external impact of tourism on host societies, rather than on the dynamics of the host society itself, in reacting to, managing or influencing the tourism development trajectory.

The innovative contribution to the debate in this thesis is its focus on the role of governance and socio-economic dynamics in SITE islands themselves as factors explaining the development trajectories, which SITE islands follow. Despite the evidence that the limits of the SITEs’ carrying capacity limits are reached (Cole and Razak 2003; TTCI 2004), while productivity and income levels have been stagnant for decades (Alberts 2016), the model still seems to be advantageous to large groups and therefore resistant to change. Exceeding the carrying capacity limits may lead to the collapse of the model and the islands slipping into the decline phase of the lifecycle. This raised the following question concerning future trajectories and policies needed to realize alternative pathways: What are the conditions of modification or revision the SITE model would have to fulfill, to prevent an imminent decline of the model? This question is addressed in the course of this chapter.

In answering these questions, two SITE cases are researched. Aruba and St. Maarten, both former island territories of the Netherlands Antilles, are now constituent countries of the same Kingdom and therefore share a non-independent constitutional status and common roots in their legislative framework. However, they shared no common policy agenda that helps explain the similarity of their SITE development trajectory, or the parallel outcomes thereof. Aruba and St. Maarten are situated at opposite ends of the Caribbean basin, followed paths that diverged from the other four Dutch islands, and received more passive resistance than encouragement from the Netherlands Antilles government level. Without any coordination, other than some mutual inspiration, both case studies show remarkably similar developments and results, reinforcing the likelihood of the results of this study being relevant to other SITEs, particularly those of a high tourism intensity.

**Socio-economic dimensions of the SITE model**

The discussion of the SITE model and the development trajectories found in Aruba and St. Maarten were broken down into several sub-questions. The first sub-question addressed was:
What are the main socio-economic dimensions of the extreme SITE model present in Aruba and Sint Maarten? What do these dimensions mean for the vulnerability and resilience of the model? ¹⁹

The tourism development model evident in Aruba and Sint Maarten closely fits the characteristics of the SITE model. Even within the context of this model, both are extreme examples, consistently in the top 3 measured by ‘tourism penetration index’, SITE’s central measurement concept. The question is then which dimensions of their development brought about this measure of SITE ‘success’.

In these particular cases, the SITE model was contingent on very high levels of immigration that provide the necessary labor force. These regional movements of workers fit earlier patterns of migration in the Caribbean region, where islands are alternately supplier or receiver of regional labor, as industries develop and dwindle per island. This change of roles is known as ‘migration transition’. As SITEs are by definition limited in their local labor supply, labor migration, which is largely one way, but to a certain extent circular as well, has to be recognized as an essential dimension of the model.

For this reason, conceptually ‘SITE’ can’t be seen as an island development model only. It can exist only by virtue of available and accessible labor reserves in the surrounding region, and is therefore a regional development concept as well. This conclusion gains even more relevance in relation to the socio-economic resilience of the model.

The SITE model in the extreme form found on the islands is based on a ‘monoculture’ of tourism with an absence of any significant economic diversification to other sectors. Conventional economic development theory favors diversification from the point of view of risk spreading, which enhances resilience. However, this does not turn out to be directly applicable to SITEs. Diversification on a small island scale is not a practical option in light of limited capital and human resources. Moreover, tourism economies in the Caribbean and Latin America economically perform better than more diversified exporters in the region, and are less vulnerable to economic shocks.

SITEs have shown a remarkably high resilience to external shocks, which is another dimension of their model that contributes to the explanation of their ‘success’. The capacity of absorbing shocks and ‘bouncing back’ relatively quickly appears to be caused partly by the embedding of SITEs in regional migration networks. Sudden economic downturns cause less unemployment than expected,

¹⁹ The results of this inquiry were published in International Development Planning Review as “Immigration-dependent extensive growth in small island tourism economies: the cases of Aruba and Sint Maarten” (Alberts 2016).
Conclusions

As migrants opt to leave the islands as jobs opportunities disappear. This is another reason to view the SITE model as a regional system.

While investigating the socio-economic dimensions of high-intensity SITEs, they appeared to show a close adherence to the stages predicted by the TALC model. After a steep growth trajectory, they have quickly reached the stages of consolidation, followed by stagnation. However, essential to their ‘success’ in doing so was a constant high degree of immigration in order to supply the necessary labor force to islands with a limited population. This is a dimension of SITEs not explicitly recognized as essential in previous studies. In the stagnation phase, the quality of the tourism product leveled off or declined, as the TALC model predicts. However, deviating somewhat from the TALC model, the tourism industry volume and visitor numbers kept growing, albeit at a slower pace. Meanwhile, the immigration trends followed tourism volume. Real economic growth was therefore recorded year after year, suggesting the continued ‘success’ of SITEs. However, through immigration the labor force grew at the same rate as real GDP, which means real per capita GDP, an indicator for labor productivity, remained stagnant. This questions the perceived success of the model. In conclusion, this adds up to ‘immigration-dependent extensive growth’, which turns out to be an important newly recognized characteristic of the mature SITE model (Alberts 2016).

Explaining the resilience of the SITE model

The second sub-question addresses vulnerability and resilience of the SITEs:

How can its low vulnerability and high socio economic resilience be explained on macro and micro levels? What role do individual labor market strategies play? When it comes to vulnerability of the model, is there a distinction between shocks and stressors? 20

An extensive academic debate about resilience of developing countries and particularly of islands exists, distinguishing between vulnerability, the extent to which an external shock affects an entity, and resilience, the capacity to absorb a shock and to ‘bounce back’ (Briguglio 2004; Briguglio et al. 2009; Philpot, Gray, and Stead 2015). Dimensions determining the degree of resilience are goods, governance, macro-economic stability, market reform policies (meaning the degree of market competition and labor productivity), social cohesion and environmental management. Generally, export concentration in a small range of goods (“monoculture”) is considered to generate vulnerability. However, this rule

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20 Answering these questions was the aim of the article ‘Resilience and Tourism in Islands: Insights from the Caribbean’ (Alberts and Baldacchino 2017) published in Tourism and Resilience, a collection edited by Richard Butler.
does not seem to apply to tourism-focused islands, especially if visitors originate from different countries and regions (Croes, Robertico R. 2000, p. 67-74; Ridderstaat 2015, p.312). An important recent development in the tourism-vulnerability debate is the distinction between shocks and stressors (Calgaro, Lloyd, and Dominey-Howes 2014). The concept of ‘stressors’ refers to slow-moving long-term detrimental factors that affect a society over time, which covers the factors caused by exceeding the limits of carrying capacity, thus linking back to the situation of SITEs in the latter stages of the TALC model. While SITEs may not be particularly vulnerable to shocks, the same may not be true for stressors.

In defiance of the rule that diversification is needed to reduce vulnerability, SITEs are an example of extreme specialization which achieves the same goal. This strategy is described in island literature with the term ‘speciation’ – borrowed from evolutionary biology by Bertram and Poirine (2007) and further elaborated by Baldacchino and Bertram (2009). Speciation combines overall concentration on one product with a high degree of internal flexibility and adaptivity to changing circumstances. The rationale of this choice is that the limited resources of an island do not permit diversification, making the concentration of human resources and institutional infrastructure with the objective to excel in one sector, the best choice. In the case of SITEs this translates into strategies like market diversification – the countries of origin of tourists - and responsive product development within the tourism sector. Speciation also promotes resilience, for instance through highly developed marketing strategies – focused on the chosen product of speciation - to mitigate the effects of external shocks. In conclusion, speciation – thus far described as an island strategy in general terms - should be recognized as an important characteristic of SITEs (Alberts 2016).

Literature dedicated to the question of how SITEs achieve their internal adaptability and flexibility in their process of speciation is very scarce, however. This thesis set out to find explanatory factors of resilience of SITEs in labor market and migration mechanisms. In doing so, a link was made to the concept of ‘occupational multiplicity’ introduced by Comitas (1963) based on research into labor market strategies in Jamaica. The research based on this concept was done in cooperation with, and inspired by ideas brought forward by island development and labor market specialist Godfrey Baldacchino (Baldacchino, Cassar, and Azzopardi 2019).

At the macro level, circular migration is an important driver of resilience. In the wake of sudden economic downturns immigrants return to their home country, either spontaneously or promoted by government, cushioning the socio-economic impact of large shocks. At the micro level, circular migration is part of a larger set of strategies employed by households and individuals that provides resilience to the economy. Workers have a high degree of horizontal flexibility - number of jobs or hours worked - as well as vertical flexibility - moving between
more or less preferable jobs, depending on available opportunities. Occupational multiplicity plays a role, the tendency to work different jobs at the same time, out of necessity or choice. Evidence from earlier (growth) stages of SITE development suggest that local residents often worked two jobs, in a situation of absolute labor scarcity in a fast-growing tourism economy, when immigration did not yet keep up with labor market demand. In the present phase, this thesis found the following individual labor market strategies, characteristic of SITEs and their labor market segmentation between locals and immigrants (Alberts and Baldacchino 2017, 150-162);

i. ‘sound basis’ combination: the preferable combination is one based on a permanent job with the government or with another employer that is perceived as sound and secure. This job is often supplemented with a white-collar type service business. Renting out apartments is another important source of additional income. Locals are overrepresented in this group.

ii. ‘formal/informal’ combination: a permanent or temporary formal job with a reliable employer, in order to secure the socio-economic basics like medical insurance or, in the case of immigrants, work and residence permits. In some cases, the primary source of income is a sole proprietorship or other business form. The primary job may be at the middle to lower levels in the hospitality industry or other services, like security or a qualified construction job. Next to this first job, secondary sources of income are sought, often in the informal sector. This can be a part-time in one of the skilled services already mentioned, a cottage industry or other services that are time-flexible. In this category are relatively many earlier immigrants who succeeded in gaining a firm economic footing. The high cost of living however makes one job insufficient to secure a good family income.

iii. ‘opportunistic’ combination: a more fluid situation is found at the base of the social pyramid, where workers juggle several part-time and full-time formal or informal jobs. Of all respondents, one third fall in this category. Generally, these jobs are not permanent, and there may or may not be a full-time contract among them. Most of this category concerns unskilled labor such as hotel or private-home housekeeping, gardening, delivery jobs, low-skilled construction jobs or work as a security guard. This category is almost exclusively made up of (recent) immigrants.

Importantly, foreign workers considered remigration a fallback option on a continuum with the options described above. This underlines the fluid internal situation in the SITE labor markets, which depends on a high degree of worker
flexibility that can quickly accommodate seasonal changes in demand, changes in the tourism product, labor demand surges like the construction of new resorts or demand slumps in case of external economic shocks. This flexibility is additional to the external flexibility stemming from the – partly circular - migration link with countries in the region, from where labor can be attracted when needed, or returned to in an economic downturn.

This internal and external labor market fluidity is a previously underexposed, yet important factor in explaining SITE growth, as well as their socio-economic resilience (Alberts and Baldacchino 2017). As it was observed in three of the most intensely developed Caribbean SITEs, Aruba, Sint Maarten and St. Croix (US Virgin Islands) it should be considered a fundamental factor to the model.

Governance capacity in SITEs

The third sub-question concerned the governance dimension:

> How did the governance framework of Aruba and Sint Maarten influence the SITE development of each island, analyzed in phases following Butler’s TALC concept? In particular: When and how did governments and other actors acknowledge the islands’ limits to their carrying capacity, and how did they react to this? 21

The answer to this sub-question draws on the governance school of thought of which Torfing is an important representative (Torfing and others 2013). Furthermore, the island development paradigms mentioned earlier (MIRAB, PROFIT, SITE) each imply a certain set of governance choices and strategies. A significant body of literature is dedicated to island governance choices, often in relation to vulnerability and resilience (Baldacchino 2010), or to achieving sustainable tourism (Briguglio, Archer et al. 1996; Briguglio, Butler et al. 1996). This includes both vertical as well as horizontal governance networks in which such SITEs participate. The vertical governance dimension of the Dutch islands, including the SITEs Aruba and Sint Maarten, in particular their constitutional relations within the Kingdom of the Netherlands have been studied extensively, sometimes in comparison to other non-independent jurisdictions (Oostindie and Klinkers 2003; Oostindie 2006). The horizontal internal workings of governance in the Dutch SITEs, however, have been the subject of far less academic research, with the notable exception of Haan (1998) where it concerns institutions and ‘rent seeking’ and recently Roitman and Veenendaal on the topics of small-island political processes (Veenendaal 2013; Roitman and Veenendaal 2016; 21

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21 These questions constitute the topic of the article ‘Governance of island carrying capacity and vulnerability through the stages of the tourism area lifecycle’ submitted for publication in 2020 (Alberts 2020a).
Veenendaal 2016). These authors inspired important avenues of research in this thesis.

There is hardly any specific literature analyzing the governance aspects of how SITEs move through the phases of the TALC model. The question as to the crucial governance mechanisms and choices that explain the SITEs’ trajectory, in particular when confronted with the limits of their carrying capacity, is a central gap which this thesis has tackled (Alberts 2020a).

In the SITEs researched in this study, the role of government in shaping the earlier stages of the life cycle was to a large degree passive. Even though tourism development was an explicitly stated goal, no particular strategies were discernable apart from a laissez-faire attitude, and creating favorable conditions for foreign investors who therefore made most of the – unplanned – choices in developing the SITE model. In contrast, an active attitude did exist from the early stages towards creating certain crucial infrastructure, such as harbors, airports and utility companies, as well as promoting the islands in overseas markets to attract tourists. Even then however, there was a stark contrast between government efforts in realizing tourism-crucial infrastructure on the one hand, and the quality of roads, utility networks and other facilities serving the general public, on the other hand.

Remarkably, SITE governments have in fact recognized their countries’ carrying capacity issues as of the 1990s before consolidation gave way to stagnation (Alberts 2020a). In this phase, concerns arose within the business community and civil society, while environmental pressure groups came into being. Government-commissioned public dialogue and research took place and policy advice was produced, but this did not lead to a marked change in government policy (Cole and Razak 2003; TTCI 2004). In practice, the focus remained short term; preserving visitor numbers and the competitive position vis-à-vis other islands. In TALC terms, therefore, in the 21st century consolidation gave way to stagnation, a phase that has been dragged out without effectively addressing the risk of slipping into the decline phase.

As a consequence, the SITEs’ tourism product developed according to the stages predicted by the TALC model; starting out with hotels at a high level of exclusivity, quality and price, and a subsequent gradual decline. This is illustrated by trends like a decrease of brand-name hotels, a shift towards time-share, the increase of cruise tourism relative to stay-over tourism, and the advent of the all-inclusive product.

A conclusion of this thesis is, that up to the development stage of the lifecycle, the weakness of governance in SITEs was disguised by the success of rapid growth and justified by a ‘laissez-faire’ ideology. The investment climate was promoted
on the one hand by the absence of a strong regulatory or enforcement framework, and on the other hand by the fact that the judiciary was guaranteed by the Kingdom framework. However, a tipping point was reached in the consolidation phase, when the limits of carrying capacity manifested themselves. What was once ostensibly a strength now became a weakness. SITEs did not just reach the limits of their carrying capacity; the mere volume of their economies exceeded their governance capacity as well. They lacked sufficient governance strength to confront the triple challenges of managing the requirements of the ballooning economy and society, navigating the limitations of their carrying capacity, and adapting or upgrading the tourism product itself. Along the timeline of the TALC therefore, the same governance characteristics that were conducive to SITE development at first, became a liability in the consolidation stage and beyond.

In the vertical governance dimension, the SITE development has proven to be disruptive to the constitutional framework. As the two case studies of this research show, the Netherlands Antilles gradually dissolved, mainly driven by the divergent development trajectories of Aruba and Sint Maarten.

Vertically, the relationship with the Kingdom reached a certain tipping point as well in the consolidation phase. At the outset, being part of a non-independent jurisdiction was an important contributing factor to SITE success, as the legislative and judicial framework, backed up by the Kingdom guarantee function contributed positively to the investment climate. Meanwhile, in the early stages tourism development was recognized at the Kingdom level as an opportunity for the islands and encouraged as well as financially supported.

However, when the governance shortcomings in both islands became evident in the consolidation phase, the relations within the Kingdom became more tenuous as well. This led to a long period of tension with respect to good governance, government finance, and the constitutional framework, that lasted from the 1990s to the present day. This development coincided with the process of dissolution of the Netherlands Antilles constitutional level, and the search for new workable Kingdom relations, which continues to this day (Alberts 2020a).

In conclusion, the specific governance characteristics of SITEs were conducive to growth in the first stages of the TALC, and the same factors account for the later stage governance problems. Both in the horizontal and the vertical levels, the governance issues reached a tipping point at the same stage. Horizontally, the ‘laissez-faire’ attitude, with government providing only the most essential of conditions for tourism development, worked very well at first. Vertically, the Kingdom played an encouraging and supporting role in SITE development, while the tension within the Netherlands Antilles framework grew, but was still tenable. However, as of the consolidation phase, the SITE model clearly outgrew
governance capacity in the horizontal plane, while the divergent development tore the Netherlands Antilles’ structure apart, and concerns about ‘good governance’ caused permanent tension within the Kingdom.

This historical - horizontal as well as vertical - governance dynamics along the TALC curve is an important addition to the SITE model, brought forward by this study.

Notwithstanding the failing governance dynamic in the consolidation and stagnation phases, governments did in fact recognize the carrying capacity limits and other factors making the SITE model inherently finite. Action was not taken however. This leads to the final question of this thesis: why SITE governments did not act on this knowledge, and remained stuck in a drawn-out stagnation phase.

Labor market segmentation and the mandatory growth paradox

The fourth and final sub-question pertained to the persistence of an ostensibly finite model: Why does a SITE model that is in a phase of stagnant productivity and lacks average income growth, go unchallenged and unchanged? What explains the perceived ‘success’ of the model and the reluctance to slow down tourism growth or modify its characteristics? 22

Since 1980 Butler’s TALC model has been extensively elaborated and applied to destinations in general and to islands specifically, whether or not using the ‘SITE’ framework. Life cycle studies however, generally focus on the applicability of the phases of the model, carrying capacity problems, relations to tourism markets and their governance (Butler 2006b; 2010). The socio-economic dynamics of the societies in question, the role of immigration, labor market mechanisms, or income distribution are usually outside their scope. The object of study usually is the management of the tourism product, not so much the development paradigm of the destination in question.

The environmental sustainability and vulnerability/resilience debates, when applied to tourism islands, each add valuable dimensions to describing the SITE development, but are to a large extent externally oriented as well. These concepts generally do not contribute to understanding what drives SITEs forward internally, or what makes them resistant to change.

This thesis draws attention to the internal socio-economic processes of SITEs, which were considered to be essential to the understanding of the particular SITE development trajectory. In developing into SITEs, the islands in question relied on high numbers of immigrant labor, which in turn led to a specific labor market segmentation. This phenomenon as such was not found in academic literature,

22 An article investigating these questions entitled ‘Labor market segmentation and the mandatory growth paradox in Small Island Tourism Economies’ was submitted for publication (Alberts 2020b).
although the ‘migration transition’ – going from being a net supplier to a net recipient of immigrant labor - was recognized by McElroy and de Albuquerque (1988) as a characteristic of some Caribbean islands, SITEs included.

The specific view on labor market segmentation in SITEs brought forward by this thesis was inspired by the seminal study ‘Double or Quits’ published by the Aruban Central Bureau of Statistics in 2004, in which some fundamental questions were explored about the economic sectors immigrants come to work in, and equally important, which sectors locals preferred and moved into (CBS Aruba 2004). Though not recognized under that name in this study, the phenomenon described here is academically known as ‘labor market segmentation’. This describes a situation of non-competing groups, in which groups in the lower strata are limited in their access to the higher strata of jobs on grounds other than skills and qualifications, for instance based on contractual status (permanent/temporary), on belonging to the formal or informal economy, or on personal characteristics such as gender or immigration status (ILO 2020). This phenomenon is primarily described in industrial societies. Labor market segmentation theory is itself a composite of ‘dual labor-market’ and ‘internal labor market’ theory. In its modern form it has its roots in the 1960s studies of Peter Doeringer and Michael Piore on the US labor market (Doeringer and Piore 1970) that led to the landmark study of Piore and Sabel (1984). In the European context, the research by Loveridge and Mok was groundbreaking (1979). These theories argue that labor migration to industrial economies is driven by pull-rather than push-factors, which constitutes one of the drivers of segmentation in the receiving economy. This concept seems highly applicable to SITEs.

In addition to labor market segmentation, the social stratification and resultant income (re)distribution within the islands’ system can be explained to a certain extent by issues of ‘rent seeking’. Rent seeking is a phenomenon originally associated with either monopolies or government, but later on was expanded to cover any behavior by an entity to gain wealth without an equivalent reciprocal contribution of productivity (Krueger 1974; North 1987). Rent seeking is closely linked to already wealthy groups securing inequality in their favor (Stiglitz, Joseph E. 2013), and is related to inclusion or exclusion of immigrants. Haan (1998) has explored mechanisms of rent seeking in the former Netherlands Antilles from the 1970s into the 1990s.

Since the stagnation phase, the SITE model manifests a paradox between the failure to produce further average productivity and income growth, and the ability to still produce favorable outcomes for most or all groups in the labor market. This paradox can be explained by an analysis of labor market segmentation. Based on continuous tourism volume growth, new immigrants were recruited to take up lower-skilled and -paid positions at the base of the labor market pyramid. By moving beyond regional low-income countries to the SITEs, these groups realized
an important improvement in their incomes. Economic growth and addition of immigrant labor in less-preferred sectors and positions created space in the higher strata of the labor market for locals and earlier immigrants into which to move (Alberts 2020b).

In the SITE labor market, several mechanisms contributed to segmentation. In terms of branches of industry, locals moved out of the economic core of hospitality and construction sectors and into government, financial- or other services, and education. They also on average moved into higher employment positions. Earlier immigrants had growth opportunities as well, generally following the same preferential hierarchy as locals. New immigrants were almost exclusively recruited into jobs in the lower rungs of the hospitality and construction sectors. The solution to the paradox is therefore, that all existing participants in the labor market generally move up, while the base is supplemented with immigrants from lower income countries in the region. Members of the latter group did advance their position by migrating to the SITE economy, but at the same time caused stagnation in the average income and productivity in the SITE labor market. So by virtue of continuous immigration and segmentation, each group indeed improved its position, while the national average remained the same.

However, this paradoxical SITE characteristic of all groups advancing while productivity stagnates is contingent on permanent growth. Without volume growth of visitor numbers and tourism resorts, the engine of the SITE economy, there cannot be an increase in opportunities in the higher strata of the labor market either. We therefore call this the ‘mandatory growth paradox’, adding an important analytical dimension to the SITE model (Alberts 2020b).

As the mandatory growth paradox was beneficial to almost everyone, governments were unable to slow down volume growth without compromising the social and economic opportunities for most groups in society. Theoretically, halting volume growth while still increasing opportunities and income would have been possible by restructuring the tourism industry in a way that would increase average productivity. However, such a strategy would require a level of governance capacity and vision that has not been in evidence yet. Consequently, the SITE model remained stuck in ‘mandatory growth’ mode.

‘Mandatory growth’ clashes with the limits of carrying capacity, and therefore builds an inherent contradiction into the SITE model. The model is clearly finite for a number of reasons.

In an island setting, the purely physical limitations are self-evident. This makes visitor number growth finite as well; high-intensity SITEs have generally used all their available beaches for resort development. The population growth following
the economic expansion gave SITEs extreme population densities. Furthermore, the natural environment came under industrial and population pressure, which in turn fed back negatively into the tourism product itself through pollution and deterioration, compounding the ‘stagnation phase’ problems. Socially and culturally, SITES were dually influenced; first of all by the dominant tourism industry and secondly by the resulting immigrant influx that completely overturned the population composition. Infrastructure development, outside the core necessities of the tourism industries such as harbors and airports, did not keep up with population growth, nor did services such as health care, education and public utilities. Crucially, the institutional framework, including governance capacity, has clearly shown not to be able to cope with the quantitative and qualitative tasks of the consolidation and stagnation phases of the TALC. These combined factors illustrate the carrying capacity limitations of SITEs and underscore the risk of stagnation turning into decline, as warned against by the life cycle paradigm.

The factors mentioned above constitute the classic components of carrying capacity. However, as this thesis shows, SITEs are confronted with the additional threat of a ‘demographic time bomb’. Decades of high immigration in the development and consolidation phases skewed the population composition in a positive way as far as productivity is concerned, increasing participation rates and lowering dependency ratios. This means government tax income grew, while the immigrant population at first had only a modest influence on education and care costs, the largest components of government budgets. This created a socio-economic and fiscal windfall for SITEs, while in reality the demographical future of the model was mortgaged. Again, a tipping point was reached in the stagnation phase. As distinct ‘onion-shaped’ SITE population pyramids now show, the earlier immigration cohorts approach retirement age, while new immigration has slowed down by virtue of lower tourism volume growth. This effect is compounded by the modest fertility rates of middle-income countries, to which the SITEs now belong. Demographics are catching up with the SITE model as a wave of ageing population is imminent.

This ‘demographic time bomb’ is a new dimension to be recognized as a characteristic of high-intensity SITEs (Alberts 2020b). Its effects deepen the unsustainability of the model. It means that even if, theoretically, the stagnation phase could be stretched by halting further volume growth and bringing previously mentioned elements of carrying capacity transgressions under control, SITE governments would still be faced with the enormous challenge of a rapidly ageing population.
Conclusions

Reworking the analytical framework

Coming back to the main research question concerning the analytical framework of the SITE model, the main conclusion is that a number of dimensions need to be added to this model to increase is descriptive and predictive value. These new elements pertain to the internal socio-economic and governance dynamics of SITEs that help explain their TALC trajectory. Most SITE studies so far comprise macro-economic or marketing oriented studies of the tourism product, questions of environmental sustainability, or the islands’ vulnerability and resilience in relation to global economic developments or climate change. Often, the TALC theory is used to classify SITEs, but the question what makes SITEs move through the lifecycle, or how they behave in its latter stages, is seldom asked. This thesis seeks to fill in this gap, by proposing the following SITE dimensions.

Extensive growth

In the mature stages of the TALC, SITEs continue to show tourism volume- and therefore economic growth. However, immigration numbers match real economic growth, resulting in an absence of productivity gain, making extensive growth a characteristic of latter-stage SITEs (Figure 6.1). This observation gives rise to the question why SITEs continue to grow in the face of stagnant productivity.

*Figure 6.1. Mature SITEs show a paradox of persistent volume growth with stagnant average productivity*
Continuous and circular migration makes SITEs a regional system

High-intensity SITEs can only grow by virtue of continuous high immigration numbers, as the islands have a limited resident population. This makes SITEs dependent on a supply of labor from low-income countries in the region. Migration is one-way as well as circular and serves as an income source for immigrants and their countries of origin. Socially and economically therefore, a SITE is a node in a regional system rather than only an island development model.

Speciation limits SITEs’ vulnerability

SITEs are extremely specialized in one – export - product. However, rather than monoculture leading to vulnerability, intelligent and flexible specialization or ‘speciation’ limits vulnerability and lends resilience to SITEs. In a situation of limited human resources and diseconomies of scale, diversification is not a viable option. Active marketing of the SITE tourism product spread out over various regions in the world and a high degree of adaptability of the product contribute to successful speciation.

Individual labor market strategies increase SITEs’ resilience

In the SITE labor market, a range of individual labor market strategies lends a high degree of flexibility to the workforce. Workers and households routinely combine different jobs and occupations, permanently or temporarily, in the formal or informal sectors, resembling the concept of ‘occupational multiplicity’. A hierarchy of strategies exists, with locals more often occupying secure and white-collar positions and recent immigrants starting in the lower strata of the labor market, prepared to leave the island if opportunities are lacking. This phenomenon gives the labor market a high degree of flexibility as economic growth can be easily accommodated in the short run by a higher deployment of existing labor, while a downturn will result in dispersed underemployment or return migration rather than in unemployment.

Horizontal governance: limited government role is conducive to TALC growth trajectory, damaging in mature phases

A limited government regulatory role in the early TALC phases, supported by a ‘laissez-faire’ ideology, contributed to a favorable investment climate. Government limited itself mainly to crucial tourism oriented infrastructure and marketing. Since SITE growth is mainly based on foreign direct investment, this successfully attracted overseas tourism investors. This same characteristic became a liability in the mature phases of the life cycle. A tipping point was reached during the consolidation phase (Figure 6.2) when the volume of the tourism industry, the population and its needs, combined with the problems of reaching the limits of island carrying capacity, far surpassed governance capacity. This shortfall became manifest in the stagnation phase.
Figure 6.2. Crucial dimensions of SITE governance through the TALC; early

Mature phases:
- Issues of mature SITEs outgrow governance capacity:
  - Tourism volume,
  - Declining tourism product quality,
  - Population size,
  - Carrying capacity limits
- Carrying capacity limits acknowledged, not acted upon
- SITE development disrupts
  - Netherlands Antilles and strains
  - Kingdom relations
- Higher vulnerability, decreasing resilience

Early phases:
- Laissez faire and weak regulatory framework promote FDI
- Non-independent status positive to investment climate
- Kingdom promotes tourism development
- SITE development generates centrifugal tendencies within Netherlands Antilles
- Carrying capacity not a bottleneck
- Low vulnerability, resilience not an issue

Source: Axes, curve, stages, carrying capacity based on (Butler 1980, p. 7) information about early/mature phases added by author
While the carrying capacity limits were recognized in the horizontal governance plane by industries, civil society and government, corrective action did not follow, leading to the risk of sliding into the decline phase. In SITEs, the same governance structure that favors the growth phases of the TALC becomes a liability in the mature phases of development.

**Horizontal and vertical governance interaction in non-independent SITEs**

The SITEs investigated in this thesis are non-independent island jurisdictions, which was a contributing factor to their investment climate, as the constitutional anchoring in the Kingdom and the independent judiciary were seen by investors as highly favorable factors. The Kingdom promoted SITE development with advice and financial support. However, when the horizontal governance structure reached a tipping point in the mature phases of the TALC and its weaknesses became apparent, this manifested itself in problematic vertical relations between SITEs and the Kingdom level as well.

**Vertical governance: SITE development incompatible with island group governance**

High-intensity SITE development is adverse to a federation-type governance structure with non-SITE islands. This is shown by the roles of Aruba and Sint Maarten within the framework of the Netherlands Antilles, the middle level of the original three-tier governance framework of the Kingdom of the Netherlands. While moving through the TALC stages, the two islands each generated increasing tensions within the Netherlands Antilles, contributing to the exit of Aruba in 1986 and the dissolution of the remaining Antilles in 2010. Though the historical, social and cultural roots of the centrifugal tendencies run deeper, the divergent SITE development became increasingly incompatible with island group governance, while SITEs developed the economic leverage to force an exit.

‘Demographic time bomb’, an additional dimension of SITE stagnation-phase problems

Carrying capacity limitations in the mature stages of development constitute a central element in the TALC theory, and are well described for SITEs. SITEs however, have an additional problem. Since their island model is immigration-dependent, high-intensity SITEs have gone through a period of rapid population growth to make their tourism expansion possible. In the TALC growth phases, this led to a demographically induced economic and fiscal windfall. Since growth mainly took place in the active segments of the population, tax revenues increased while costs of education, health care and other public services rose only moderately, while social security funds thrived. Participation rates were high and dependency ratios low. In the stagnation phase however, again a tipping point is reached. Immigration slowed down, while the earlier immigrant cohorts now
approached retirement age, illustrated by constricted ‘onion-shaped’ population pyramids. This will lead to high claims on social security funds, health care and other services, while tax and premium income will decrease. What was once a windfall now turns out to be a time bomb, a demographic challenge that will have to be confronted.

Labor market segmentation explains ‘mandatory growth paradox’

Although the SITEs studied are clearly in the TALC stagnation phase, with the very real risk of sliding into decline under the combined pressures of carrying capacity limitations, tourism product decline, weak governance and an ageing population, tourism numbers in these islands keep growing. Although stagnation problems are acknowledged by governments as well as civil society, there is no indication that the fundamental characteristics of the SITE model are challenged to either rejuvenate the tourism life cycle or at least alleviate the carrying capacity pressures by halting volume growth. Furthermore, the failure of the SITE model to generate further productivity and average income gains does not lead to the conclusion that continued volume growth is pointless. This constitutes a paradox, an apparent contradiction between realization of the limits of the SITE model and failure to act upon this knowledge. To explain this paradox, the SITE labor market is investigated with the aim of elucidating why continuing along the current path is apparently still in everyone’s -short term- interest (Alberts 2020b).
Figure 6.3. Labor market segmentation explains the ‘mandatory growth’ paradox

Labor market segmentation over time; each group benefits

Hierarchy of occupational preference
- Government
- Financial services
  - Education, social work
  - Transport, communication
  - Trade and wholesale
  - Construction
  - Hospitality

Regional developing countries
The answer to the paradox can be found in the way the labor market is segmented. Immigration takes place by almost exclusively recruiting labor into the lower rungs of the labor market, mostly low-skilled jobs in the hospitality industry and construction. Most immigrants come from low-income countries in the region, and therefore improve their quality of life by moving to a SITE. Continuous immigration accommodates continuous economic growth, which in turn creates additional opportunities in the middle and higher strata of the labor market. A clear segmentation pattern is discernible, in which locals move out of hospitality and into preferred sectors such as government and financial services, while earlier immigrant cohorts move up to the mid-tier sectors such as trade, transportation and certain other services. Similar movements take place within industries. Although locals on balance move out of the hospitality industry, they occupy an increasing number of management positions. Earlier immigrant cohorts perceive advancement opportunities as well. However, this segmentation and the accompanying movements can only persist as long as the entire labor market and therefore tourism, its economic engine, keeps growing. Only under this condition new above-average jobs can be continuously created, while adding new below-average work at the base of the pyramid. This dynamic labor market segmentation mechanism explains why a model that on average shows no productivity or income progress, is still beneficial to all segments – at least in the short term. Growth is therefore mandatory to the SITE model, giving rise to the ‘mandatory growth paradox’.

In summary, a new SITE model with several added interrelated dimensions is needed to clarify the development of high intensity SITEs through the stages of the TALC. ‘Speciation’ helps to illustrate that a high degree of specialization, when executed in a flexible and intelligent way, can make islands less vulnerable without sectoral diversification, and actually add to their resilience, explaining a successful growth model. Large-scale immigration is an essential requirement for high intensity SITEs, which in the mature phases no longer correlates with productivity growth, translating into ‘extensive growth’, which in turn clashes with carrying capacity limitations.

The drive of mature SITEs to keep growing in spite of the finite nature of the model leads to the ‘mandatory growth paradox’. This paradox can be resolved by observing the combined mechanisms of immigration and labor market segmentation, that offer all groups avenues of advancement, even when resulting in stagnant average productivity and incomes (Figure 6.1, Figure 6.3). The same elements of limited governance capacity that promote the SITE model’s growth in the growth part of the curve, turn into a liability in the mature stages when the requirements of society grow and the tourism product’s lifecycle wanes, putting SITEs at risk of sliding into the decline stage of the TALC.
Avenues of future research

Many elements of the SITE model elucidated here have only been the subject of very limited research so far and need additional work. Some of these topics probably have a high degree of relevance to other cases in the field of development studies as well.

The intersection of migration and labor market segmentation in SITEs – and probably other developing economies with a strong labor migration dependency - needs further attention. Labor market segmentation has not been a frequent object of research after the 1980s but should be revived and applied to SITEs and other Caribbean economies, where migration has always been a central phenomenon in socio-economic development.

Labor market segmentation is one important driver of social stratification and income distribution in SITEs. However, there are additional mechanisms as well, rent seeking being one. Rent seeking or acquiring income without significant contribution to productivity, often in relation to public policy and government-controlled markets is a driver of inequality (Stiglitz, Joseph E. 2013) and plays an important role in SITEs (Haan 1998). The concept ties in closely with the distinction between extractive and inclusive economic institutions brought forward by Acemoglu and Robinson (2013).

Rent seeking in turn has a strong relation to the quality of governance. The inadequacy of governance is an important theme in this thesis, and has thus far been researched mostly from the constitutional angle of Kingdom relations. Research into the different actors and institutions that play a role in the horizontal governance networks in SITEs is needed, firstly because of the crucial stagnation phase they find themselves in, and secondly because of the existing and new challenges of vulnerability and resilience the islands are confronted with, some of which are mentioned below.

Furthermore, in a globalizing world economy, national borders have become progressively less of an obstacle to production chains, and increasingly contentious to human migration. SITEs are at a large distance from their markets, dominated by foreign direct investment and are therefore examples of globalizing international production - and consumption - patterns. At the same time, SITEs constitute regional systems of labor supply, based on selective and partly circular migration patterns from nearby islands and countries. Being small, high production-intensity, labor-migration dependent states with a strong labor market segmentation, SITEs might be viewed as part of a family of small economies to which for instance some small oil-producing states in the Middle East belong as well, a perspective that could be studied further.
Conclusions

The concept of resilience, central to this thesis, has been heavily challenged in the 21st century by factors related to globalization. Climate change is an obvious example. By nature, islands are vulnerable to rising sea levels and disproportionately affected by hurricanes, as became clear when hurricanes Irma and Maria hit Sint Maarten in 2017. Islands in general, and SITEs in particular, cannot escape a fundamental reorientation of their economies in light of these developments. Combined with their already strained carrying capacity situation, research into the sustainable use of ocean, sea and coastal resources, in other words a ‘blue economy’ (World Bank 2017), seems necessary.

More recently, all established understanding of vulnerability and resilience of SITEs, or for that matter, all societies and economies worldwide, has been challenged by the impact of the Covid-19 pandemic. Though this pandemic is still ongoing at the time of this research, it is probably no exaggeration to state that thinking about sustainability, vulnerability and resilience will be profoundly and definitively changed. This pertains to island studies and SITE knowledge in particular, as through their comprehensive dependence on international chains of production, consumption and marketing, they are impacted disproportionally (Dukharan 2020).

Policy implications

Where do the SITEs go from here? Having explained how SITEs are trapped in a ‘mandatory growth paradox’ while in the full knowledge of the finiteness of their development model, the question arises whether there is a way out of their predicament. In TALC terms, a shift from ‘stagnation’ into ‘decline’ is imminent and would essentially mean a collapse of the SITE concept as we know it. At first sight, stretching the stagnation phase, as is arguably the case now, might be considered a viable scenario. We have to realize however, that the present phase contains intrinsic stressors that worsen over time, such as the environmental damage, the pressure on infrastructure and public services.

Even a complete halt to volume growth, such as a construction ‘moratorium’ scenario, without changing the essence of the model, would not be sustainable. Such measures might stabilize certain environmental and spatial impact factors, but even then, the slow demographic time bomb of the ageing of past immigration cohorts will continue to tick. The cost of health care, elderly care, and the social security system would rise in any such scenario and consequently government finance would be deeply impacted as well.

SITEs are therefore confronted with a triple challenge; a weary tourism product in the stagnation phase of its lifecycle, an island exceeding its carrying capacity limits, and the demographic consequences of past immigration. Furthermore, this
set of challenges is ‘locked in’ by the obligation to safeguard advancement opportunities in their segmented labor market by continuous volume growth.

It is easy to see how this combination of challenges could lead the SITEs to slip into the ‘decline’ phase. Any solution to prevent this will have to take all these aspects into account and will have to break the ‘mandatory growth’ paradox in the process. In TALC terms, the aim would be to enter a ‘rejuvenation’ phase through reinventing the tourism product, in the process probably catering for new markets as well.

As stagnant labor productivity is the entry point to understanding the SITEs problems, it also has to be the starting point of a solution. Labor productivity can only be increased by introducing different production processes, which in the case of tourism means services with a higher added value. The concept of ‘speciation’ mentioned in this thesis as an answer to the proponents of diversification, has to be rediscovered. Speciation as an island strategy implies the propensity to develop new skills, increase quality and productivity in a certain chosen niche, in this instance within the realm of tourism. In reality, SITEs have moved into the opposite direction; from exclusive, distinct, recognizable destinations in the 1970s and 1980s into generic suppliers of sun, sea and sand in the 1990s and the 21st century.

Reinventing the tourism product implies a radically different role for governments. As put forward in this study, there has hardly been any governance of the direction of the tourism development trajectory as such, the contribution of government consisting mostly of creating favorable conditions for investment and operations, complemented by marketing efforts – the last element with varying degrees of success. This was in line with the ‘laissez-faire’ philosophy prevalent during the SITEs’ growth years. To achieve ‘rejuvenation’ however, active governance of the type of tourism products by selectively attracting investments and seeking out high quality products is a necessary condition.

As weak governance capacity is at the root of the finite character of the SITE model, solutions are out of reach if the institutional framework is not strengthened in the process. More capacity is needed to manage the character of the tourism sector and its product, as well as the existing carrying capacity challenges, while securing a sufficient quality of life for the population. This will take a new relationship between the main actors in the horizontal governance plane; government, business, NGOs and civil society. A parallel rejuvenation of the Kingdom relationships, that seem to suffer from a crisis of meaning and significance, could be a positive factor in this process.

SITE policies have by and large taken the relative resilience of tourism economies for granted. Their trajectory compared positively to non-tourism economies in the
region in terms of vulnerability to external shocks and their ability to bounce back from them. These certainties have been severely shaken by the recent Covid-19 pandemic. Concepts of vulnerability and resilience will have to be revisited, and the SITE model will have to become far more robust if it is to survive.

A way out of the mandatory growth paradox and towards rejuvenation cannot be limited to changes in the tourism product and -market alone. The social dynamics of labor market segmentation will need to be addressed too. Creating additional space in the higher levels of the social pyramid may have resulted in inflation of the non-hospitality sectors. The preference of locals and earlier immigrants alike, to move towards trade, financial and other service- or government jobs, may have resulted in a lower drive for efficiency and a resulting lower productivity in those sectors. Eliminating rent-seeking mechanisms and other barriers to competition will likely induce entrepreneurship and lead to increased efficiency, possibly freeing up labor for different, higher value-added activities.

Finally, increased labor productivity is generally dependent on increased qualifications and therefore on education of workers. In this respect as well, governments in coordination with the private sector will have to play a more active role in maximizing the potential of the available labor force. This applies to classic long term manpower planning, e.g. matching education output to labor market demand, but also for opening avenues of advancement, retraining and lifelong learning. This applies especially to immigrant groups, who may indeed be better off since leaving their homeland, but are not necessarily functioning at the level of their qualifications, nor have they always reached their full potential in educational attainment.