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A Configurational Analysis of Tourism Performance

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Master in Hospitality and Tourism Management

Supervisor:

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ISCTE Business School

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BUSINESS
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Department of Marketing, Strategy and Operations

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To my friends and family

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Resumo

A proposta desta dissertação de mestrado é a de oferecer uma nova perspectiva sobre os fatores que determinam a performance turística dos países. O objetivo deste estudo passa por compreender como se relacionam estes fatores, e de que forma influenciam a performance turística. O princípio por detrás da metodologia deste estudo é a de que o turismo é um fenómeno complexo, que é afetado por múltiplos e complexos fatores, e que não pode ser explicado apenas pelo efeito singular de cada variável. Por isso, foi feita uma análise qualitativa comparativa com conjuntos *fuzzy* (fsQCA), com cinco variáveis retiradas do Índice de Desenvolvimento de Viagens e Turismo (TTDI) do World Economic Forum, onde foram identificadas sete configurações de fatores antecedentes do produto interno bruto (PIB) do setor de viagens e turismo. Estas configurações revelam de que forma, e em que circunstâncias, estes fatores influenciam a performance turística nos países com mais e com menos PIB do setor de viagens e turismo.

Palavras-chave: performance turística, PIB do setor das viagens e do turismo, fsQCA

Abstract

The purpose of this master's thesis is to offer a new perspective on the factors that determine a country's tourism performance. The objective of this study is to understand how these factors are related, and how they influence tourism performance. The principle behind the methodology of this study is that tourism is a complex phenomenon, which is affected by multiple and complex factors, and which cannot be explained solely by the singular effect of each variable. Therefore, a fuzzy-set qualitative comparative analysis was performed (fsQCA) with five variables taken from the Travel and Tourism Development Index (TTDI) of the World Economic Forum, where seven configurations of antecedent factors of Travel and Tourism Industry Gross Domestic Product (T&T Industry GDP) were identified. These configurations reveal how, and in which circumstances, these factors influence tourism performance in countries with high and low T&T Industry GDP.

Keywords: tourism performance, T&T Industry GDP, fsQCA

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Introduction

The COVID-19 pandemic presented a major blow to economic activity worldwide and the tourism sector has taken one of the hardest hits (S. Xiang et al., 2021). This is particularly noticeable when looking at the variation in the weight of tourism in the Gross Domestic Product (GDP) in several economies, in the periods before the pandemic and during the pandemic. In 2018, tourism accounted for an average of 4.1% of GDP (\$1,632,940 million) in high-income economies, and, in 2020, that value was less than half, at around 2% (\$887,171 million) (World Economic Forum [WEF], 2022). Given the importance that many countries have given to tourism as a driver for economic growth, it is only natural that more and more studies are appearing on the topic (e.g., Dogru & Bulut, 2018; Lin et al., 2019; Stauvermann & Kumar, 2017; Tugcu, 2014), and in particular on the determinants of tourism (e.g., Assaf & Josiassen, 2012; Corne & Peypoch, 2020; Marrocu et al., 2015; Zadeh Bazargani & Kiliç, 2021).

However, tourism is a complex phenomenon (Darbellay & Stock, 2012) and it is hard to even settle on a concrete definition of what the tourism sector is (Cellini & Torrisi, 2013). Some authors like Antolini (2021, p.3) go as far as to say that tourism itself is not a sector but rather a part of other fields, such as the social and economic fields. In the *glossary of tourism terms* provided by the United Nations World Tourism Organization (2023), the tourism sector is defined as follows: a “cluster of production units in different industries that provide consumption goods and services demanded by visitors”. These industries, otherwise known as tourism industries, such as the lodging, and food and beverage industries, form an interactive network where they influence each other and the tourism sector as a whole (Banerjee et al., 2015). Beyond its internal system, the tourism sector also possesses a dynamic relationship with other sectors, most notably, with the economic and political sectors (Nguyen et al., 2020; Banerjee et al., 2015). This complex “system of interconnected industries and markets in cross-cutting contexts” (Aguinis et al., 2023, p.8) warrants an equally complex analysis that diverges from the linear approach adopted by other studies on tourism phenomena (Stevenson et al., 2009).

This study addresses the complex nature of tourism, employing fuzzy set qualitative comparative analysis (fsQCA) with complexity theory principles to explore the complex relationships of five antecedents, and to find which combinations of these antecedent factors explain high and low Travel & Tourism Industry Gross Domestic Product (T&T Industry GDP). While previous studies have already identified tourism as a complex phenomenon (e.g., Darbellay & Stock, 2012), and used configurational approaches (e.g., Corne & Peypoch, 2020),

this study contributes to the existing literature by adding a refreshing approach to tourism performance (proxied by T&T Industry GDP) in high-income economies, with a unique set of five antecedent factors – Travel and Tourism capital investment, Travel and Tourism government expenditure, country brand strategy, impact of rules on foreign direct investment, and extent of staff training.

Literature Review

2.1. Tourism and the Economy

Tourism is often regarded as a promotor of regional economic development (Lin et al., 2019). The appeal of tourism as an economic driver is the possibility of converting a free good – natural and socio-cultural resources – into part of a tourism product (Mihalič, 2014). The positive economic effects of tourism are well covered in the literature. Job promotion, poverty reduction, attraction of capital investment and foreign direct investment (FDI), increased tax revenue and foreign exchange earnings are some examples of the economic benefits of tourism (Adedoyin et al., 2022; Can & Gozgor, 2018; Dogru & Bulut, 2018; Gholipour et al., 2022; Khan et al., 2020; Lin et al., 2019; Perrottet, 2021; Tugcu, 2014). Furthermore, tourism’s multiplier effects on other sectors, such as accommodation and transportation, further affirm tourism’s influence on the economy (Barman & Nath, 2019; Tugcu, 2014).

2.1.1. Causality

Although it may be true that tourism brings with it economic benefits, the causal relationship between tourism development and economic growth is very much up for debate. Understanding causality – between tourism development and economic growth, in this case – is fundamental to making predictions and being able to make better decisions (Zhang et al., 2018). Spirtes et al. (1993, p.42) describe causation as a “relation between particular events”, where both the cause and the effect are a particular event. Considering the case in discussion in this paper specifically, an example of a causal inference could be: *if tourism grows, the economy grows, and if tourism contracts, the economy contracts*. This relationship indicates a “lawlike necessity” (Pearl, 2000, p.1), meaning that when tourism development occurs (the cause), economic development occurs (the effect). Interestingly, this example is the basis for one of four causal hypotheses for tourism and economic growth found in the literature – tourism-led growth hypothesis, or growth hypothesis. This hypothesis derives from the export-led growth hypothesis that posits that export growth instigates economic growth through increases in efficiency and productivity (Nowak et al., 2007). Accordingly, tourism-led growth consists of the hypothesis that tourism is a driver of economic growth (Dogru & Bulut, 2018). The other three hypotheses are the growth-led tourism or conservation hypothesis, the feedback

hypothesis, and the neutrality hypothesis. In the growth-led tourism hypothesis the causality inverts, with economic growth being the cause of tourism development (Stauvermann & Kumar, 2017). While the two hypotheses previously discussed support a unidirectional causality, the feedback hypothesis proposes a bi-directional causality, where tourism growth and economic expansion are interdependent (Dogru & Bulut, 2018). Lastly, the neutrality hypothesis is that there is no causality between tourism and economic growth (Tugcu, 2014).

The reality seems to be that none of these hypotheses can translate into a universal truth and are dependent on the context in which they are studied, meaning that each of these hypotheses can be proven true depending on the indicator used or the country in study (Can & Gozgor, 2018; Lin et al., 2019; Tugcu, 2014). This corroborates with Suárez (2014) who defends the idea that causal evidence is context-specific, where evidence can support a claim in one context and disprove it in another.

2.2. Travel and Tourism Industry Gross Domestic Product

Studies in the literature use different variables to measure tourism performance. Some measure more objective tourism data, like tourist expenditure (e.g., Deskins & SeEVERS, 2011; Marrocu et al., 2015; Olya & Mehran, 2017; Sokhanvar, 2019), tourism receipts (e.g., Ağazade & Karasakaloğlu, 2022; Dogru & Bulut, 2018; Sokhanvar, 2019; Zadeh Bazargani & Kiliç, 2021), tourist arrivals (e.g., Adedoyin et al., 2022; Khan et al., 2020) and overnight stays (e.g., Antolini, 2021; Assaf & Josiassen, 2012). Others use more economic-oriented metrics, such as GDP (e.g., Goel & Budak, 2010) or Gross State Product (e.g., Deskins & SeEVERS, 2011). Meanwhile, this study utilizes T&T Industry GDP as a proxy for tourism performance. Authors like Zadeh Bazargani & Kiliç (2021), and Ağazade & Karasakaloğlu (2022), also deployed T&T Industry GDP in their studies. The main objective of this variable is being able to assess the impact of tourism on the economy. According to the Organisation for Economic Cooperation and Development (OECD) (2022, p.12), T&T Industry GDP is a fraction of the total GDP that comprises the contributions of each sector made in “response to internal tourism consumption”. Studies, however, may use slightly different variations of this variable, such as direct tourism GDP and indirect tourism GDP (see OECD, 2022), or use proxies for tourism, such as tourism receipts, as a share of the GDP (e.g., Sokhanvar, 2019).

2.3. Antecedents of Travel and Tourism Industry GDP

This subsection analyses, in detail, five antecedents of T&T Industry GDP and their importance to tourism and the economy.

2.3.1. Travel and Tourism Capital Investment

Given the nature of the tourism sector, particularly, its necessity of physical infrastructure and equipment to accompany its intensive demand, it is reliant on investments, more specifically, on capital-intensive investments (Tovmasyan, 2021; Vellas & Bécherel, 1995). These investments are required to make up for the infrastructural needs of a tourist destination, most notably regarding transportation and accommodation (OECD, 2017). A part of these investments comes from the private sector since tourism has many stakeholders such as hotel owners, tour operators, investment funds, and property developers that provide for tourism with capital investments across the tourism spectrum (Perrottet, 2021). This type of investment can be very beneficial in regard to economic development and job creation (Nguyen et al., 2020) and countries increasingly rely on foreign capital and know-how to compensate for their inability to meet the demand of investment that tourism requires (Mihalič, 2014). Moreover, national and regional governments also play an important role in the sustainability of the tourism sector with important capital investments in infrastructure such as roads and airports, as well as water and power infrastructures, that directly or indirectly support tourism activity (Mihalič, 2014). Also, public investment is fundamental to ensure the accessibility of cultural and natural sites to the public (OECD, 2017).

According to the OECD (2017), capital investments are a particularly important factor in the growth of the tourism sector because increasing demand can overwhelm the existing infrastructure and the available supply, stunting the potential growth of the sector. The fact that capital investments provide needed infrastructure allows the economy to take advantage of the potential gain from tourism (Sokhanvar, 2019), even though this effect is more significant in higher-income economies than in tourism-dependent ones (Adedoyin et al., 2022). Besides, capital investments, namely in information and communications technology (ICT) which is becoming an increasingly more important component of these types of investment, allow companies in the tourism sector to improve their ability to reach new clients on a global scale who also benefit from this increased competitiveness, with more as well as cheaper options (Barman & Nath, 2019; Gholipour et al., 2022). All in all, these investments all contribute to increasing the appeal of a destination (OECD, 2017). For instance, Barman & Nath (2019) posit that international tourists are more drawn to tourist destinations with better transportation

facilities. This leads to an acceleration of tourist arrivals (Khan et al., 2020), an argument that can be used to support the tourism-led growth hypothesis (Adedoyin et al., 2022).

Overall, a greater amount of capital investment is found to have a positive effect on economic growth and tourism development (Goel & Budak, 2010; Khan et al., 2020; Morozumi & Veiga, 2016; Nguyen et al., 2020; Tovmasyan, 2021). In particular, Tovmasyan's (2021) findings show that capital investments in tourism increase T&T Industry GDP. Khan et al. (2020), however, suggest that the causal relationship between capital investment and tourism might be bidirectional, meaning that tourism also influences the amount of capital investment.

2.3.2. Travel and Tourism Government Expenditure

Governmental action is regarded as an indispensable means for the preservation and protection of the social, cultural, and natural resources that tourism relies upon (Nguyen et al., 2020). This is particularly important, not only from an environmental and sentimental standpoint, but because it values the tourism product and has multiplier effects on the private sector that is now encouraged to exploit it and invest in it (Stabler et al., 2009). These types of expenses/investments become even more relevant considering their unlikeliness of being taken over by the private sector in an initial phase (Nguyen et al., 2020).

Government expenditure on tourism also includes other important outlays to the tourism industry such as current expenses (e.g., expenses for the maintenance of public spaces and expenses for maintaining order and security); other types of expenses that are related to incentives aimed at supporting the industry, namely, tax incentives and subsidies; and capital investments in infrastructure such as roads and airports (Statistical Office of the European Communities. et al., 2011). These expenses are crucial to guarantee a proper functioning of the tourism activity. For example, Sou & Vinnicombe (2021) and Okafor & Khalid (2021) highlight the importance of security spending, pointing out the evident negative effects that a lack of security has on tourism demand and potential investments.

In general, government spending can be seen as a promotor of tourism and economic growth for its importance in raising infrastructure that lowers the costs for tourism providers and increases the overall appeal of the destination (Goel & Budak, 2010). In some cases, however, government spending can have unintended outcomes. Excessive government investment changes the proportion of private/public capital accumulation ratio that reduces the returns on private investment, perverting the incentives of the private sector (Nguyen et al., 2020). Also, tax incentives can potentially create a perverse effect on private investment. The increase in government bonds with the objective to finance a tax cut, can negatively affect

private investment given that these new government bonds crowd out the amount of privately issued bonds, reducing their investment ability (Abel, 2017). Another potential unintended outcome is on short-term growth. Public investments in tourism infrastructure likely divert public investments from other areas or substitute private investment, which can negatively impact said growth (Goel & Budak, 2010). Additionally, short-term growth can also be harmed by longer implementation delays in public investments that can result in even less private investment and a deceleration of labour and output, due to a decrease in public supply in that period (Leeper et al., 2010, p.8).

Literature on government expenditure has presented mixed results. Antolini's (2021) study on public expenditure in Italy between 2000 and 2017 found public expenditure to have a negative impact on tourist arrivals and nights spent. Another study on government spending in Italy by Cellini & Torrasi (2013), presented similarly unsatisfactory results regarding travel and tourism government spending and number of tourists, especially concerning public spending in current accounts. Interestingly, public spending in capital accounts appears not to have significance on the number of accommodations infrastructure (Cellini & Torrasi, 2013). On the contrary, Nguyen et al.'s, (2020) findings show that travel and tourism government expenditure is a driver of private investment in the tourism sector which suggests that travel and tourism government expenditure might stimulate tourism development and economic growth. Similarly, Assaf & Josiassen (2012) found government expenditure in tourism to be one of the most impacting determinants of tourism performance. Other more nuanced findings on the effects of public spending are also present in the literature. Rosentraub & Joo (2009), for instance, noted that, although public investment in amenities is not per se a driver of economic development of a certain region, the lack of amenities may hinder economic growth. Okafor & Khalis (2021) found that security spending is, indeed, important to stabilize the normal number of visitors during an armed conflict but its effects are only noticeable after eight years.

As Banerjee et al. (2015) clarified, it is very hard to assess the net impact of an investment in tourism since every country has its own specific context that significantly alters the perspective on how government expenditure can be judged. Moreover, and considering the complex nature of tourism, it is hard to impute government expenses in tourism to the overall government spending given that some expenses aimed at other sectors can also affect tourism, as is the case of transportation, for example (Antolini, 2021). This means that some analyses of the impact of public investment in tourism might be misleading (Cellini & Torrasi, 2013). Not only that, but the success of a public investment depends on the nation's or region's ability to absorb it (Banerjee et al., 2015, p. 168). Countries with greater openness to the outside world

have a higher chance of making full use of public investments as catalysts for development (Goel & Budak, 2010). Similarly, public investment might be more impactful in nations lagging in infrastructure (Nguyen et al., 2020).

2.3.3. Country Brand Strategy

Looking at the tourism industry from a competitive standpoint, countries are essentially competing against one another to attract potential tourists (Fetscherin, 2010). From this perspective, it's a logical path to understanding how country brand strategy is an important tool for countries seeking to set themselves apart. Still, country brand strategy is not solely linked to the tourism industry (Dinnie, 2022). Countries may seek to build a strong brand in order to maintain a positive outward image, increase the value of the products they make, and appeal to foreign investors (Hao et al., 2021). Fundamentally, what all of these objectives have in common is the idea of competition and standing out against competitors (i.e., other countries). However, there is no general consensus on what exactly a nation brand is (Hao et al., 2021). While it may seem like a mere marketing strategy, in reality, it is a much more complex, multidimensional concept that branches out into other areas such as politics and the economy, and which, in some countries, has even led to laws and public-private partnerships focused on promoting the country (Fetscherin, 2010). The complexity of country branding stems not only from its multidisciplinary nature but also from its myriad of stakeholders (Dinnie, 2022). Aronczyk (2013) emphasizes that nation branding is more than just “slapping” a logo on a country, and, for that reason, it is a distinct concept from product branding. At its core, nation branding relates to the image and reputation of a country which can influence factors like the number of tourists or FDI (Papadopoulos et al., 2016).

Fetscherin (2010), identifies two ways of measuring country brands, a consumer-based equity approach and a company-based equity approach. The first approach looks at brand value as being defined by the consumers themselves, in other words, it bases brand value on consumer perception and assessment (Fetscherin, 2010). The second approach uses performance data to evaluate how a country's brand has affected exports, tourism, FDI, and immigration (Fetscherin, 2010). According to this second approach, strong country brand is associated with high levels of exports, high levels of tourism, high levels of FDI, and high levels of immigration (more specifically, immigration of skilled workers and foreign students) (Fetscherin, 2010). Similarly, Gupta et al. (2021) found a positive relationship between government marketing and promotional efforts and higher inflows of foreign investment. Still, some of the links between these connections are fuzzy. In an attempt to investigate the relationship between nation

branding and FDI, Papadopoulos et al. (2016) determine that while it is possible to identify multiple factors affecting investor decisions, it is difficult to conclude which factors are most impactful. In other words, while it is clear that there is some intersection between country branding and FDI, there is no clear understanding of which aspects of country branding, and in what contexts, will most positively affect FDI (Papadopoulos et al., 2016).

2.3.4. Impact of Rules on FDI

The continued rise of tourism prompted an increased demand for resources which has seen many countries turn to foreign capital as a manner of compensating for already very limited resources (Ağazade & Karasakaloğlu, 2022). FDI stands out against other types of international capital as it is a more reliable source of cash flow due to its relative stability (Iamsiraroj & Ulubaşoğlu, 2015). And considering tourism's thorough reliance on capital, to fund infrastructures like new airports and hotels or transport-related infrastructure, it becomes clear why tourism relies so much on FDI (Nunkoo & Seetanah, 2018).

In general, FDI is believed to be strongly associated with a country or region's economic growth, especially due to the globalization of modern economies (Sabir et al., 2019). Most notably, FDI is a valuable provider of technological advancement, innovation, and managerial and organizational know-how, as well as capital renewal (OECD, 2023; Ağazade & Karasakaloğlu, 2022; Fauzel, 2020). However, it should not be generalized that an increase in FDI share in the economy is always an optimal policy, as shown by Sokhanvar (2019), who found a negative relationship between FDI and GDP growth in a sample of European countries. Also, the capacity of an economy to take full advantage of FDI is diminished without healthy financial markets and increased levels of international commerce (Iamsiraroj & Ulubaşoğlu, 2015). More specific to the tourism context, studies in the literature positively associate foreign direct investment with higher T&T Industry GDP and as an overall contributor to tourism development (Ağazade & Karasakaloğlu, 2022; Fauzel, 2020; Nunkoo & Seetanah, 2018; Sou & Vinnicombe, 2021). Others, like Sokhanvar (2019), posit the inverse relationship.

Within the tourism economy, FDI is regarded as an effective tool for making sure essential components of the industry (i.e., hotels, restaurants, transportation, tourism sites, and tours) are well supported (Nunkoo & Seetanah, 2018). Moreover, the attraction of multinationals positively contributes to the increase of human capital, as they are often linked with high levels of staff training (Fauzel, 2020).

Papers in the literature highlight the role of governance in attracting FDI (e.g., Sou & Vinnicombe, 2021; Sabir et al., 2019; Contractor et al., 2020; Falk, 2016; Azémar & Desbordes;

2010, Kalinova et al., 2010). Governments (in its broadest sense) play an important role in attracting foreign investment due to their ability to regulate it and make it more or less restrictive (Contractor et al., 2020). Contractor et al. (2020, p.11) argue that multinational enterprises (MNE) adopt a comprehensive perspective of the institutional and regulatory paradigm before investing in another country and present four important aspects an investor looks up before making an investment decision: ease of entry, contract enforcement, ease of trading, and ease of exit. Another valuable factor MNEs take into consideration before investing in a new country is the country's protection of Intellectual Property Rights (IPR), which is also positively linked to higher levels of FDI (Khoury & Peng, 2011; Sou & Vinnicombe, 2021).

Restrictions on FDI are barriers that create higher business expenses that drive away companies to other countries with more friendly regulations (OECD, 2023). This high cost of compliance is linked with lower FDI inflows (Gupta et al., 2021). Restrictions on FDI include excessive bureaucracy, complex regulation, and limitations to foreign equity, to name a few (Falk, 2016). Assaf & Josiassen (2012), cast visa requirement and time required to start a business as two of the most negatively impactful determinants on tourism performance. Park (2023), identifies a negative relationship between restriction on FDI and tourism growth. Despite the predominant tendency to lift restrictions on foreign investment, most notably in manufacturing sectors, the service sector continues to be the most affected by these restrictions (Mistura & Roulet, 2019). Naturally, various authors suggest reforms to liberate FDI restrictions (e.g., Contractor et al., 2020; Mistura & Roulet, 2019).

2.3.5. Extent of Staff Training

The success of the tourism sector is largely determined by its workforce (Knollenberg et al., 2022). This workforce holds a set of skills, denominated Human Capital (Goldin, 2016), that is a vital asset for economic growth and labour productivity (Stauvermann & Kumar, 2017). Businesses engaged in the tourism industry that lack the ability to attract and maintain skilled labour are at risk of becoming less competitive (Fuchs, 2022).

The Travel & Tourism industry faces many challenges regarding its labour force, such as high turnover rates and a lack of personnel (Matev & Assenova, 2012). Moreover, digitalisation has been reshaping the sector in recent years, creating new roles and business models, and posing additional challenges to workers in the industry (Dredge et al., 2019). The recent pandemic of COVID-19 has also severely impacted the hospitality and tourism panorama, complicating host-guest interactions in hotels, for example (K. Xiang et al., 2022). These challenges bolster the importance of human capital investments, in particular, training.

The Oxford Learner's Dictionary (2023) defines (staff) training as “the process of learning the skills that you need to do a job”. Any industry nowadays, including tourism, incorporates training in its human resources development program to develop the skills of its employees (Malik & Balyan, 2018, p.11). One reason might be economic, meaning that a more prepared employee should overcome the necessity of hiring a new one (Knollenberg et al., 2022). Additionally, training allows tourism businesses to address the industry's high turnover rates (Bird et al., 2010). Firstly, it raises the overall well-being of the employees, resulting in higher levels of labour productivity (i.e., human capital accumulation) (Knollenberg et al., 2022; Stauvermann & Kumar, 2017). Secondly, training provides workers with a range of different skills that prepare them to be able to perform in the most varied scenarios (Baum, 2015). For example, high staff turnover in the tourism sector in Thórsmörk, located in the volcanic hazard zone of Katla, in southern Iceland, reinforced the importance of regular staff training, since the staff must be always prepared to respond in the event of an eruption warning (Bird et al., 2010).

However, Goel & Budak's (2010) findings, for instance, point to an insignificant relationship between the quality of the workforce and economic growth. Also, Stauvermann & Kumar (2017) concluded that only in a situation of price elasticity of the tourism demand could the economy benefit from an increase in labour productivity, and Knollenberg et al. (2021) that the return on an investment in human capital is limited by the extent to which investments in other areas are made. Assaf & Josiassen (2012), on the other hand, posit that the level of staff training is a key determinant of tourism. Nonetheless, it is clear that training remains an indispensable tool for skill development in any organization in the tourism business (Malik & Balyan, 2018) and it is vital to improve the future readiness of the labour force in the sector (World Travel & Tourism Council [WTTC], 2021).

Although some of these antecedents have already been linked to T&T Industry GDP in previous studies, this study innovates in analysing the complex relationships between these five antecedents and how they combine to lead to T&T Industry GDP. The following subsection introduces complexity theory, which is useful for understanding how variables can impact the outcome differently, depending on the context in which they find themselves.

2.4. Complexity theory

Complexity theory revolves around the notion that events are complex and “relationships between variables can be non-linear, with abrupt switches occurring, so the same ‘cause’ can,

in specific circumstances, produce different effects” (Urry, 2005, p.5). In essence, the idea behind this theory is that an outcome is rarely explained by a single condition but rather by a complex combination of conditions, and those conditions affect the outcome differently, depending on how they are aligned (Ordanini et al., 2014; Wu et al., 2014).

Complexity theory relies on the tenets of equifinality, causal complexity, and causal asymmetry that are reflected in the fuzzy-set qualitative comparative analysis (Prentice, 2020). Equifinality explains how multiple combinations can lead to the same result (Mendel & Korjani, 2013). Causal complexity assumes that combinations – as opposed to singular conditions – create pathways to a specific result (Salonen et al., 2021), implying that the same singular condition may be present in configurations that lead both to a positive outcome and a negative outcome (Prentice, 2020). Causal asymmetry refers to how combinations that lead to a low outcome are not, necessarily, the opposite of combinations that lead to a high outcome (Rihoux & Ragin, 2009, p.9).

Many prior studies have, in the most varied fields, also applied complexity theory in their research (e.g., (Gligor & Bozkurt, 2020; Ordanini et al., 2014; Prentice, 2020; Woodside, 2015; Wu et al., 2014), including in hospitality and tourism (e.g., Corne & Peypoch, 2020; Hsiao et al., 2015; McDonald, 2009; H. G. Olya & Mehran, 2017; H. G. T. Olya et al., 2019; Zahra & Ryan, 2007). Olya & Mehran (2017), for instance, developed a configuration model of tourism expenditure for 105 countries, between 2009 and 2013, based on key tenets of complexity theory, and tested the model with fsQCA. Similarly, this study utilizes complexity theory and fsQCA to analyse combinations of antecedent factors that lead to T&T Industry GDP.

Methodology

3.1. Data

This study deploys five independent variables – travel and tourism capital investment (T&T capital investment), travel and tourism government expenditure (T&T government expenditure), country brand strategy, impact of rules on FDI and extent of staff training – and a dependent variable – T&T Industry GDP. The data was collected from the Travel & Tourism Development Index 2021 of the World Economic Forum (WEF, 2022) in reference to the years 2020 and 2021 (albeit some weights relate to 2019) for high-income economies in 2020. According to the World Bank’s 2020 classifications by income, high-income economies refer to countries where the gross national income (GNI) per capita was greater than \$ 12,535 (as cited in WEF, 2020) and includes the following countries: Australia, Austria, Bahrain, Belgium, Canada, Chile, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Hungary, Iceland, Ireland, Israel, Italy, Japan, Kuwait, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Poland, Portugal, Qatar, Republic of Korea, Saudi Arabia, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Trinidad and Tobago, United Arab Emirates, United Kingdom, United States of America, and Uruguay (WEF, 2020). Table 3.1 provides a deeper insight into each variable, according to WEF (2022).

Table 3.1*Variable Description*

Variable	Description
T&T Industry GDP (US\$ million)	“Travel and Tourism industry direct contribution to GDP, US\$ million”
T&T Capital Investment (% Total Capital Investment)	“Travel and Tourism capital investment as a percentage of total capital investment”
T&T Government Expenditure (% Government Budget)	“Travel and Tourism government expenditure as a percentage of total government budget”
Country Brand Strategy (0-100)	“This indicator evaluates the accuracy of a National Tourism Organization’s (NTO) Country Brand Strategy”
Impact of Rules on FDI (1-7)	“Response to the survey question: “In your country, how restrictive are rules and regulations on foreign direct investment (FDI)?” [1= Extremely restrictive; 7 = Not restrictive at all]”
Extent of Staff Training (1-7)	“Response to the survey question: “In your country, to what extent do companies invest in training and employee development?” [1 = Not at all: 7 = To a great extent]”

Note. This table provides a description of each variable, retrieved from: <https://www.weforum.org/reports/travel-and-tourism-development-index-2021/explore-the-data>

3.2. Analytical Approach: Qualitative Comparative Analysis

The analysis in this study uses a configurational approach, fsQCA, a type of approach that has seen a rise in popularity in recent years (Pappas & Woodside, 2021). Fuzzy set qualitative comparative analysis (fsQCA), first introduced by social scientist Charles Ragin, is a technique that combines fuzzy-logic principles with qualitative comparative analysis (QCA) (Mendel & Korjani, 2013). QCA is a technique of asymmetric data analysis that allows the researcher to take advantage of the strong points of both qualitative and quantitative-based methods, providing the researcher with the ability to explore large numbers of cases without foregoing important contextual data (Pappas & Woodside, 2021). Compared to other QCA variations

(e.g., mvQCA and csQCA), fsQCA is not limited to binary variables (Pappas & Woodside, 2021). The use of fuzzy sets gives fsQCA the “ability to (...) capture variation in set membership in degree” (Vis & Dul, 2018, p.876). Fuzzy sets were described by Ragin (2000, p. 316) as a “half-verbal-conceptual and half-mathematical-analytical” language that allowed social scientists to intertwine data and theory – a so-called “bridge” between qualitative and quantitative methods.

FsQCA transports the key tenets of complexity theory to the results and tests for combinatorial theories that can explain the intended outcome (Wu et al., 2014). As opposed to other methods such as regression analysis which aim to identify the overall impact of independent variables on dependent variables, fsQCA searches to find conditions or combinations of conditions (configurations) that lead to a given outcome (Vis & Dul, 2018). The idea is that examining combinations can facilitate the identification of causal patterns that may not be identified if the variables were examined on their own (Gligor & Bozkurt, 2020).

To carry out this study, five factors (i.e., the independent variables) were chosen as conditions that could be combined in different ways to achieve the same outcome: high (and low) T&T industry GDP (i.e., the dependent variable). Given that causal asymmetry is a characteristic of fsQCA, these factors can be combined to explain high travel and tourism industry gross domestic product as well as low travel and tourism industry gross domestic product – although the combinations that lead to a high outcome may not be the exact opposite of those that lead to a low outcome.

3.2.1. Calibration

Any researcher attempting to perform rigorous research should be cautious about using reliable and valid data. In the case of fsQCA, the researcher must consider another step: calibration (Vis & Dul, 2018). In this step, variables from the original data are converted into fuzzy sets (Pappas & Woodside, 2021).

Fuzzy sets are organized as groups, where each variable belonging to the group is given a score from 0 to 1 which indicates how much it belongs to the group (0 = full exclusion, 1 = full inclusion) (Pappas & Woodside, 2021). Within this range, “three qualitative breakpoints” are defined: full membership (1), full non-membership (0), and the cross-over point (0.5) (Ragin, 2000, p. 270). This shows how fsQCA is capable of identifying variation both in kind (i.e., in or out) as well as in degree (i.e., how much) (Vis & Dul, 2018).

The calibration of data into fuzzy sets should follow theoretical guidelines and take into account the context of the study (Ragin et al., 2017). Hence, the choice of thresholds for

membership anchors should not be mechanical (Pappas & Woodside, 2021). The definition of these anchors is crucial as the results of the fsQCA analysis will differ based on the anchors chosen (Dul, 2016).

Following the recommendations of Ragin et al. (2017), the qualitative anchors for this study's analysis were set at 0.95, 0.5 and 0.05 for full membership, cross-over point, and full non-membership, respectively.

CHAPTER 4

Results

4.1. Analysis of Necessary Conditions

Conditions that are always present for the outcome are referred to as necessary conditions (Ragin, 2000, p.211). Nonetheless, these conditions, by themselves, are not necessarily enough to lead to the outcome (Gligor & Bozkurt, 2020). In fsQCA, conditions with a consistency value above 0.9 are considered necessary conditions, while conditions with a consistency value above 0.8 are considered almost always necessary (Ragin, 2000). According to fsQCA recommendation, the analysis of necessary conditions should precede the analysis of the truth table, which identifies sufficient configurations (Dul, 2016, p.1516). Therefore, this study commenced its analysis with the analysis of necessary conditions.

The results of the necessity analysis for this specific study, meaning an outcome of a high travel and tourism industry gross domestic product (ttigdp) and the negation of high travel and tourism industry gross domestic product (\sim ttigdp), show that none of the five conditions (nor their negation) passed the consistency threshold of 0.9 which means none of the conditions can be considered necessary.

4.2. Analysis of Sufficient Conditions for T&T Industry GDP

The analysis of necessary conditions is followed by the analysis of sufficient conditions and combinations of conditions. It is considered sufficient, a causal condition or combination of conditions that always leads to a specific outcome even though the outcome may derive from other conditions (Gligor & Bozkurt, 2020). Sufficient conditions are subsets of the outcome (Salonen et al., 2021). The focal point of analysing necessary conditions is, precisely, the possible subset relationships between conditions and the outcome of interest (Ragin, 2000, p.278).

This analysis is made based on the elaboration of the truth table – also referred to as the Boolean chart (Salonen et al., 2021). The truth table presents all logical combinations of causal conditions (configurations) and each of their individual empirical outcomes (Vis, 2012). Each of these combinations of causal conditions is represented in a row (Ragin, 2017). Based on the five conditions, it is safe to assume that this table contained $2^5=32$ configurations or, from another perspective, thirty-two rows (Pappas & Woodside, 2021). The number of rows, however, was reduced in the following step, in accordance with a frequency threshold and a

consistency cutoff (Fiss, 2011). The frequency threshold was set at 5, meaning that only configurations that had at least 5 empirical cases would be considered (Ragin, 2008). Consistency, on the other hand, refers to the number of empirical cases that lead to the outcome in a configuration – the number of cases in each configuration that lead to the outcome divided by the number of cases in each configuration that do not lead to the outcome (Fiss, 2011). According to Ragin (2008, p. 136), the minimum cutoff value should not be lower than 0.75. In this case, the consistency cutoff was set at 0.8, meaning only configurations with consistency above 0.8 were listed. The literature also advises the researcher to add Proportional Reduction in Inconsistency (PRI) consistency as an additional measure in the truth table – PRI measures the consistency of subset relations (Pappas & Woodside, 2021). This goes hand in hand with what Schneider & Wagemann (2012, p. 278) say about how researchers should be aware of simultaneous relations before determining that a row is sufficient to lead to the outcome. This study restrained configurations scoring lower than 0.7 from entering the outcome since lower PRI consistency scores indicate significant inconsistency (Greckhamer et al., 2018).

Afterwards, the truth table is reduced to simplified configurations using the truth table algorithm (i.e., Quine-McCluskey algorithm) which is based on Boolean algebra (Fiss, 2011) (Mendel & Korjani, 2012). The truth table algorithm relies on counterfactual analysis (Fiss, 2011). Counterfactual analysis assesses the plausibility of logical remainders (i.e., configurations with no empirical observations) (Ragin & Sonnett, 2005, p.184). This is important because it helps solve the problem of the lack of empirical instances derived from huge numbers of rows in the truth table (i.e., problem of limited diversity) (Fiss, 2011).

The truth table algorithm generates three solutions: complex, parsimonious, and intermediate (Mendel & Korjani, 2013). The complex solution includes every possible combination of conditions – this number of configurations can grow quite large, even when there are few conditions (Pappas & Woodside, 2021). In this solution, no counterfactual cases are included (Ragin & Sonnett, 2005, p.14). Still, given the potentially very large number of configurations, the complex solution can then be simplified into the parsimonious solution, which, unlike the complex solution, includes *all* counterfactuals (Fiss, 2011). Finally, the intermediate solution is found using counterfactual analysis of the complex and parsimonious solutions (Liu et al., 2017). The intermediate solution includes only easy counterfactuals, as opposed to the parsimonious solution which includes both easy and difficult counterfactuals (Fiss, 2011). Significantly, these solutions allow the researcher to distinguish between core and peripheral conditions (Greckhamer et al., 2018). Core conditions will be present in both the

parsimonious and intermediate solutions while peripheral conditions are only present in the intermediate solution (Liu et al., 2017).

Consistency and coverage were used as metrics to assess the goodness of fit of the solution. Consistency measures how consistently an outcome is displayed in cases that share a particular configuration, while coverage determines the empirical significance of a configuration that leads to a specific outcome (Ragin, 2008, p.44). Unique coverage, on the other hand, describes “how much of the outcome is covered only by a specific path” (Schneider & Wagemann, 2012, p.133).

It can be inferred, by looking at Table 4.1, that all configurations can be sufficient for high T&T Industry GDP considering that all configurations along with the overall solution scored higher or equal to the threshold for consistency of 0.8 - as previously mentioned. Regarding coverage, each of the configurations had a unique coverage greater than 0, which means that none of the configurations are redundant (Schneider & Wagemann, 2012, p.133). According to the results, the three solutions account for a significant amount of the outcome, with an overall solution coverage of 0.72.

Table 4.1*Configurations for high and low T&T Industry GDP*

Configuration	High T&T Industry GDP, USD (ttigdp)			Low T&T Industry GDP, USD (~ttigdp)			
	C1	C2	C3	C4	C5	C6	C7
T&T Capital Investment		⊗	⊗	⊗	●		
T&T Government Expenditure			○			○	○
Country Brand Strategy	⊗	●	○			○	⊗
Impact of Rules on FDI	⊗	⊗	●	○	⊗		●
Extent of Staff Training	●	⊗	○		⊗	⊗	
Consistency	0,85	0,80	0,80	0,85	0,83	0,85	0,88
Raw Coverage	0,43	0,43	0,29	0,50	0,36	0,33	0,35
Unique Coverage	0,03	0,03	0,03	0,17	0,05	0,03	0,05
Overall solution consistency		0,80				0,84	
Overall solution coverage		0,72				0,83	

Note. ● - indicate the presence of a condition (core); ⊗ - indicate the negation of a condition (core); ○ - indicate the presence of a condition (peripheral); ⊗ - indicate the negation of a condition (peripheral)

The first configuration shows that a combination of high level of extent of staff training (core) with low levels of impact of rules on FDI (core) and low levels of country brand strategy led to a high T&T industry GDP. The second reveals that high country brand strategy (core) with low T&T capital investment (core), low impact of rules on FDI (core) and low extent of staff training, regardless of T&T government expenditure, also led to high T&T industry GDP.

The last presented configuration demonstrated that high capital investment along with low T&T government expenditure, low country brand strategy, low impact of rules on FDI (core), and low extent of staff training also led to high T&T industry GDP.

On the other end of the spectrum, low T&T industry GDP can be explained by four different paths, supporting the idea of causal asymmetry (i.e., configurations may not be the logical opposite of configurations that lead to high outcome) (Rihoux & Ragin, 2009, p.9). The frequency, consistency and PRI threshold were set at the same values as in the analysis of the high T&T industry GDP. The overall solution coverage was 83%, which means a great proportion of low T&T industry GDP was explained by these four configurations. The fourth configuration presented in the table (the first configuration explaining low T&T industry GDP) showed that low T&T capital investment combined with high impact of rules on FDI led to low T&T industry GDP. The fifth solution stated that high T&T capital investment (core), low impact of rules on FDI, and low extent of staff training (core), regardless of T&T expenditure and country brand strategy, also led to low T&T industry GDP. Configuration 6 demonstrated that regardless of T&T capital investment and impact of rules on FDI, high T&T government expenditure, high country brand strategy, and low extent of staff training led to low T&T industry GDP. The last configuration presented revealed that high T&T government expenditure, high impact of rules on FDI (core) and low country brand strategy also led to low T&T industry GDP.

CHAPTER 5

Discussion

The first configuration shows T&T Industry GDP depending on the extent of staff training when the impact of rules on FDI and country brand strategy are low. This configuration suggests that countries with a weaker country brand and more restrictive rules of FDI, benefit from investing in the personnel. As previously covered in the literature review, investment in the training and the development of the staff is strongly associated with increases in productivity and reduction of staff turnover, which might explain its efficacy in generating high levels of T&T GDP, despite the low levels of country brand and impact of rules on FDI (Bird et al., 2010; Knollenberg et al., 2022; Stauvermann & Kumar, 2017). This configuration is partially concordant with Assaf & Josiassen's (2012) findings, which posit that the level of staff training is a key determinant of tourism performance. However, their claim that restrictions on FDI negatively impact tourism performance is not verified in this configuration. This configuration also contradicts other findings in the literature, similarly supportive of the negative causal impact of restrictive regulation on FDI (e.g., (Mistura & Roulet, 2019; Park, 2023). Destination management not being an antecedent of tourism performance was already demonstrated in Hanafiah & Zulkifly (2019) study. This configuration identifies the context in which a lower country brand can yield stronger tourism performance results. An interpretation of this configuration may be that this configuration is displaying countries that have a weak foreign investment attraction policy but overcome this by having a strong educational policy or culture that incentivises companies and employees to invest in their skill development. For this reason, this configuration will be called TRAINERS.

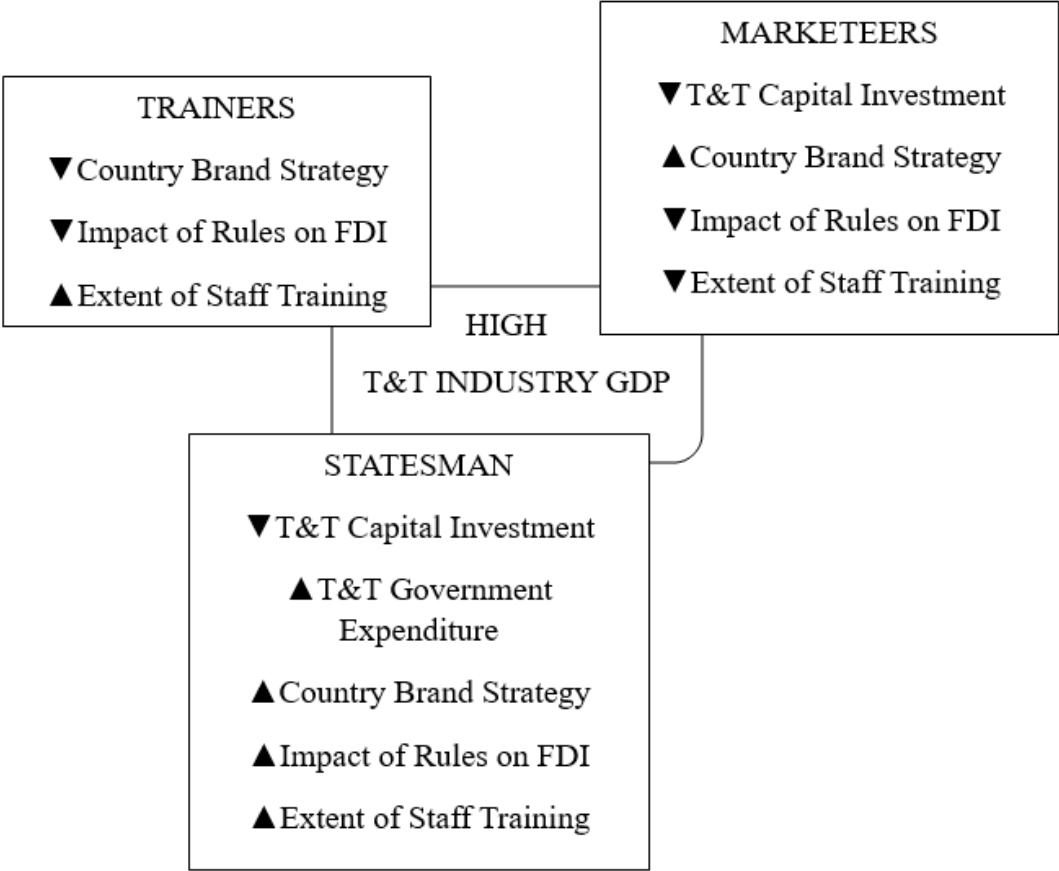
The second configuration reveals that high T&T Industry GDP can also derive from a combination of a good country brand strategy, low T&T capital investment, low extent of staff training and more restrictive rules on FDI, implying that countries that have lower metrics like this are taking advantage of having a strong country brand strategy to boost their tourism revenue. It is interesting to intersect this configuration with Fetscherin's (2010) study, which linked country brand with high levels of FDI, immigration of skilled workers and more exportation. This might justify the resentment in these countries to make reformations to liberalize rules on FDI, who, instead, rely on a brand strategy to attract FDI, and also, the low levels of staff training, since with the arrival of these workers companies can allocate costs in other areas, which might also be contributing to the high levels of T&T industry GDP. This configuration also highlights the complexity of country brand addressed in Papadopoulos et

al.'s (2016) paper. Comparing this configuration with the first configuration, it is possible to observe that, in different contexts, both the absence and the presence of a strong brand strategy can lead to the same result. In fact, and taking into account all configurations, this study could be very useful for anyone who wants to understand in which contexts having a strong country brand strategy can lead to better tourism performance. Given the strong stance of the countries in this configuration in following the strategy of investing in their brand, this configuration is named MARKETEERS.

Configuration 3 comprises all five conditions, with all but T&T capital investment being present in configuration for the outcome of High T&T Industry GDP to occur. In other words, countries with high T&T government expenditure, high country brand strategy, high impact of rules on FDI, high extent of staff training levels and low T&T capital investment are countries with high T&T industry GDP. It is interesting to observe that T&T capital investment is either low or absent in all configurations that lead to high T&T industry GDP, contradicting studies such as those of Tovmasyan (2021), Banerjee et al. (2015), and Assaf & Josiassen (2012). One reason might be that because the data in analysis regards only high-income economies, where the need for infrastructure is lower than in other economies, capital investments in tourism may not be considered as important for tourism development as they would in another scenario (Nguyen et al., 2020). On the other hand, the contradictory findings in configurations 1 and 2 regarding the impact of rules on FDI, are in this configuration concordant with the literature. This configuration builds on the studies of Gupta et al. (2021), Assaf & Josiassen (2012), Contractor et al. (2020), Park (2023), Fauzel (2020), and Mistura & Roulet (2019), and provides a context in which less restrictive rules can be beneficial to improve tourism performance. Furthermore, the findings in this configuration regarding government expenditure are also in line with other studies in the literature (e.g., (Assaf & Josiassen, 2012; Banerjee et al., 2015; Deskins & SeEVERS, 2011; Nguyen et al., 2020)). Considering that a government's spending on tourism may also account for capital investments (Mihalič, 2014), as well as marketing efforts to promote the country's brand (Gupta et al., 2021), it is plausible to hypothesise that countries in this configuration may have already reached sufficient maturity when it comes to tourism-related infrastructure and prefer to allocate their public resources elsewhere, for instance in the development of a strong country brand strategy, in security, and promotion of tourism corporate training. Therefore, the name of this configuration is STATESMAN.

Figure 5.1

High T&T Industry GDP configurations



The configurations that lead to low T&T industry GDP also need to be discussed since they add equally relevant content to the literature on tourism performance. Building on Goel & Budak’s (2010) findings that investments in infrastructure have perverse effects on economic growth – which according to either the growth-led hypothesis or bidirectional hypothesis also has effects on tourism growth – configuration 5 shows that higher capital investment in tourism may, in fact, lead to lower T&T industry GDP if legislation on FDI is stricter and the levels of staff training remain low. The fact is that capital investments in tourism always come at the expense of reallocating resources from elsewhere (for example, from staff training), which could arguably be more important for tourism development, even if allocated in other sectors (Sokhanvar & Jenkins, 2022). Likewise, low levels of staff training, despite nonconsensual findings in the literature, are always a concerning sign because, at minimum, training is an indispensable tool for tourism operators to retain talent (Bird et al., 2010; Knollenberg et al., 2022). Contrarily, configuration 4, despite leading to the same result – low T&T Industry GDP

– depicts a configuration made up of almost mirror opposite causal conditions. In this case, low levels of capital investment and less strict rules on FDI leading to low T&T industry GDP. Although contradicting the majority of studies in the literature on FDI restrictions (e.g., Gupta et al., 2021; Park, 2023), and admitting fewer restrictions are indeed generating more inflows of FDI, this configuration is not totally revolutionary as Sokhanvar (2019) had already found a negative relationship between FDI and tourism growth.

The tenet of causal complexity, that is, the same condition can be part of two or more configurations that lead to opposite outcomes (Prentice, 2020), can be observed in its most natural form when looking at configuration 3, and at configurations 6 and 7, all depicting high T&T government expenditure. At the same time, it shows the richness of the results that can be achieved when performing a configurational analysis. While configuration 3 denies the results of Antolini (2020), configurations 6 and 7 prove that high government spending can, in fact, negatively impact tourism performance if combined with high country brand strategy and low extent of staff training, or low country brand strategy and high impact of rules on FDI, respectively. The potential negative side effects of public investment, already addressed in the literature, such as the crowding-out effect (Abel, 2017), help to explain these results and it would be interesting for future studies to delve deeper into these effects using this study as a starting point, given that it presented situations where public investment led to high T&T Industry GDP and where it led to low T&T Industry GDP.

Conclusion

This dissertation aimed to contribute to the literature on the topic of tourism performance. Despite the numerous papers on the topic, few studies actually attempt to provide a general overview of the drivers of tourism performance. Even fewer are those that studied tourism performance through a configurational approach. Understanding what, and in which circumstances, drives tourism performance is of utmost interest to those who wish to improve it. Rooted in complexity theory, this study took on five antecedents of tourism performance and, through a configurational analysis, studied how these conditions best configured themselves to result in higher (and lower) T&T industry GDP.

The major contribution of this study to the literature was revealing seven unique configurations that help explain T&T industry GDP in high-income economies. Each of these configurations displays unique sets of conditions, analysed for the first time in this paper. This study identifies that no single necessary condition is sufficient to explain either high or low T&T industry GDP, proving the principle that tourism is a complex phenomenon. For that reason, this study confirms the usefulness of approaches like fuzzy-set qualitative comparative analysis to study the tourism world. With this in mind, this study makes use of these configurations to add context to other studies in the literature and enrich the knowledge of the field of tourism.

Certainly, all studies are subject to limitations. Firstly, the use of T&T Industry GDP only accounts for the direct impacts of these variables. In other words, there could be indirect impacts of these variables on the GDP of other industries that are not accounted for in the analysis. Secondly, the conclusions reached in this study are only applicable to the data analysed, specifically, to high-income countries in 2020 and have a low predictive value. The results do not present the best path for countries to take to improve their tourism performance, but rather show how in 2020 these 5 variables impacted the T&T industry GDP in high-income economies. Lastly, and as has already been discussed with complexity theory, the five variables chosen are not representative of all of the variables that go into determining tourism performance. The factors are plentiful, and it would be extremely difficult to conduct a study including every single one of them. These limitations lend themselves to opportunities for further research. Future research could develop a more dynamic analysis, extending the period of observation. This study could significantly improve the explanatory power of these configurations if it is shown that they are part of a larger pattern and not a one-time phenomenon.

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