Athens Journal of Tourism

Front Pages

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Published by the Athens Institute for Education and Research (ATINER)

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The **Athens Journal of Tourism (AJT)** is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas of tourism and related disciplines such as culture, leisure, recreation, geography, urban planning, heritage, sports, historical cities, landscape, architecture etc. The AJT considers theoretical and empirical papers as well as case studies and policy papers. The journal's aim is to be useful to both academics of tourism research and the practitioners of the tourism industry. Many of the papers published in this journal have been presented at the various conferences sponsored by the Tourism, Leisure & Recreation Unit of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's Publication Ethical Policy and Statement. A journal publication might take from a minimum of six months up to one year to appear. All papers are subject to ATINER's Publication Ethical Policy and Statement.

Athens Journal of Tourism
Editorial and Reviewers' Board

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The current issue is the third of the tenth volume of the *Athens Journal of Tourism*, published by the Tourism, Leisure & Recreation Unit of ATINER.

Gregory T. Papanikos
President
ATINER

Athens Institute for Education and Research
A World Association of Academics and Researchers

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25-28 March 2024, Athens, Greece

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Important Dates

- Abstract Submission: **31 August 2023**
- Submission of Paper: **26 February 2024**

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Athens Institute for Education and Research
A World Association of Academics and Researchers

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10-13 June 2024, Athens, Greece

The [Tourism, Leisure & Recreation Unit](#) of ATINER organizes its **20th Annual International Conference on Tourism, 10-13 June 2024, Athens, Greece** sponsored by the [Athens Journal of Tourism](#). The aim of the conference is to bring together academics and researchers from all areas of Tourism. You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2024/FORM-TOU.doc).

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- Abstract Submission: **7 November 2023**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **13 May 2024**

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Trade Off and Pecking Order Capital Structure Theories in Tourism Sector in the Portuguese Central Region

By Sílvia M. Dinis Mendes[*], Paula Machado[±], Carla David Reis[°] & Vera L. Mendes Cunha[•]

The present study aims to identify the predominant theory in financing decisions, and which are the determinants of the capital structure of small and medium enterprises (SMEs) of the tourism sector in the Central Region of Portugal. The statistical method applied was the econometric model of linear regression, using a sample of 606 SMEs in the tourism sector in the Central Region, for a period of analysis between 2011 and 2018. The focus on the tourism sector is due to its importance in the Portuguese economy and to the existence of few studies, particularly in the Central Region. In the analysis of the determinants of capital structure decisions we used as explanatory variables profitability, asset tangibility, size, total liquidity, other non-debt tax shields, risk and age of SMEs. The results obtained suggest that the capital structure decisions follow more closely the assumptions of the Pecking Order theory but may also follow the assumptions of the Trade-Off theory. Therefore, this paper enhances that Trade-Off and Pecking Order Theories are not mutually exclusive in explaining the capital structure decisions of SMEs. We may conclude that SMEs firstly finance themselves with retained earnings, then use external financing and finally resort to capital increases.

Keywords: *determinants of capital structure, SMEs, tourism sector, pecking order theory, trade-off theory*

Introduction

Small and Medium Enterprises (SMEs) have an extremely important role for the Portuguese economy as generators of opportunities and jobs, promoting the development of the region where they are located. According to data from INE (National Statistics Institute), regarding Portuguese companies in 2019, the Portuguese SMEs represent about 99.90% of the business sector. Therefore, the fact that this type of companies represents the structural basis of the Portuguese economic environment leads us to highlight the importance and relevance of studies whose sample is composed of SMEs.

The sample under study is composed of SMEs within the tourism sector of the Central Region of Portugal, companies within the manufacturing industries with CAE 55 - Accommodation, according to the Portuguese Classification of Economic Activities (CAE), CAE-Rev.3.

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Marujo (2008) mentions that tourism is one of the most important phenomena, from the political, economic, environmental, and socio-cultural point of view. It is no longer seen merely as a synonym for leisure and has now assumed a role as a social agent in the societies in which it has been developed.

The choice of the tourism sector is due to its importance in the Portuguese economy (Pacheco and Tavares 2017). Several authors have been studying this sector (for example: Abrantes 2013, Pacheco and Tavares 2017, Peixoto 2017, Herdeiro 2019). As there are not many studies focused on the Central Region, we focused our analysis on this region.

According to the CCDRC[1], the Central Region of Portugal, which incorporates 100 municipalities, is a territorial unit for statistical purposes (NUTS II[2]) bounded to the north by the North Region, to the east by Spain, to the south by the Alentejo and the Lisbon Regions, and to the west by the Atlantic Ocean.

SMEs face more limited internal financial resources, which leads them to seek external financing. However, the constraints associated with this form of financing, namely the use of bank credit, are very relevant for this type of company. These constraints range from difficulties in accessing bank loans at low interest rates, the lack of government support to create conditions that facilitate or ease access to such loans, the disclosure of accounting information, among others (Correa et al. 2013, Pandula 2015, Calei 2019).

The studies of Modigliani and Miller (1958, 1963) generated an extensive discussion on the capital structure of companies, thus supporting the development of new theories, namely the Trade-Off theory and the Pecking Order theory. These theories seek to explain the decisions made by corporate managers/owners when choosing their sources of funding. According to Myers (1984) the Trade-Off and Pecking Order theories compete with each other in explaining the capital structure of companies.

Some studies conclude that the Trade-Off and Pecking Order theories have great applicability in capital structure decisions of SMEs in general. The fundamental objective of this research is to analyse the capital structure decisions of SMEs in the tourism sector in the Centre Region of Portugal, according to the principles of the Trade-Off and Pecking Order theories.

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[1]Comissão de Coordenação e Desenvolvimento Regional do Centro (Regional Co-ordination and Development Commission of the Centre)

[2]Nomenclatura das Unidades Territoriais para Fins Estatísticos (Nomenclature of Territorial Units for Statistics Purposes): hierarchical system of territorial division into regions. This nomenclature was created by Eurostat at the beginning of the seventies, in order to harmonise statistics data from various countries in terms of collection, compilation and dissemination of regional statistics. The nomenclature is subdivided into 3 levels (NUTS I, NUTS II, NUTS III), defined according to population, administrative and geographical criteria.

Literature Review

Theories of the Financial Structure of SMEs

Trade-Off Theory

Trade-Off theory holds that firms attempt to achieve an optimal capital structure that maximises firm value by balancing the tax benefits and bankruptcy costs associated with debt (Myers 1984).

Kraus and Lintzenberger (1973) point out that insolvency costs can be quite significant for companies, as they contribute to a reduction in the value of the company, and an increase in the debt level of companies leads to an increase in insolvency costs. The incorporation of these costs in the literature, in order to explain the reasons why companies were not fully financed with debt, gave rise to the Trade-Off Theory, developed by some authors, such as Myers (1977), DeAngelo and Masulis (1980) and Myers (1984), among others.

Several authors use the designation Trade-Off theory to describe a set of theories concerning the existence of an optimal capital structure that maximises the value of the company, based on the trade-off between the costs and benefits of debt.

Serrasqueiro and Caetano (2014) states that the trade-off model refers to the choice by firms of an optimal level of debt to balance the tax benefits with the bankruptcy costs associated with debt. This theory recognises that there are tax benefits and that debt can bring benefits to a firm as long as these benefits outweigh the costs associated with debt that may arise. DeAngelo and Masulis (1980) considered that all companies could have a given debt structure based on the trade-off between insolvency costs and the tax advantage from the deductibility of interest on debt, regardless the size of the bankruptcy costs.

Novo and Vieira (2010) point out the benefits to the firm of the tax advantage associated with debt, but also the costs associated with corporate bankruptcy, with the probability of bankruptcy increasing with the firm's debt ratio. Novo (2009) states that "the trade-off theory supports the idea that, if on the one hand, debts bring advantages to the company through tax benefits, on the other hand, it also brings costs related to the company's bankruptcy (Financial bankruptcy occurs when a company is unable to meet its commitments, or when it does so after the established deadline). The probability of incurring bankruptcy is higher the higher the degree of debts of the company."[3]

Therefore, this theory is developed on two bases. On the one hand, it identifies debt as a factor that generates benefits for the company in terms of tax savings, if the company is able to generate results that allow it to benefit from these tax advantages. On the other hand, it recognises that, despite the benefits of debt in terms of tax savings, the risk of financial insolvency increases beyond a certain level of debt and, consequently, the cost of insolvency has a negative impact on the value of the company.

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[3]Novo 2009, p. 30, lines 9-12 and lines 29-30.

According to Novo (2009) bankruptcy costs can be divided into direct and indirect costs. So direct costs, such as accounting costs, legal costs and the payment of fees, the indirect costs, such as the opportunity costs resulting from the company's inability to maintain its relationship with suppliers and/or customers (Haugen and Senbet 1978).

The Myers (1984) model advocates that the more debt a company has, the greater its tax advantages and financial difficulties, so it needs to find a point of debt that maximises its value. The level of debt is limited by the costs of possible financial difficulty, the market value of a company grows as a function of the tax benefits generated by debt until the point at which doubts begin to be raised about the financial health of the company and the costs of bankruptcy begin to be high.

According to Matias et al. (2015), cited by Calei (2019), the objective of the Trade-Off theory is to search for an optimal ratio of debt, where the tax benefits equal the bankruptcy costs. According to Pereira et al. (2015), if the company's assets and investment plans remain constant, the limit for the use of borrowed capital occurs when the costs generated by debts, which cause financial difficulties, become greater than the benefits generated.

Pecking Order Theory

The expression Pecking Order is, in Myers' words, a recent concept. For the advocates of the Pecking Order theory, there is a hierarchy of financing sources chosen by a company. Financing should firstly come from internally generated resources (self-financing) and if these are insufficient, the company should resort to debt. Only in the last instance should it resort to issuing new shares to obtain capital. This theory is based on the assumption that there is information asymmetry between managers and investors.

The Pecking Order theory is characterised by the correct choice of financing sources, used by the company in order to minimise the costs caused by information asymmetry[4]. Myers (1984) and Myers and Majluf (1984) contributed to the development of this theory by introducing the effect of asymmetric information between managers and investors in the analysis of corporate financing decisions.

In the presence of information asymmetry, companies follow a hierarchy in the selection of financing sources, preferring to finance themselves initially with internally generated funds (retained earnings), retaining surplus funds. These are considered to be easily accessible by the company and not subject to external interferences, presenting a lower cost when compared to funds obtained externally. However, when the companies have insufficient or no self-financing, the managers prefer external financing (debt), leaving the issue of shares to external investors as a last option (Myers and Majluf 1984). Myers and Maljuf (1984) suggest that if the investor does not have sufficient information about the value of the company, especially when compared to the managers, the company runs the risk of being undervalued by the market.

According to Novo (2009, p. 41) "the privileged sources of financing are self-financing and bank credit." The difficulty in accessing the capital market,

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[4]Information asymmetry - The information held by managers is superior to the information known by external investors, in relation to the situation of an entity.

exacerbated for SMEs, makes the issue of new shares impracticable. Companies only issue equity when they see the possibility of resorting to debt exhausted. Nevertheless, the higher the profitability of companies and, consequently, the greater their capacity to finance themselves with internal funds, the lower their level of debt will be.

As Harris and Raviv (1991) point out, one way to minimize the fall in share prices would be for the company to finance the new investment through less risky sources, such as its own resources or issuing debt securities, and only, after the investment is completed, to settle this debt through a share issue.

For Chirinko and Singha (2000) and Frank and Goyal (2003), the Pecking Order theory is subdivided into two forms of financing, strong financing and weak financing. Strong financing occurs when a firm chooses only two sources of financing, namely the use of internal resources and the issuance of debt, and does not resort to the issuance of shares for its financing. Weak financing occurs when, for some reason, there is no information asymmetry at the moment, and the company admits a certain level of share issuance for its financing.

However, Campos and Nakamura (2015) state that in the Pecking Order theory there is no mention to an optimal debt ratio, but the debt would be a consequence between the conditions of information asymmetry with the market and the emergence of good projects. In this context, managers should be vigilant to the costs of funding sources without worrying about reaching a certain target capital structure.

Investigation Hypotheses

Profitability

According to the literature review, the main theories that support the determinants of corporate capital structure are Trade-Off and Pecking Order, because, on the one hand, they are the two most significant theories in the field of capital structure field and, on the other hand, SMEs are mostly privately held companies. Therefore, the hypotheses will be formulated according to the principles underlying the Trade-Off and Pecking Order theories, in order to homogenise the exposition of the hypotheses to be tested. The determinants of capital structure had as references the studies of Bastos and Nakamura (2009), Pereira et al. (2015), Peixoto (2017), Pacheco and Tavares (2017) among others. According to the Trade-Off Theory, the most profitable companies should use more debt, as they benefit from the tax deduction of interest (Modigliani and Miller 1963), thus suggesting a positive relationship between profitability and debt. Companies with greater capacity to create and maintain results have greater negotiation power, obtaining the most attractive interest rates when the company resorts to external financing (Ross 1977, Harris and Raviv 1991). The various studies based on this theory identify a positive relationship between profitability and the level of corporate debt (for example, Sogorb-Mira 2005, Ramalho and Silva 2006). Firms with higher profitability tend to have a higher level of debt,

since bankruptcy costs decrease as profitability increases. In addition, the more profitable a firm is, the more it will benefit from the tax advantage obtained by deducting interest on loans. On the other hand, the Pecking Order theory assumes that when companies need to finance their investments, they have a hierarchical preference in the choice of financing sources. Cumulative earnings are first used, then third-party resources via debt and, finally, issuing new shares. Thus, the more profitable companies are, the more they are able to finance themselves and the less they need to increase their debt (Myers 1984, Myers and Majluf 1984). According to Bastos and Nakamura (2009), Serrasqueiro and Nunes (2011, 2014) and Novo and Vieira (2010), companies prefer to use internal resources first and only afterwards they seek for external resources, corroborating the Pecking Order theory. Therefore, it is expected that the more profitable SMEs are more likely to retain profits and, consequently, use them to finance themselves. Recently, Sardo and Serrasqueiro (2022) the positive impact of the probability of financial distress on SME working capital suggests that SMEs exposed to a higher probability of bankruptcy invest more in working capital to avoid the risk of default and financing imbalance.

Considering the various points of view, we can formulate the following hypotheses:

H1.1: There is a positive relationship between profitability and debt in SMEs.
H1.2: There is a negative relationship between profitability and debt in SMEs.

Tangibility of Assets

The asset structure represents the set of tangible and intangible assets held by a company. Tangible company assets such as land, machinery and buildings can be used as a guarantee in the event of the company's bankruptcy, protecting the interests of creditors.

The Trade-Off theory is based on a positive relationship between tangibility of assets and debt, the higher the value of tangible assets, the higher the financing/guarantee in case of insolvency (Calei 2019). The existence of collateral reduces agency costs and information asymmetry problems as mentioned by Jensen and Meckling (1976) and Ross et al. (2011). Serrasqueiro and Nunes (2014), established a positive relationship between asset tangibility and debt, since a company with a high level of collateral may find it easier to increase the recourse to debt as creditors offer more favourable credit conditions.

In line with the Trade-Off theory, also in the Pecking Order theory one expects to find a positive relationship between the amount of tangible fixed assets of the firm and its level of debt. The most common empirical results regarding the relationship between asset tangibility and debt point to a positive relationship (Serrasqueiro and Nunes 2014, Peixoto 2017, Calei 2019).

Thus, we predict the following hypothesis:

H2: There is a positive relationship between tangibility of assets and debt in SMEs.

Firm Size

The size of the company is a determining factor in the capital structure. The larger the size of a company, the greater its capacity to finance itself, so larger companies have easier access to external financing and have fewer asymmetry problems and a lower probability of default (Herdeiro 2019). Matias and Serrasqueiro (2017) mention that for McConnell and Pettit (1984) the size of the company is especially relevant to explain the capital structure of SMEs. The same idea is stated by Novo and Vieira (2010). Following the Trade-Off theory strand, larger firms tend to be more diversified and are less likely to become insolvent. In addition, due to lower information asymmetry, larger firms have easier access to capital markets and pay lower interest rates, having a greater incentive to increase their borrowed capital (Fama and French 2007). In the context of the Pecking Order theory, a positive relationship between size and debt is also expected. Empirical studies by Serrasqueiro and Nunes (2014) point out a positive relationship between size and debt, highlighting that larger companies reduce the possibility of bankruptcy given the greater ability of the company to have a great diversification of activities, products or services. Consequently, lower bankruptcy costs allow large companies to have higher levels of debt. Calei (2019) concludes that larger firms find it easier to mitigate their information asymmetry problems, which leads to easier access to debt.

The two main theories argue that there is a positive association between size and debt. Therefore, the third hypothesis formulated was as follows:

H3: There is a positive relationship between size and debt in SMEs.

Total Liquidity

Total liquidity enables the measurement of the company's ability to meet its short term commitments, verifying which are the preferred sources of financing. According to Pereira et al. (2015), total liquidity is the ability recognized to an asset to be converted into monetary means, cash or cash equivalents, to meet its short-term or current commitments. According to the Pecking Order theory a negative relationship is expected between liquidity and the level of debt of a company, since companies with a high level of liquidity have plenty of internal funds, and, therefore, they do not need to resort to debt as much to finance their investments. The relationship between total liquidity and debt plays a more relevant role in SMEs, as they do not press their clients with the same intensity that large companies do, so payments are often financed by trade credit, which leads to an increase in current liabilities. Hence, more indebted companies have a lower level of treasury (Pastor and Gama 2013). The papers by Pereira et al. (2015), Bastos and Nakamura (2009), Pastor and Gama (2013) and Pacheco and Tavares (2017) reveal a negative relationship between liquidity and debt. Several studies mention that companies with low levels of liquidity have a preference for short-term debt. In relative terms, Pacheco and Tavares (2017) refer that the analysed SMEs have more short-term debt to face their obligations, since they

have high liquidity problems. For SMEs that suffer from the problem of meeting their charges, there are two ways to mitigate this issue: delay, to some extent, payments to creditors or increase short-term bank loans.

Thus, it is expected a negative relationship between liquidity and debt.

H4: There is a negative relationship between liquidity and debt in SMEs.

Other Non-debt Tax Shields

The Trade-Off theory predicts a negative relationship between other non-debt tax shields and debt. DeAngelo and Masulis (1980), show that the importance of a firm depends not only on economic factors but also on the capital structure adopted. In addition, they state that other tax benefits, such as tax deductions allowed by depreciation and investment tax credits, could complement the tax saving function provided by debt. However, a firm with a high level of other non-debt tax shields has a lower degree of debt than a firm with few other non-debt tax shields. As firms increase debt, so does the probability that the output reaches levels for which the tax protection generated by the available tax benefits cannot be used (Gama 2000). Pacheco and Tavares (2017) mention in their study that as for the variable other tax benefits besides debt it was not considered relevant, nor was it considered in short-term debt, long-term debt and, consequently, in total debt. Thus, it does not confirm the trade-off theory that argues for a negative relationship between other non-debt tax shields and short-term debt. The study by Novo and Vieira (2010) establishes a negative relationship with short-term debt and a positive effect on long-term debt. There are several studies that found no statistically significant relationship between other non-debt tax shields: Serrasqueiro and Nunes (2011), Serrasqueiro and Nunes (2014) and Calei (2019).

Thus, a negative relationship is expected between tax benefits other than debt and the level of debt of firms, materialised in the following hypothesis:

H5: There is a negative relationship between other non-debt tax shields and debt in SMEs.

Risk

SMEs are companies that usually operate in less concentrated markets and therefore face high competition, higher risk and a higher probability of bankruptcy, so these companies tend to slow down their debt levels (Abrantes 2013). The Trade-Off theory predicts a negative relationship between risk and debt level (Bastos and Nakamura 2009). The higher the risk, the higher the likelihood that the companies' cash flows will be insufficient to honour the commitments with creditors, which in turn, will reduce the possibility of being able to get indebted (Pereira et al. 2015). The Pecking Order theory also predicts a negative relationship between risk and the ratio debt: the higher the risk, the more likely the firm will become insolvent. Thus, risk reduces the financing capacity of firms and increases their costs (Myers 1984). Therefore, the Pecking Order theory predicts that firms with high business risk make efforts to accumulate capital over the years to avoid

lack of funds in the future. For Bastos and Nakamura (2009), debt is negatively related to risk. Several empirical studies present divergent results on the relationship between risk and debt. It is evident the difficulty in defining the parameters capable of measuring such attribute, since the costs of financial failure are difficult to estimate. In general, the risk of a company is constituted by the level of insecurity regarding its future (Novo and Vieira 2010).

Thus, we establish the following hypothesis:

H6: There is a negative relationship between risk and debt in SMEs.

Firm Age

Age is related to the life cycle of companies, being expected greater financing needs in the early years. Serrasqueiro and Caetano (2014) state that age can be an important determinant in capital structure decisions, unlike more mature companies that are already at a later stage of their life cycle, young companies, at the beginning of their lives, tend to resort more to borrowed capital. The older the firm, the more likely it is to generate good impression with its creditors and mitigate agency problems and costs, which allows easier access to debt (Serrasqueiro and Caetano 2014). Thus, it is expected a positive relationship between age and the level of debt of the company, following the Trade-Off theory. According to the Pecking Order theory, older firms usually have greater capacity to generate internal funds and, therefore, greater self-financing capacity through retained earnings, so they tend to resort less to debt. Thus, in line with the Pecking Order theory approach, but contrary to the Trade-Off theory, a negative relationship is expected between the age of the firm and its level of debt. Empirically Abor and Biekpe (2009) concluded that age is a key factor in access to funding, as firms that have been in business for longer have more guarantees to offer to banks in case they are unable to honour their commitments. Gama (2000), Serrasqueiro and Caetano (2011) and Calei (2019) found a negative relationship between age and debt. According to Novo and Vieira (2010), older firms generate enough internal resources to not be as dependent on debt as younger firms.

Thus, the following research hypotheses are proposed.

H7.1: There is a negative relationship between age and debt in SMEs.
H7.2: There is a positive relationship between age and debt in SMEs.

Research Design

Sample

The SABI[5] database was used to collect the empirical data. The selection of the companies was made based on recommendation n. °2003/361/EC[6], belonging

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[5]SABI - Sistema de Análise de Balanços Ibéricos (Iberian Balance Sheet Analysis System). It is an advanced data search and processing tool, which allows to easily analyse the general information and the annual accounts of selected companies and to personalise the presentation of results. It

to CAE 55 (Accommodation). Initially it was possible to collect information for a set of 921 SMEs for the Central Region for a period of 8 years, between 2011 and 2018.

Subsequently, the following criteria were applied to refine the sample in accordance with the objectives of the study: only companies that were active and for which the information necessary to operationalise the variables was available were selected.

Finally, we checked which companies are technically bankrupt in accordance with article 35 of the Commercial Companies Code[7], since it is not the aim of this study to analyse the capital structure of companies that are technically bankrupt. Thus, after considering the selected criteria, it was possible to obtain a sample with 2445 observations related to companies with CAE 55 in the Central Region of Portugal for a period of 8 years.

After computing the various ratios and the necessary and mentioned transformations, the data were exported to the statistical software IBM SPSS Statistics, version 25, in order to perform the statistical treatment and to test the hypotheses previously formulated.

Variables

In this study, the dependent variable is measured by total debt (Table 1), being calculated by the quotient between total liabilities and total assets. This is the variable that we intend to explain within the capital structure of SMEs of the tourism sector in the Centre Region, considering the work of Novo and Vieira ovo (2010), Degryse et al. (2012) and Pacheco and Tavares (2017).

Table 1. *Dependent Variable*

Abbreviation	Variable	Description
ENDT	Total Debt	$\dfrac{\textit{Total Liabilities}}{\textit{Total Assets}}$

The independent variables used had as references the studies of Bastos and Nakamura (2009), Serrasqueiro and Caetano (2014), Pereira et al. (2015), Pacheco and Tavares (2017) among others, and are listed in Table 2.

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includes sophisticated and unique statistical processing options. This system is in charge of Bureau Van Dijk.

[6]According to this recommendation, a business unit is considered an SMEs if it meets two of the following criteria: fewer than 250 employees, less than 43 million euros in assets or less than 50 million euros in turnover.

[7]A company is technically bankrupt when its equity is equal to or less than half of its share capital.

Table 2. *Independent Variables*

Abbreviation	Variable	Description
REND	Profitability	$\dfrac{EBIT}{Total\ Assets}$
TANG	Assets tangibility	$\dfrac{non\ current\ assets\ +\ inventories}{Total\ Assets}$
DIM	Turnover size	$\ln(turnover)$
LG	Total Liquidity	$\dfrac{Current\ Assets}{Current\ Liabilities}$
OBF	Other non-debt tax shields	$\dfrac{Depreciation\ for\ the\ year EBIT}{Total\ Assets}$
RISC	Risk	$\dfrac{Non\ Current\ Liabilities}{Total\ Liabilities}$
ID	Age	*Log of the number of years in business*

Regression Model

According to the research objectives and similar to other studies, such as Bradley et al. (1984), Gama (2000), Novo (2009) and Rodrigues (2012), the multiple linear regression model was used to test the relationship between the level of debt and the determinants of SMEs capital structure. Marôco (2018) states that regression analysis defines a set of statistical techniques used to shape relationships between variables and predict the value of one or more dependent variables from a set of independent variables.

In the present study we intend to model the linear relation between the level of debt of a company (dependent variable) and the variables profitability, asset tangibility, turnover size, total liquidity, other non-debt tax shields, age and risk (independent variables), as follows:

$$ENDTi = \beta_0 + \beta_1 RENDi + \beta_2 TANGi + \beta_3 DIMi + \beta_4 LGi + \beta_5 OBFi + \beta_6 IDi + \beta_7 RISCi + \varepsilon i$$

The linear regression model will be estimated by the ordinary least squares (OLS) method. For the proposed model to be valid it is necessary to test and validate the following assumptions: the normality with zero mean, the independence, the homoscedasticity of the residuals and the multicollinearity of the independent variables (Rodrigues 2012, Cardoso 2013, Marôco 2018).

Results

Descriptive Statistics and Correlation Matrix

For the period under analysis, 2011-2018, the mean and the standard deviation of the variables are presented in Table 3 and Table 4 shows the Pearson's correlation matrix between the variables.

Table 3. *Mean and Standard Deviation of Variables*

Variable	N	Mean	Standard Deviation
ENDT	2863	0,5207	0,2672
REND	2863	0.0352	0.1358
TANG	2863	0,7194	0,2830
DIM	2524	1,9872	0,7493
LG	2731	6.9316	25.1143
OBF	2863	0,0443	0,0410
RISC	2863	1.8303	5.5930
ID	2863	14,3392	14,0500

The analysis of Table 3 shows that the average debt of SMEs in the tourism sector in the Central Region is 0.5207, which means that they finance externally about 52.07% of their total assets. The variables profitability, total liquidity and risk are highly volatile compared to the remaining. The remaining explanatory variables (tangibility of assets, size and age) have a standard deviation below their means, which allows us to conclude that the volatility of these variables is not considerable.

Analysing Table 4, most of the linear correlations between the explanatory variables and the dependent variable are statistically significant, with exception of DIM. The dependent variable presents a positive correlation with the explanatory variables TANG, OBF and RISC. On the other hand, it presents a negative correlation with the variables REND, LG and ID. It should also be noted that the absolute value of the correlation with the RISC variable is high and with the OBF variable is low (although statistically significant) compared to the other correlations observed.

Table 4. *Pearson's Correlations*

	ENDT	**REND**	**TANG**	**DIM**	**LG**	**OBF**	**RISC**	**ID**
ENDT	1							
REND	-0.150[**]	1						
TANG	0.243[**]	-0.357[**]	1					
DIM	-0.013	0.182[**]	0.009	1				
LG	-0.155[**]	-0.016	-0.163[**]	-0.107[**]	1			
OBF	0.078[**]	0.055[**]	0.037[*]	0.114[**]	-0.085[**]	1		
RISC	0.394[**]	-0.083[**]	0.131[**]	-0.083[**]	0.018	-0.055[**]	1	
ID	-0.182[**]	-0.027	0.065[**]	0.308[**]	0.007	0.079[**]	-0.075[**]	1

Note: ** significance at the 1% level; * significance at the 5% level.

Validation of Regression Assumptions

As mentioned, to ensure the validity of the model it is necessary to test its assumptions.

<u>Normality and Mean of Residuals</u>
The normality of the residuals can be graphically assessed through a probability plot, as shown in Figure 1. In this graph the points seem to be distributed close to the diagonal line, which means that the distribution of the estimated residuals seems to be approximately normal.

Figure 1. *Normal Probability Plot*

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ENDT
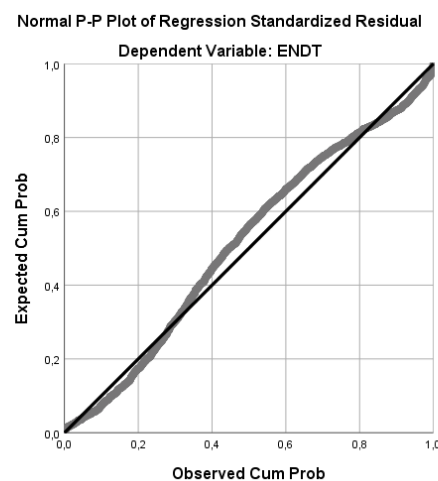
Nevertheless, we can use measures of shape, asymmetry and kurtosis, to validate this assumption. Marôco (2018) considers that the values indicating a deviation from normality capable of compromising the reliability of the conclusions are still not consensual. However, he mentions that absolute values of

skewness and kurtosis below 3 and 7, respectively, indicate that the distribution of residuals is normal. The values obtained for the residuals are both below the indicated reference values, as shown in Table 5 and, consequently, they do not indicate problems regarding the assumption under analysis.

Table 5. *Skewness and Kurtosis*

Residuals	
Valid N	2445
Mean	0.000
Standard Deviation	0.224
Skewness	**-0.518**
Kurtosis	**0.807**

Table 5 also shows that the average of the residuals is zero.

Autocorrelation

To evaluate the assumption of residuals independence we resort to the Durbin-Watson test, whose null hypothesis states that the residuals are independent. The value of the Durbin Watson statistic obtained was $d = 1.999$, which is very close to 2, suggesting that the residuals are independent.

Homocedasticity

This assumption requires that the variance associated to the residuals is homogeneous. To test for homoscedasticity the Breusch-Pagan test was used, obtaining $p < 0.01$, indicating a possible presence of heteroscedasticity in the residuals of the model.
However, it was decided to maintain the initial model to characterize the sample data, aware that any inference made from it should be interpreted with great caution.

Multicolinearity

Multicolinearity, which refers to the existence of a linear relationship between independent variables, was diagnosed using the calculation of Pearson's correlations between the independent variables and the analysis of VIF (*Variation Inflation Factor*) values. The analysis of Table 4 shows that the values of the bivariate correlations are low, stressing however the correlations between TANG and REND and between ID and DIM, which are slightly above 0.3 (Aivazian et al. 2005). Nevertheless, these values are not very high, which leads us to conclude that the problem of endogeneity between the independent variables is not particularly relevant in this study.

The values of the VIF were also analysed as an indicator of multicollinearity. According to Marôco (2018), values greater than 5 indicate the presence of multicollinearity in the independent variables. Since the VIF values in Table 6 are all lower than 5, the conclusion that there is no significant correlation between independent variables is reinforced.

Table 6. *VIF Values*

Variables	VIF
REND	1.293
TANG	1.280
DIM	1.196
LG	1.055
OBF	1.017
RISC	1.038
ID	1.150

Discussion

As previously mentioned, the main purpose of this study is to analyse the determinants of the capital structure of SMEs in the tourism sector of the Central Region in Portugal, to understand which are the main financing sources (internal or external) of SMEs and identify which is the predominant theory in the financing decisions of the SMEs under study.

In this sense, we proceeded to the analysis of the multiple linear regression model obtained (Table 7) in order to test the hypotheses defined in our empirical study. The model is statistically significant for a level of significance of 0.05, with a low degree of explanatory power, since the coefficient of determination (R^2) is 0.266, which means that 26.60% of the variation of the dependent variable is explained by variations in the independent variables of the proposed model. For a significance level of 0.01, all variables are statistically significant.

Table 7. *Multiple Linear Regression Model*

	Unstandardized Coefficients		Standardized Coefficients	t statistic	p -value
	B	**Std. Error**	**Beta**		
Constant	0.438	0.020		22.364	0.000
REND	-0.245	0.038	-0.129	-6.522	0.000
TANG	0.088	0.019	0.093	4.749	0.000
DIM	0.031	0.007	0.087	4.596	0.000
LG	-0.002	0.000	-0.133	-7.479	0.000
OBF	0.298	0.111	0.047	2.684	0.007
RISC	0.019	0.001	0.368	20.814	0.000
ID	-0.004	0.000	-0.225	-12.092	0.000
R^2			0.266		
R^2 *Adjusted*			0.264		

Considering the proposed model for the Central Region tourism sector for the years under study, we will proceed to the analysis and validation of the established hypotheses, according to the Trade-Off and Pecking Order theories.

We begin by analysing hypothesis 1, which focuses on the relationship between REND and ENDT. In the model obtained the variable REND ($\beta = -0.129, p < 0.01$) has a statistically significant negative influence over the variable debt. This result does not allow us to validate the previously formulated Trade-Off Theory hypothesis (H1.1.1). However, the negative relationship found, validates the hypothesis H1.1.2 that predicts a negative relationship between the two variables under the Pecking Order theory, i.e., SME's in the tourism sector in the Centre region have a preference for using internal financing over debt. The more profitable a company is, the more likely it is to retain profits and use them to finance itself. Considering the results obtained, one realizes that they are in line with the results obtained by several authors (Bastos and Nakamura 2009, Novo and Vieira 2010, Pacheco and Tavares 2017, Calei 2019), who identify a negative relationship between profitability and debt.

The second hypothesis assumes the existence of a positive relationship between TANG and the debt level of SMEs in the tourism sector in the Centre region, which, in the model obtained ($\beta = 0.093, p < 0.01$), is statistically significant. Thus, hypothesis H.2 is validated and it can be stated that this determinant follows a positive relationship according to the Trade-Off and Pecking Order theories. Thus, the greater the value of tangible fixed assets the greater the financing/guarantee. These relationships were verified in studies previously developed by Serrasqueiro and Nunes (2014), Peixoto (2017) and Calei (2019).

Regarding the third hypothesis formulated, it is concluded that there is a statistically significant positive relationship between the DIM variable and the debt of SMEs in the tourism sector in the Centre region ($\beta = 0.087, p < 0.01$). This conclusion is consistent with Serrasqueiro and Caetano (2014) and Calei (2019). The larger size allows for an increase in the diversification of products and services of SMEs, and, in this sense, also allows for a decrease in the probability of bankruptcy and asymmetry of information between owners and creditors and, consequently, to obtain advantages at the level of external financing. The increase in size also translates into a greater possibility of obtaining profits, and therefore of taking advantage of the tax benefits of debt. These results are therefore in line with the assumptions of the Trade-Off Theory on the one hand, and the Pecking Order theory on the other.

The influence of the variable LG on the level of debt is statistically significant ($\beta = -0.133, p < 0.01$), with an increase in the value of LG causing a decrease in the value of the level of debt of SMEs, as predicted by the Pecking Order theory. This result is in line with the findings of Pereira et al. (2015), Bastos and Nakamura (2009), Pastor and Gama (2013) and Pacheco and Tavares (2017), that firms with high levels of liquidity when they need to finance themselves resort to their own excess liquidity.

As for the OBF, the observed result ($\beta = 0.047, p < 0.01$) does not meet the expected, leading to the rejection of hypothesis 5, within the Trade-Off theory approach. There is a statistically significant positive relationship between the variable OBF and the level of debt, as Novo and Vieira (2010) present in their study, concerning the long-term debt. The empirical evidence obtained indicates that, the SMEs under study increase their debt as the tax benefits other than debt increase.

The model does not support hypothesis 6 since it presents a positive and statistically significant ($\beta = 0.368, p < 0.01$) relationship between the RISC variable and the level of debt of SMEs in the tourism sector of the Centre region. However, despite contradicting the theories, this relationship is in line with the results obtained by Novo and Vieira (2010), Pereira et al. (2015) and Tavares and Pacheco (2017). Thus, riskier SMEs, which have more debt, may see their agency costs reduced and probably outweigh the expected increase in bankruptcy costs. This association may be sensitive to firm size, as creditors would continue to finance the largest SMEs, even if they were riskier, in order to avoid bankruptcy and thus their losses.

Finally, the negative and statistically significant ($\beta = -0.225, p < 0.01$) relationship between the variable ID and the level of debt allows us to accept hypothesis 7.2, which is in accordance with the assumptions defended in the Pecking Order theory. However, according to the Trade-Off Theory approach, we reject hypothesis 7.1. We conclude that SMEs tend to follow the Pecking Order theory, that is, older firms retain more profits and reduce their recourse to debt, thus the need to resort to debt decreases. Similar results were obtained by Serrasqueiro and Nunes (2012) and Serrasqueiro and Caetano (2014).

Briefly, in Table 8 we can observe which behaviour was expected between the independent variables and the dependent variable (total debt) based on the Trade-Off theory and the Pecking Order theory. One can also observe and compare the expected results and the results obtained from the present study.

Table 8. *Expected versus Actual Relationships between the Dependent Variable and the Independent Variables*

Independent Variables	Trade-Off Theory	Pecking Order Theory	Actual relationships	
REND	Positive	Negative	Negative	(S.)
TANG	Positive	Positive	Positive	(S.)
DIM	Positive	Positive	Positive	(S.)
LG	---	Negative	Negative	(S.)
OBF	Negative	---	Positive	(S.)
RISC	Negative	Negative	Positive	(S.)
ID	Positive	Negative	Negative	(S.)

(N.S.) Statistically non-significant, 2. (S.): Statistically significant

Conclusion

The main purpose of this study was to analyse which of the theories (Trade-Off or Pecking Order) is more followed by SMEs of the tourism sector in the Central region in Portugal or if the use of one of them does not exclude the other. Simultaneously, it aimed to analyse and identify the main sources of financing and to assess the main determinants that influence the capital structure of such SMEs.

Regarding the determinants that influence the capital structure decisions of the SMEs under study, the empirical evidence obtained allows us to conclude that all variables are statistically significant, but those that most contribute to explain the debt of SMEs are risk and age. This may indicate the problems that SMEs suffer when resorting to debt, in which they are often seen by creditors as companies with higher risk, forcing them to finance their investments using retained earnings, for example their cash-flows. Age seems to mitigate this problem, as older SMEs tend to accumulate more retained earnings.

We identified a negative and statistically significant relationship between profitability and debt, corroborating the Pecking Order theory. This relationship seems to indicate that SMEs in the tourism sector of the Centre region prefer internal financing to external financing. Thus, companies that show higher profitability are able to retain their profits and thus become self-financing, which implies that they do not resort to external financing.

The tangibility of assets influences debt in a positive and statistically significant manner. Thus, companies with a higher level of tangible assets have a higher level of debt. The result obtained suggests that SMEs that hold high levels of tangible assets enjoy greater access to debt, since these can be given as collateral in case of bankruptcy of the company.

A positive relationship between the size and the level of debt of SMEs was identified according to the Pecking Order theory and the Trade-Off theory. The results obtained indicate that as the size of SMEs increases, their debt capacity also increases. The size of firms mitigates the problems of information asymmetry and the risk of bankruptcy, which leads to easier access to debt, as advocated by the Trade-Off and Pecking Order theories.

A positive relationship was identified between other non-debt tax shields and debt, i.e., a relationship contrary to the Trade-Off theory's prediction.

The results show the existence of a positive influence of tangibility of assets, size, benefits other than debt and risk on the level of debt, while for profitability, general liquidity and the age of firms there was evidence of a negative influence. Thus, we conclude that, the influence of profitability and age is in line with the Pecking Order theory. On the other hand, the influence of tangibility of assets and size proves to be in agreement with both theories. Finally, the results for benefits other than debt and for risk were against what was predicted by any of the theories addressed.

Thus, statistical evidence was established proving that all the determinants under study can be related to Pecking Order theory except for OBF and RISC variables. While asset tangibility and size can be linked to both Trade-off theory and Pecking Order theory.

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In conclusion, the main sources of financing for SMEs in the tourism sector in the Centre region, considering the results obtained, are the retained funds, i.e., the source of internal financing, which is in line with the Pecking Order theory. Thus, it is the Pecking Order theory that is most followed by the companies considered in this study. However, considering the results, the possibility of the two theories being followed simultaneously cannot be ruled out.

As guidelines for future research, we suggest the inclusion of macroeconomic factors and new variables such as gross domestic product. Also, for future investigations we suggest a dynamic panel data analysis and the study of SMEs from other regions of the country, and proceed to the confrontation between them, to ascertain the follow-up of the theories by SMEs.

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An Evaluative Case Study of City Center Muscat Accessibility Provisions

By Masooma Al-Balushi[*] & Tamer Atef[±]

Shopping malls are the corner stone of shopping tourism and at the same time a controlled entertainment hub. Persons with disabilities could socialize and enjoy the different entertainment activities provided within the mall environment, but are the malls ready to adequately provide their services and products to this customer segment? The current study seeks to answer this question in The Sultanate of Oman, through the case study of "City Center Muscat", the number one mall in the country located in the capital city "Muscat". The study aims to assess the accessibility provisions of City Center Muscat and the on-premises food and beverage outlets, as well as some of the challenges that individuals with disabilities face when interacting with these establishments. To achieve the study aim, content analysis was applied on the mall website and mobile application contents, then, a checklist was used to evaluate both the mall website and the mobile application accessibility features. In order to assess the mall and the on-premises food and beverage outlets accessibly provisions two checklists were formulated and used. The paper highlights some of the positive initiatives that have been put in place to increase accessibility and proposes some recommendations for how accessibility can be further improved.

Keywords: *Accessibility, City Center Muscat, Disabled, Food, Oman, Tourism, Shopping*

Introduction

Worldwide the number of persons with disabilities is increasing due to many reasons, among them is aging, accidents, disasters, wars, and other environment/ habitat related factors (World Tourism Organization and Fundación ACS, 2015).

People with disabilities depend on caregivers, friends or family members in their daily activities. This segment of customers is an opportunity to increase tourism revenues when their needs and preferences are met (Atef 2011, Burnett & Bender-Baker 2001, Chen 2004, Darcy 2003, Lach 1999, Lehto et al. 2018).

Tourism activities are various, one of these activities is shopping, which has become for many tourists a decisive factor in choosing a destination. It represents a significant portion of what tourists spend their money on (Choi et al. 2016, Rifai 2014). Malls and shopping centers serve as a hub for leisure, entertainment, and commerce across the world, and Oman is no exception. With the spread of shopping malls across the country, malls have become increasingly popular over

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the years. Despite their popularity, however, malls often pose significant accessibility challenges for individuals with disabilities, including the elderly, people with mobility impairments or vision loss, amongst others. For example, some malls have wider parking spots, ramps and spacious elevators designed for individuals with mobility limitations, while others do not. Similar differences exist when it comes to accessible washrooms and other facilities as well as the availability of wheelchairs or mobility scooters for rent.

For persons with disabilities the shopping mall is an opportunity for socialization and entertainment when services and products that match their needs are available in a convenient barrier free environment (Darcy 2019, Porto et al. 2020, Swaine et al. 2014).

The availability of accurate information pertaining to accessible tourism/ hospitality services and products is so important and greatly affects choices of customers with disabilities (Gladwell & Bedini 2004). The websites of tourism/ hospitality establishments and destinations must be accessible. Accessible information is essential in order for products and services to reach persons with permanent or temporary disabilities (Leidner 2006, World Wide Web Consortium 2022).

In the Sultanate of Oman there are many shopping centers/malls. City Centre Muscat is the first and largest lifestyle shopping destination in the country, attracting more than 11 million visitors annually. It was opened in 2001 and is located in Muscat the capital city of the Sultanate of Oman. City Centre Muscat is known for its diverse dining options and world-class shopping experience. However, the accessibility of the mall and its food and beverage outlets is an important aspect to consider for those who are differently abled or have special needs. The study aims to assess the accessibility provisions of City Center Muscat and the on-premises food and beverage outlets, as well as some of the challenges that individuals with disabilities face when interacting with these establishments.

Literature Review

Persons with Disabilities Worldwide and in The Sultanate of Oman

The World Health Organization (WHO) world report on disability issued in 2011, estimates that nearly one billion people worldwide live with some degree of disability, which is about 15% of the global population (World Tourism Organization and Fundación ACS 2015).

The Sultanate of Oman is divided into eleven Governorates. The total population in 2021 was 4,527,446 of which 2,804,177 (62%) are Omanis and 1,723,329 (38%) are Non-Omanis (National Center for Statistics and Information, 2022a). The number of Omanis registered in the "Disabled Person Card System" during 2021 was 42,613 persons, of which males accounted for 61%. Approximately RO 34 million was allocated by the government to support the 21,406 cases of disability registered in the social security system in 2021, this category nearly represents 50% of the total system beneficiaries (National Center for Statistics and Information 2022b).

Article 1 of Oman's Promulgating The Disabled Care and Rehabilitation Law, decree No. 63/2008, defines The Disabled as: "Persons who suffer from a shortage of some sensory or physical or mental abilities congenitally or as a result of a genetic factor, or illness, or an accident, thus limiting their ability to perform their natural role in life compared to those at their age, with the need for care and rehabilitation to play their role in life" (Royal Decree No. 63/2008 2008). Furthermore Articles (10) and (11) of the law explain the engineering and structural standards that should be adopted to ensure that the disabled benefit from public services and the means of their involvement and participation in social, sports, and cultural activities (Royal Decree No. 63/2008 2008).

Accessibility Provisions

Persons with disabilities have special needs, which require the development, adaption and alteration of building and structural elements, means of communication, transportation, accommodation, food and beverage outlets, parking spaces, and several other environmental and man-made facilities to adhere to accessibility rules and procedures (Linderová 2015).

Accessibility refers to allowing persons of varying disabilities to use places, spaces, products or services, whether physical or virtual easily and independently, without the need for special arrangements. Furthermore, accessibility is a means of ensuring that persons with disabilities are able to practice all rights with freedom on the basis of equality with all other human beings (United Nations 2015).

Accessibility varies depending on the type and degree of disability (Darcy 1998):

- Physical: which requires the provision of handrails, ramps, lifts and lowered counters
- Sensory: which requires the provision of signs, hearing augmentation systems, and audio cues for lifts
- Communication: which require the provision of access to information through a variety of media

Persons with disabilities face a number of barriers that hinder them from getting involved in tourism activities (McKercher et al. 2003, Smith, 1987):

- Intrinsic (knowledge, health)
- Environmental (accessibility and design)
- Interactive (industry affiliates attitude)
- Economic (affordability)

Accessible tourism involves the collaboration of all concerned stakeholders, through the delivery of accessible tourism products, services and environments which persons with disabilities are able to enjoy independently (Darcy 2006, Darcy & Dickson 2009).

The General Assembly of the United Nations World Tourism Organization

invited its member states and all tourism stakeholders to take all possible measures to facilitate the travel by persons with disabilities and recommended the following paths (World Tourism Organization and Fundación ACS 2015):

- To adopt tourism sites and establishments accessibility, posing no extra charges
- To train tourism affiliates on how to deal with persons with disabilities
- To publish updated accurate information to support and assist persons with disabilities

The persons with disabilities segment potentiality to the tourism industry is based on the following facts (Burnett & Bender-Baker 2001, Darcy 1998, World Tourism Organization and Fundación ACS 2015):

- It is constantly increasing
- Persons with disability do not travel alone, an average of 1.5 people travel as well
- It is good for a destination's image
- Higher revenue than other conventional tourism forms

In order to attract this market segment the tourism industry must address the issues of accessibility. Customers with disabilities' selections depend on previous experiences and on accessibility provisions availability. Their loyalty is directed towards establishments that are keen to accommodate their needs and requirements allowing them to feel free and independent (Burnett and Bender-Baker 2001, Chen 2004). Suitable tourism and hospitality services/products should be provided, personnel should be trained on how to deal with this segment, and the structural and environmental conditions should be developed according to international accessibility standards (Donoghue 2003, Germ & Schleien 1997, Ozturk et al. 2008, Yau et al. 2004).

Shopping Centers and Persons with Disabilities

Shopping is considered as one of the biggest revenue generators for tourism destinations (Albayrak et al. 2016). Shopping in some cases is the main reason for visiting a destination (Murphyet al. 2010). Shopping centers stand out as the main attraction point of shopping activity (LeHew & Wesley, 2007).

According to the International Council of Shopping Centers (1999) a shopping center is defined as, "A group of retail and other commercial establishments that is planned, developed, owned and managed as a single property. On-site parking is provided. The two main configurations of shopping centers are malls and open-air strip centers. Malls typically are enclosed, with a climate-controlled walkway between two facing strips of stores. A strip center is an attached row of stores or service outlets managed as a coherent retail entity, without the enclosed walkways linking the stores" (p.1-2).

Shopping centers/malls are public places, which are intended to provide their

services and products to various customer segments with different needs and requirements (Bashiti & Rahim 2015, Levine 2003). To provide a successful experience to their patrons, especially those with special needs and disabilities, malls are required to adopt accessibility standards and keep improving them (Lestari & Wiastuti 2019).

The main purpose of shopping centers provision of services and products is revenue generation, despite the fact that adopting accessibility standards is costly, alterations and developments within the physical environment is a must to achieve accessibility for all and for business continuity (Afacan 2012, Chikuta et al. 2019, Lestari & Wiastuti 2019). Barrier free structural and architectural designs consider the needs of persons with disabilities based on four major disability categories (ADA National Network 2015):

- Mobility disabilities
- Visual disabilities
- Hearing disabilities
- Cognitive disabilities

Persons with Disabilities and Information

Information management is the starting point of accessibility enhancement. Accessibility information would encourage several persons to travel with confidence that their needs are going to be met (Shaw and Coles 2004). The tourism cycle begins with reliable information about destinations, facilities, products and services, in addition to procedures and required documentations (Leidner 2006).

The top sources of information used by travelers with disabilities are word-of-mouth, websites, and travel guides/books (Ray & Ryder 2003). The most convenient and accessible source of information for persons with disabilities are websites (McKercher et al. 2003). Accessible information means that the websites of tourism and hospitality establishments and destinations must be user-friendly for all categories of persons with disabilities, accurate, recent, and constantly updated (Eichhorn et al. 2007, Leidner 2006).

Accessibility of Websites and Mobile Applications

The internet and websites are the major information seeking tools for lots of people nowadays. Online trading is huge, governments reach out to citizens through web-based services. Despite the fact that web accessibility is imperative to serve all types of web users, not all web sites have adopted the accessibility requirements basics (Pelzetter 2021).

International accessibility standards refer to a set of guidelines developed to ensure equal access to online content by individuals with disabilities. The primary objective of international accessibility standards is to provide a set of guidelines that can be universally implemented to ensure that online content is accessible to all, regardless of their disabilities. International accessibility standards are

developed and published by organizations such as the World Wide Web Consortium (W3C). Some of the guidelines provided by the World Wide Web Consortium include (World Wide Web Consortium 2008, 2018):

- Perceivable: content availability in different forms (providing captions and audio descriptions for videos - providing text alternatives for non-text content)
- Operable: ensuring that content is easily navigable enhancing users' ability to interact with the content (use of keyboard vs. mouse)
- Understandable: users' ability to process the content (ease of making changes)
- Robust: continuous development and update of the content

Accessibility will not only serve people with permanent disabilities but also those under unfavorable circumstances/situations (Lazar et al. 20154, World Wide Web Consortium 2022):

- People using devices with small screens
- Seniors with diminishing abilities
- People with temporary disabilities
- People in crowded places and cannot hear properly, or in dark environments that hinder proper vision

Besides websites, mobile devices are gaining importance and momentum due to the easiness of usage and the enormous possibilities to perform several activities through the mobile applications "Apps" (Acosta-Vargas et al. 2021). Accessibility in mobile applications should be the aim of software creators and developers. Making these "Apps" as accessible as possible to the various user segments with different physical and mental capabilities is imperative to cope with the ever-changing customer demands (World Wide Web Consortium 2015, 2018).

Methodology

An evaluative case study approach was adopted which seeks to evaluate the study subject related phenomena. In evaluative case studies, the researcher captures all the complexities and aspects of a case and goes further by putting interpretations and evaluations based on the collected data analysis (McDonough & McDonough, 1997; Yin, 1994; Yin, 2014). There are many advantages to using case studies (Merriam, 1998; Yin, 1994):

- Data interpretation and analysis is based on the study scope and functionality
- Quantitative and qualitative data analyses are applicable
- Data collection methods choice and usage depend on the researcher(s) discretion

Data Collection and Analysis

Content analysis was applied on the mall website and mobile application contents, then, a checklist was used to evaluate both the mall website and the mobile application accessibility features. Finally, two checklists were formulated and used to assess the mall and the on-premises food and beverage outlets accessibly provisions. Data collected by means of the study checklists were tabulated, analyzed, then interpreted.

Content analysis is widely used in social sciences. Its usage in the field of tourism and hospitality research has been escalating, especially in studying texts, advertisements, promotional material, brochures, and images (Berg, 2009; Hall & Valentin, 2005).

Checklists allow researchers to consistently check the availability of attributes among studied entities/subjects, its application enhances the accuracy and reliability of the results and consequently the study conducted (Miller, Hudson, & Turner, 2005; Morrison, Colman, & Preston, 1997; Oppenheim, 1998).

The study phases were conducted and applied based on City Center Muscat status/information on 12-26 August 2022:

Phase One

The study started with content analysis of the mall website (https://www. citycentremuscat.com/) and mobile application (https://www.citycentremuscat. com/download-app) contents to indicate how City Center Muscat publicizes its accessibility provisions, if any.

Phase Two

A checklist was used to evaluate both the mall website and the mobile application accessibility features and whether they were developed and adapted to be used by people with different disabilities. The checklist was formulated from the reviewed literature.

Phase Three

Two checklists were formulated and used to assess the mall and the food and beverage outlets accessibly provisions. The items of the checklists were based on and adapted from the literature reviewed. The checklists consisted of checkpoints covering different accessibility aspects:

A. Mall accessibility provisions: In order to access the mall accessibility provisions a checklist evaluation of the following areas was conducted:
   - Parking
   - Route (Access to the premises)
   - Mall Entrance
   - Floor(s) Accessibility
   - Restrooms

B. Food and beverage outlets accessibility provisions: The list of food and beverage outlets under investigation was formulated from the City Center Muscat website and verified by personal visits within the study stated time frame. The website included four categories under "Dining" (37 Outlets) (City Center Muscat, 2022):

- Chocolates/Confectionery/Ice Cream (8 Brands)
- Dining - Cafes (9 Brands)
- Dining - Fast Food (11 Brands)
- Dining - Restaurants (9 Brands)

The Chocolates/Confectionery/Ice Cream category was excluded from the study as they do not provide a dining space, they are shops that sell items without any table or seated in-unit service. The Dining - Fast Food category constitutes the mall food court, it is formed of similar service counters for all the included brands facing a large seating area with tables and seats, so an overall evaluation of the food court was conducted. The study was conducted on the following food and beverage outlets:

- Dining - Cafes
- Dining - Food Court (Fast Food)
- Dining - Restaurants

Results and Discussion

Website and Mobile Application Accessibility Information Availability

City Center Muscat website provides useful information for patrons and shoppers, but mentions nothing about the center accessibility provisions, the only mentioned piece of information about facilities for persons with disabilities is in the "Services & Facilities" of the "Tourist Information" section found under "Guest Services" menu of the website (https://www.citycentremuscat.com/guest-services/tourist-information) and is about courtesy wheelchairs and disabled restrooms availability (City Center Muscat, 2022). The mobile application mentions nothing about the availability of accessibility provisions, it does not even provide the limited disabled facilities information (Wheelchairs, Disabled Restrooms) found on the center website.

Website and Mobile Application Accessibility Features

A seven-point checklist was used to evaluate both the mall website and the mobile application accessibility features and easiness of use by people with different disabilities (see Table 1). The website had available four points out of seven which is 57%, while the mobile application had available only 3 points out of seven which is 43%. These results indicate the necessity of adopting websites/

mobile application accessibility standards of being perceivable, operable, understandable, and robust (World Wide Web Consortium, 2008, 2018).

Table 1. *Website and Mobile Application Accessibility Features*

Checkpoint	Website	Mobile Application
Images are supported with explanatory text	No	No
Allow interaction through means other than keyboard/mouse/touch	No (limited keyboard navigation)	No (Touch Only)
Provide page titles	Yes	Yes
Allow content to zoom/enlarge smoothly	Yes	No
Create captions for video and audio content	No	No
Information does not depend on colour	Yes	Yes
Does not time out unexpectedly	Yes	Yes
Total/7	**4/7 - 57%**	**3/7 - 43%**

While Muscat City Center has made significant improvements in the accessibility of their website and mobile application, there are still areas that need improvement. One area of improvement is in the means of navigation, keyboard/ mouse/touch navigation can be improved to make it easier for users with mobility impairments to navigate the website and mobile application. Content zooming is a must, and the availability of captions for video and audio contents would help users with visual and hearing impairments. Finally, alternative text for website images is missing, making it difficult for users with visual impairments to understand the content.

Mall and Food and Beverage Outlets Accessibly Provisions

Two checklists were used to assess accessibility provisions of the mall, and the food and beverage outlets on premises.

Mall Accessibility Provisions
This part comprises five areas:

- Parking
- Route (Access to the premises)
- Mall Entrance
- Floor(s) Accessibility
- Restrooms

According to the literature reviewed it is important to adopt accessibility standards in order to attract customers with special needs (Lestari & Wiastuti, 2019). Their loyalty is for the establishments that consider their needs and adapt their services and products accordingly (Burnett & Bender-Baker, 2001; Chen, 2004).

City Centre Muscat has a large parking area located just few meters of the entrance gates, three entrance gates are available (see Table 2). The parking areas

are well lit and easy to access. The parking areas also have designated parking spots for disabled individuals. The parking facilities are located at strategic locations around the commercial centre for easy accessibility.

Table 2. *Parking Accessibility*

	Yes	No	Not Applicable
Accessible parking spaces are provided	√		
Accessible parking close by outdoor/indoor areas	√		

Additionally, there are barrier-free routes with slopes that facilitate the movement of wheelchairs leading directly to the entrances. The movement from the outdoor to the indoor areas is smooth, safe and hurdle free, centre personnel are available to facilitate the circulation of cars and centre customers. Guiding/ directional signs are provided at clear visible locations that are easily recognizable. The signage provides clear directions to different areas of the centre. There is a small station at the parking area that provides courtesy wheelchairs and strollers to be used by the centre customers (see Table 3).

Table 3. *Route Accessibility (Access to the premises)*

	Yes	No	Not Applicable
The route from the parking lot to the mall entrance is accessible	√		
Clear paths from outdoor to indoor areas	√		
Clear directional signage including symbols	√		

All entrances have wide self-opening doors after which there are security gates that are also wide and can allow wheelchairs access. One entrance does not lead to the ground floor but leads to the first-floor parking area through a ramp like escalator. The center policy does not allow pets on premises and so assistance dogs are not allowed to the center (see Table 4).

The circulation inside the center is smooth, pathways are wide, floors are not slippery, with consistent even lighting throughout the center areas and floors. Guiding signs are present all over the center that indicate levels, areas, and facilities available. Movement between floors could be done by elevators and/or escalators, elevators are provided with audio information indicators that mark opening/closing of doors and level reached (see Table 5).

All floors are provided with disabled restrooms (the restrooms have grab bars and low sinks for the convenience of disabled individuals), with signs all over the center indicating directions to the nearest ones (see Table 6).

Table 4. *Mall Entrance Accessibility*

	Yes	No	Not Applicable
Are all of the entrance doors accessible?	√		
There are signs indicating the location of the nearest accessible entrance			√
Wide self-opening doors	√		
Wide easy to open doors			√
The door is always open		√	
There is no door			√
Appropriate safety markings on glass doors and adjacent panels	√		
Assistance dogs are accepted		√	

Table 5. *Floor(s) Accessibility*

	Yes	No	Not Applicable
Wide and clear internal pathways	√		
Ramp access to all levels			√
Lift/Escalators access to all levels	√		
Slip resistant floor	√		
Consistent and even lighting throughout	√		
Clear directional signage including symbols	√		

Table 6. *Restrooms Accessibility*

	Yes	No	Not Applicable
Are accessible restrooms provided?	√		
Is there an accessible route to the restrooms?	√		
Clear directional signage including symbols	√		

Food Court

The food court is formed out of eleven fast food brands that provide counter service facing a large seating area with tables and seats. Some areas have fixed seats, while others have light movable seats and tables. The area is large enough to allow wheelchairs maneuvers. Seats and table are easily moved to allow any seating alterations required by customers with disabilities or with special needs. Center staff are available to help and give assistance whenever needed (see Table 7). The customer cycle starts with order placement and payment at the cashier, then waiting for the order to be prepared, the order is collected when the order number is shown on a screen or called out, then the food tray is taken by the customer to the seating area for consumption.

Table 7. *Food Court Accessibility*

	Yes	No	Not Applicable
Is the entrance/door accessible?	√		
There is no door	√		
Is the service counter accessible?	√		
Is there an accessible seating location(s)?	√		
Is there an accessible route(s) to accessible seating location(s)?	√		
Furniture (tables and seats) range in height to accommodate disabled persons	√		
Clear space (between furniture) for a person to manoeuvre a mobility aid	√		

Restaurants and Cafes

All Restaurants and Cafes under investigation have shown that they are ready to accommodate the needs of disabled customers or those with special needs. The units designs and furnishings were found to be suitable and conform to the accessibility requirements/points of the checklist (see Table 8). There are no doors as is the case in most centers/malls designs. In restaurants and cafes that offer items on display for take away or offer counter service as well as table service, the display/counter was found to be accessible and easily approached with clear access and hurdle free routes.

Food and beverage outlets, and mall facilities were found to adhere to accessibility rules and procedures as suggested by the literature reviewed, this segment requires the development, adaption and alteration of building and structural elements, and other facilities to adhere to accessibility rules and procedures of the different type and degree of disability (Darcy 1998, Linderová 2015).

City Center Muscat accessibility is the responsibility of the mall administration and the food and beverage outlets brands (management), at different levels:

- The flow of movement and circulation in the various mall sections is the responsibility of the mall management as per the designs and construction schematics.
- The food court was designed by the mall management and consequently assume the full responsibility of the seating area accessibility while the food and beverage brands (management) are responsible for how they make their products and services accessible (customer friendly)
- The within food and beverage units accessibility is the full responsibility of the brands (management)

Table 8. *Restaurants and Cafes Accessibility*

Checkpoint	RESTAURANTS									CAFES								
	Buffalo Wild Wings	Chili's	Habib Beirut	KoseBasi	Nando's	Paul	Tender	TUK TUK	Zen Asian Bistro	Azura	Cinnabon	Clara's authentic coffee	Dose Café	Le Petit Café	Mikel Coffee	PappaRoti	Starbucks	Tim Hortons
Is the entrance/door accessible?	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
There is no door	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Is the service counter accessible?	N/A	N/A	N/A	N/A	N/A	√	N/A	N/A	N/A	√	√	√	√	√	√	√	√	√
Is there an accessible seating location(s)?	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Is there an accessible route(s) to accessible seating location(s)?	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Furniture (tables and seats) range in height to accommodate disabled persons	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Clear space (between furniture) for a person to manoeuvre a mobility aid	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

√=Yes, X=No, N/A=Not Applicable

Conclusions

Disability access provisions are critical for creating a barrier-free environment for persons with disabilities. Worldwide, there have been increased efforts to ensure that public spaces, including malls, are accessible to everyone, regardless of their physical abilities. Persons with disabilities often face challenges in accessing malls due to physical barriers such as uneven surfaces, narrow passageways, inadequate signage, and the absence of facilities like elevators and wheelchair ramps. Through legislation and policy, governments have put in place measures to make malls accessible by providing provisions that cater to persons with disabilities. Nevertheless, mall developers and operators need to remain vigilant in addressing the challenges that people with disabilities face to ensure that malls remain accessible to everyone.

As more people rely on technology for accessing information, and as more businesses shift to online presence, it is important to ensure that websites and mobile applications are accessible to everyone, including people with disabilities. It's important for businesses to prioritize accessibility to ensure that everyone can access their digital platforms. International accessibility standards adoption are crucial to ensure equal access to online content for individuals with disabilities. Compliance with these standards not only benefits individuals with disabilities but also improves user experience for all users. Organizations should strive to follow these guidelines to ensure equal access to online content and avoid legal challenges.

Overall, accessibility provisions of City Center Muscat are commendable. The commercial center has taken significant steps to ensure that disabled individuals have easy access to all areas of the center. The parking facilities, ramps, elevators, restrooms, and signage are all designed with the needs of disabled individuals in mind. The center entrances have self-opening doors. Circulation within/between floors is smooth and easy, escalators and elevators are available with audio assistance in elevators. Food and beverage outlets are accessible and suite customers in wheelchairs, the accessibility of these outlets is crucial to ensure that all mall visitors can enjoy them with ease and convenience. Accessibility provisions do not only benefit disabled individuals its benefits extend to all customer categories and improves the overall customer experience of the center.

Special attention should be given to City Center Muscat website and mobile application. Developments to enhance accessibility levels to better serve users with different disabilities are needed. The contents and information provided about the center accessibility provisions should reflect the fact that the center is accessible and ready to accommodate the needs of customers with disabilities.

Despite the numerous disability access provisions in place at City Center Muscat, the mall still faces several challenges. One challenge is the upkeep and maintenance of the facilities. The mall's management must ensure that the facilities remain operational, clean, and in good repair (hurdles free). Another challenge is the need for greater awareness and inclusivity on disability issues among businesses and customers in the mall. The mall's management can achieve this by organizing awareness events, establishing a feedback mechanism, and dynamic communication channels.

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Factors Influencing Tourist Satisfaction in the Restaurant Industry at Can Tho City, Vietnam after the COVID-19 Pandemic

By Thi-Hoang-Anh Tran[*]

The Food & Beverage (F&B) market has accelerated after the COVID-19 crisis, especially in big cities. Stakeholders are racing to improve quality to attract more customers. Can Tho City, a tourism hub in Vietnam's Mekong Delta region, is experiencing a revival of its restaurant industry-an important sector of its economy. This study surveyed 286 Vietnamese domestic tourists and international tourists at medium-sized restaurants in Can Tho city, aiming to (1) identify factors affecting customer satisfaction after the health crisis; (2) evaluate the importance of these factors; and (3) propose implications for improving quality, satisfaction, loyalty, and return intention. The study used document research, interviews, observations, and questionnaires. Data were analyzed using Descriptive Statistics, Partial Least Squares, and Structural Equation Modeling. The findings revealed five factors impacting tourist satisfaction: (1) flavor of food and drinks; (2) reasonable price; (3) cleanliness; (4) service quality; and (5) restaurant atmosphere. Customer satisfaction positively influenced loyalty and return intention. Recommendations were provided for stakeholders in Can Tho's restaurant industry.

Keywords: *customer satisfaction, customer loyalty, restaurant industry, Can Tho City, Vietnam.*

Introduction

The COVID-19 pandemic, which emerged in 2019, has significantly impacted the global economy, particularly the tourism and food & beverage (F&B) industries. According to the World Bank (2022), the global tourism industry experienced a decline of 72% in international tourist arrivals and a loss of $1.3 trillion in 2020. However, as the pandemic has been controlled in many countries and vaccination rates increased, the tourism industry has gradually regained momentum, with a focus on domestic tourism to drive economic recovery (UNWTO 2022).

Vietnam, a developing country in Southeast Asia, has also experienced severe consequences from the pandemic on its economy, particularly in the tourism sector. In 2020, Vietnam reported a decline of 78.7% in international tourist arrivals and a 45.8% decrease in tourism revenue (General Statistics Office of Vietnam 2021). In response to this situation, Vietnam's government has been promoting domestic tourism to stimulate the economy, with several provinces and cities experiencing remarkable recovery (VNAT 2022). Most recent, as reported

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by the Vietnam National Administration of Tourism and the General Statistics Office (VNAT) (2023a, 2023b), international visitor arrivals to Vietnam in March 2023 were estimated at 895,425, marking a 4.0% decrease compared to February 2023 but an impressive 5,869.5% increase compared to the same period in 2022. The cumulative number of visitors for the first quarter of 2023 reached 2,699,556, representing an 11,974.2% growth compared to the same timeframe in 2022. This upward trajectory demonstrates the positive impact of post-pandemic recovery initiatives, as well as the enhanced promotion and quality of Vietnam's tourism offerings in the international market.

Can Tho City, located in the Mekong Delta region of Vietnam, has been developing tourism as a spearheading economic sector. As the largest city in the region, Can Tho plays a crucial role in the post-pandemic recovery of the tourism industry. Can Tho City has set ambitious goals for its tourism sector by 2025, with a vision extending to 2030. The city aims for tourism services to contribute over 9% to its Gross Regional Domestic Product (GRDP) structure, attract around 9 million tourists, with hotel guests accounting for approximately 4 million (10% being international visitors), and create jobs for about 10,000 direct workers in the industry, with over 75% receiving training (Kieu Mai 2022). Currently, international tourists staying in Can Tho spend an average of 250 USD per person, and the average length of stay is about 2 days. By 2030, the city strives to attract about 12 million visitors and increase the average stay to 2.2 days. The restaurant industry in Can Tho City, which is an important part of the city's economy, has shown an encouraging revival after the COVID-19 crisis. To sustain this growth and further develop the tourism industry, research aimed at enhancing tourist satisfaction, loyalty, and return intention in the restaurant sector is vital.

Customer satisfaction has long been considered a critical factor in the success of the F&B industry (Kotler et al. 2014). High levels of satisfaction lead to greater customer loyalty, return intentions, and positive word-of-mouth, which are essential for businesses to survive and thrive in the competitive post-pandemic environment (Hennig-Thurau et al. 2002). Understanding the factors that influence customer satisfaction in Can Tho City's restaurant industry will help stakeholders make informed decisions to improve their services and attract more customers, both Vietnamese and foreign tourists.

The present study aims to address this research gap by exploring the factors affecting customer satisfaction in the restaurant industry in Can Tho City after the COVID-19 pandemic, analyzing and evaluating the importance of these factors, and proposing management implications to help stakeholders improve quality, developing satisfaction, loyalty, and the return intention of customers. To thoroughly investigate the factors affecting tourist satisfaction in Can Tho City's restaurant industry and provide valuable insights for stakeholders, the following research questions were formulated:

Research question 1 (RQ1): What are the key factors influencing customer satisfaction in the restaurant industry in Can Tho City after the COVID-19 pandemic?

Research question 2 (RQ2): What is the relative importance of these factors in determining customer satisfaction?

Research question 3 (RQ3): How does customer satisfaction serve as an intermediary in creating customer loyalty and return intention?

Research question 4 (RQ4): What are the management implications and recommendations for stakeholders in the restaurant industry in Can Tho City to improve quality, enhance customer satisfaction, and foster loyalty and return intention?

In this study, the author sought to address these research questions and provided a comprehensive understanding of the factors that contributed to customer satisfaction in Can Tho City's restaurant industry, as well as practical suggestions for stakeholders. This study is structured as follows: Immediately following this introduction, section 2 provides a literature review on customer satisfaction, loyalty, and retention in the restaurant industry; Section 3 details the methodology employed in this research; Section 4 presents the research findings and discussion; and Section 5 concludes the study, offers recommendations for stakeholders in Can Tho city's restaurant business, presents the limitations of this study and proposes future research directions.

Literature Review

Customer Satisfaction

Customer satisfaction is a crucial element in the restaurant industry, as it reflects the degree to which a customer's needs, expectations, and desires are met or exceeded by a particular dining experience (Kotler et al. 2014). High levels of customer satisfaction contribute to customer loyalty, positive word-of-mouth, and ultimately, business success (Wilson et al. 2016). Several theories and models have been proposed to explain customer satisfaction in the service industry, including the restaurant sector. The expectancy-disconfirmation paradigm (Oliver 1980) posits that satisfaction is determined by the discrepancy between customers' pre-consumption expectations and their actual experiences. If the experience exceeds expectations, customers are satisfied; if it falls short, dissatisfaction ensues. Equity theory (Adams 1965) suggests that customer satisfaction is influenced by the perception of fairness in the exchange process. Customers assess the value of the goods and services received in relation to the effort, time, and money invested. If they perceive an equitable exchange, satisfaction is likely to be high, whereas perceived inequity leads to dissatisfaction. Attribution theory (Weiner 1985) asserts that customer satisfaction is affected by the attribution of responsibility for service outcomes. Customers tend to be more satisfied when they attribute positive outcomes to the service provider's efforts and skills, while negative outcomes attributed to external factors may lead to dissatisfaction. These theories and models provide valuable insights into the factors that drive customer satisfaction in the restaurant industry and help inform strategies for enhancing the

dining experience. By understanding and addressing these factors, restaurant operators can work towards achieving higher levels of customer satisfaction and ultimately, business success.

Factors Affecting Customer Satisfaction

Several factors have been affirmed in the literature as key determinants of customer satisfaction in the restaurant industry. These factors include food and drink quality, service quality, ambiance, price, and cleanliness. Food and drink quality is a critical component of customer satisfaction in the restaurant industry (Namkung and Jang 2007). It encompasses the taste, presentation, variety, and freshness of the food and beverages offered. A study by Ryu et al. (2012) emphasized that food quality significantly influenced customer satisfaction and behavioral intentions in upscale restaurants. Service quality refers to the efficiency, friendliness, and professionalism of the restaurant staff (Parasuraman et al. 1988, Nguyen 2021). It has been found to be a strong predictor of customer satisfaction (Liu and Jang 2009). A study by Ha and Jang (2010) revealed that service quality dimensions such as responsiveness, assurance, and empathy were critical factors in determining customer satisfaction in casual dining restaurants. Ambiance, or the physical environment of the restaurant, contributes to the overall dining experience and influences customer satisfaction (Bitner 1992). Factors such as lighting, music, interior design, and seating arrangement play a role in shaping customers' perceptions of the restaurant's atmosphere. A study by Jang and Namkung (2009) demonstrated the significant impact of ambiance on customer satisfaction and behavioral intentions in upscale restaurants. Price has been identified as a determinant of customer satisfaction in the restaurant industry (Kivela et al. 1999). Customers evaluate the value they receive for the price they pay, and perceived value has been found to be positively related to satisfaction (Ryu et al. 2010). A study by Qin and Prybutok (2008) confirmed that price fairness positively influenced customer satisfaction in Chinese restaurants. Cleanliness is another critical factor influencing customer satisfaction in the restaurant industry (Soriano 2002). Cleanliness of the restaurant environment, tableware, and staff uniforms can significantly affect customers' perceptions of the dining experience. A study by Tuncer et al. (2021) indicated that cleanliness was a key driver of customer satisfaction in fast-food restaurants. Most recently, a study by Ha (2023) on customer loyalty in the food and beverage industry in Ho Chi Minh City, Vietnam, following the COVID-19 pandemic, discovered that factors such as service quality, reasonable pricing, and restaurant atmosphere positively impact customer satisfaction. In summary, various empirical studies have identified and ranked the importance of factors such as food and drink quality, service quality, ambiance, price, and cleanliness in determining customer satisfaction in the restaurant industry across different contexts.

Customer Loyalty and Retention

Customer loyalty and retention are crucial concepts in the restaurant industry, as they represent customers' ongoing commitment and likelihood of returning to a particular establishment. Customer loyalty refers to the emotional attachment and preference for a specific brand or business, leading to repeated patronage (Oliver 1999). Retention, on the other hand, is the ability of a business to maintain its customer base over time (Reichheld and Teal 1996, Ha 2022, Ha 2023). The significance of customer loyalty and retention in the restaurant industry cannot be overstated, as these factors contribute to the long-term success and profitability of businesses (Dick and Basu 1994). Loyal and returning customers not only provide a stable revenue source but also help reduce marketing costs and foster positive word-of-mouth (Reichheld and Sasser 1990, Nguyen 2021). The relationship between customer satisfaction, loyalty, and retention has been extensively studied in the literature. Customer satisfaction is often considered an intermediary factor in creating loyalty and return intention (Anderson and Sullivan 1993). When customers are satisfied with their dining experiences, they are more likely to develop loyalty and return to the restaurant (Bowen and Chen 2001). A study by Hennig-Thurau et al. (2002) validated that customer satisfaction was a significant driver of customer loyalty in the service industry, including the restaurant sector. Research by Ryu et al. (2008) substantiated that customer satisfaction mediated the relationship between the quality of the physical environment, food, and service, and customer loyalty and return intention in the restaurant industry. In summary, customer loyalty and retention are essential for the success and sustainability of businesses in the restaurant industry. Customer satisfaction plays a vital role in fostering loyalty and return intention, making it a critical factor for businesses to focus on and optimize.

The Impact of the COVID-19 Pandemic on the Restaurant Industry

The COVID-19 pandemic has had a significant impact on the restaurant industry, causing numerous challenges and changes that have affected customer behavior, preferences, and expectations. The global health crisis has led to a shift in the way customers dine out, with many preferring contactless services, takeaway, or delivery options (Alhemimah 2023). Additionally, concerns over health and safety have led to increased expectations for cleanliness and hygiene practices in restaurants (Brizek et al. 2021). The pandemic has also resulted in a change in customer preferences, with a growing emphasis on value for money, local sourcing, and sustainable practices (Martino et al. 2021, Nguyen 2021, Ha 2022). These changes have the potential to affect the factors influencing customer satisfaction, as customers now place greater importance on different aspects of their dining experience. The literature reveals that during and after the pandemic, the factors influencing customer satisfaction in the restaurant industry may have evolved to reflect new priorities and expectations. For example, cleanliness and hygiene practices have become more critical in driving customer satisfaction (Brizek et al. 2021). Similarly, contactless services and the ability to adapt to new service

delivery models, such as takeout and delivery, have become essential in meeting customer expectations (Alhemimah 2023, Ha 2023). In conclusion, the COVID-19 pandemic has significantly impacted the restaurant industry, leading to changes in customer behavior, preferences, and expectations. These changes have likely influenced the factors that drive customer satisfaction, requiring restaurants to adapt and respond to new customer demands and priorities.

Cultural and Regional Factors

Cultural and regional factors play a crucial role in shaping customer satisfaction, loyalty, and retention in the restaurant industry, especially in specific contexts such as Can Tho City and the Vietnamese market. Understanding the cultural and regional influences can help restaurant owners and managers cater to local preferences and expectations, ultimately enhancing customer satisfaction and fostering loyalty (Nguyen 2021, Ha 2022, Ha 2023). Research on Vietnamese dining habits and preferences reveals that traditional Vietnamese cuisine, known for its emphasis on fresh ingredients, balance of flavors, and presentation, is highly valued by local consumers (Mai and Bui 2018). Moreover, cultural values such as collectivism, relationship-building, and hospitality are essential in the Vietnamese context, affecting the way customers perceive service quality and overall dining experiences (Han et al. 2019). In Can Tho City, a major tourism hub in the Mekong Delta region, the restaurant industry is influenced by both local and international customers, with diverse cultural backgrounds and preferences (Nguyen 2021). As such, it is essential for restaurant owners and managers to understand and adapt to these cultural and regional factors to meet the diverse needs of their customers and ensure high satisfaction, loyalty, and retention rates. In summary, cultural and regional factors significantly impact customer satisfaction, loyalty, and retention in the restaurant industry. A thorough understanding of these factors in the specific context of Can Tho City and the Vietnamese market is essential for restaurant owners and managers to tailor their offerings and services, ultimately enhancing customer satisfaction and fostering loyalty.

Management Implications and Strategies

Management implications and strategies are essential for restaurant owners and managers to improve customer satisfaction, loyalty, and retention. The literature offers several strategies and best practices to enhance these key performance indicators in the restaurant industry, including service training, menu design, and marketing communication (Pike et al. 2018). Service training is crucial for ensuring that employees understand and meet customer expectations, ultimately leading to higher satisfaction and loyalty (Pham et al. 2016). Employee training programs focusing on soft skills, such as communication and problem-solving, as well as technical skills, like food handling and preparation, are essential in providing quality service. Menu design plays a significant role in attracting customers and meeting their preferences (Magnini and Kim 2016). A well-designed menu should consider factors such as variety, dietary preferences,

regional tastes, and cultural influences. Additionally, menu design should incorporate visual appeal and easy-to-understand descriptions to enhance customer satisfaction. Furthermore, marketing communication helps restaurants to create brand awareness and build relationships with customers (Sigala 2018). Effective marketing strategies, such as social media marketing, targeted promotions, and customer feedback management, can contribute to increased customer satisfaction and loyalty.

In the Can Tho City context, these strategies and best practices are relevant and applicable. Considering the city's diverse cultural and regional factors, restaurant owners and managers should adapt their offerings and services to meet the unique needs of both local and international customers (Nguyen et al. 2018, Nguyen 2021). Implementing effective management strategies, such as service training, menu design, and marketing communication, can help restaurants in the city enhance customer satisfaction, loyalty, and retention.

In conclusion, the literature review provides a solid foundation for understanding the various factors that can influence customer satisfaction, loyalty, and retention in the restaurant industry, as well as the impact of the COVID-19 pandemic and cultural and regional factors in Can Tho City's context. The following section, "Methodology," will detail the methods and approaches employed in this study to address the research questions and objectives.

Methodology

Research Hypotheses

Upon examining the existing literature, this study formulated the subsequent research hypotheses to explore the factors affecting tourist satisfaction in Can Tho City's restaurant industry post-COVID-19 pandemic:

- Research hypothesis 1 (H1): Flavor of food and drinks has a positive and significant impact on customer satisfaction in Can Tho City's restaurant industry.
- Research hypothesis 2 (H2): Reasonable price has a positive and significant impact on customer satisfaction in Can Tho City's restaurant industry.
- Research hypothesis 3 (H3): Cleanliness has a positive and significant impact on customer satisfaction in Can Tho City's restaurant industry.
- Research hypothesis 4 (H4): Service quality has a positive and significant impact on customer satisfaction in Can Tho City's restaurant industry.
- Research hypothesis 5 (H5): Restaurant atmosphere has a positive and significant impact on customer satisfaction in Can Tho City's restaurant industry.
- Research hypothesis 6 (H6): Customer satisfaction has a positive and significant impact on customer loyalty in Can Tho City's restaurant industry.

- Research hypothesis 7 (H7): Customer satisfaction has a positive and significant impact on customer retention in Can Tho City's restaurant industry.
- Research hypothesis 8 (H8): Customer loyalty has a positive and significant impact on customer retention in Can Tho City's restaurant industry.

The independent and dependent variables were listed as follows:

Dependent Variables: (1) Customer satisfaction (SAT) (H1, H2, H3, H4, H5); (2) Customer loyalty (LOY) (H6); and (3) Customer retention (RET) (H7, H8).

Independent Variables: (1) Flavor of food and drinks (FL) (H1); (2) Reasonable price (RP) (H2); (3) Cleanliness (CL) (H3); (4) Service quality (SQ) (H4); (5) Restaurant atmosphere (RA) (H5); (6) Customer satisfaction (SAT) (H6, H7); (7) Customer loyalty (LOY) (H8)

These dependent and independent variables are crucial in understanding the factors that contribute to tourist satisfaction in Can Tho City's restaurant industry after the COVID-19 pandemic. By analyzing the relationships between these variables, the study aimed to provide valuable insights and recommendations for enhancing the industry's resilience and long-term success.

Research Model

Based on the aforementioned hypotheses, the research model for this investigation was subsequently developed by the author as follows:

Figure 1. *Research Model*
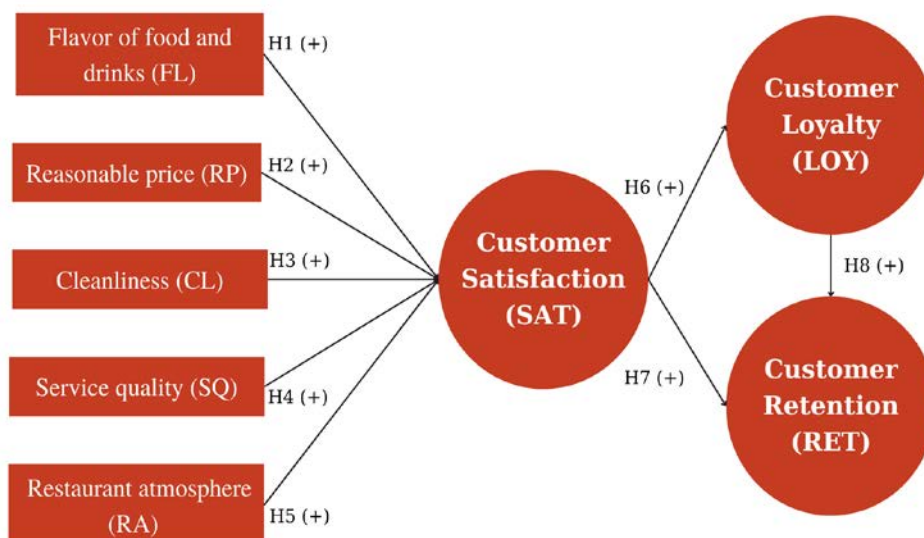
Source: The author (2023).

Mixed-Methods Approach

The research process, as illustrated in Figure 2, encompasses the following specific research stages:

(1) Draft Scale Construction

The author conducted qualitative research to identify factors influencing tourist satisfaction in the restaurant industry at Can Tho City, Vietnam, after the COVID-19 pandemic, within a specific context and time frame. The draft scale used to meas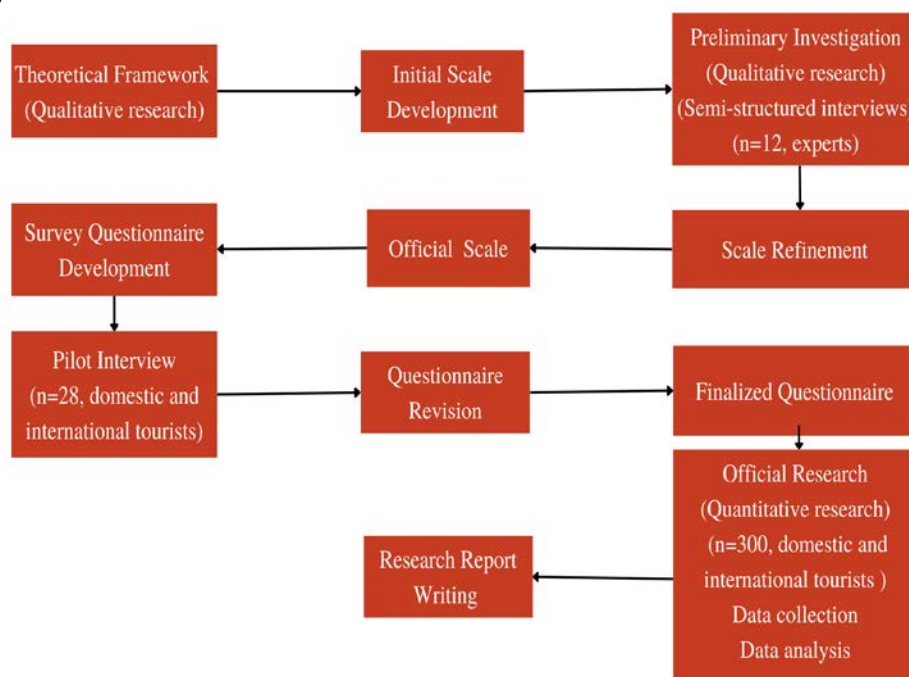ure the concepts in the research model was proposed by the author based on theoretical foundations drawn from previous related concepts and studies.

Figure 2. *Research Process*

Source: The author (2023).

(2) Preliminary Research Phase

This phase aimed to adjust the draft scale (i.e modify and supplement the observed variables used to define and measure the concepts in the research model). The author utilized qualitative methods (semi-structured interviews) based on prepared scripts to gather expert opinions (n=12). Representatives from various entities in Can Tho city's tourism industry, such as the Department of Culture, Sports and Tourism, travel agencies, restaurants/hotels, etc., were selected through purposive sampling. Interview results helped adjust the observed variables proposed in the previous draft scale. Refined variables were used to construct the questionnaire for the main research phase. Subsequently, the author tested and assessed the questionnaire's suitability (e.g., language, response level/cooperation

of survey participants, etc.) as the basis for determining sample size, and sampling method in the pilot research and the main study phase. The quantitative research method (pilot survey) was performed with a sample size (n=28) of Vietnamese domestic tourists and international tourists in Can Tho city. Non-random sampling (convenience sampling) was applied in this phase. Following the pilot survey phase, the results helped adjust the questionnaire, resulting in the official questionnaire.

(3) Main Research Phase

This phase involved quantitative research, aiming to validate the scales in the research model through the official interview questionnaire. The survey questionnaire, consisting of 24 questions (both multiple-choice and open-ended), was designed by the author to suit the research context of tourism in Can Tho City. The questionnaire was divided into six main sections, each exploring data on a specific factor: (1) flavor of food and drinks (FL); (2) reasonable price (RP); (3) cleanliness (CL); (4) service quality (SQ); (5) restaurant atmosphere (RA); and (6) personal information of the respondents. A 5-point Likert scale was used, ranging from 1 (strongly disagree) to 5 (strongly agree). There were 39 observed variables across the 8 factors (see Table 1). Additionally, control variables for the respondents' personal information (e.g., gender, age group, place of origin, yearly earnings, first visit to Can Tho City or not, optimal travel season, duration of stay, and type of travel group) were also included.

Table 1. *References for Measurement Scales*

Variables	Observed variables/Sources
Flavor of food and drinks (FL)	1. Taste: The overall taste profile of the food and drinks, which includes aspects such as sweetness, saltiness, sourness, bitterness, and umami (Soriano 2002). 2. Aroma: The smell or fragrance of the food and drinks, which plays a significant role in the overall flavor perception (Spence 2020). 3. Presentation: The visual appeal and arrangement of the food and drinks, which can influence customer perceptions of taste and quality (Namkung and Jang 2007). 4. Freshness: The quality and freshness of the ingredients used in the food and drinks, which can impact the overall flavor (Mai and Bui 2018). 5. Variety: The range of food and drink options available on the menu, offering diverse flavors and catering to different customer preferences (Ryu et al. 2012).
Reasonable price (RP)	1. Price fairness perception: Customers' assessment of the price in relation to the quality of food and service they receive (Xia et al. 2004). 2. Price comparison: Customers' perception of the restaurant's prices compared to other similar establishments in the area (Kivela et al. 1999). 3. Price-value ratio: Customers' evaluation of the overall value they receive for the price they pay, considering factors such as food quality, service quality, and ambiance (Ryu et al. 2010).

	4. Menu price range: The range of prices on the menu, reflecting the affordability and variety of options available to customers (Magnini and Kim 2016).
Cleanliness (CL)	1. Cleanliness of dining area (Soriano 2002): This indicator includes the cleanliness of floors, tables, chairs, and other dining surfaces. 2. Cleanliness of tableware and utensils (Soriano 2002): This includes the cleanliness of plates, glasses, cutlery, and other utensils provided for customers. 3. Cleanliness of restroom facilities (Tuncer et al. 2021): This involves evaluating the overall cleanliness, maintenance, and hygiene of the restrooms available for customers. 4. Cleanliness of staff uniforms (Tuncer et al. 2021): This indicator assesses the cleanliness and presentation of the staff's clothing and overall appearance. 5. Food handling and preparation hygiene (Tuncer et al. 2021): This involves assessing the cleanliness of the kitchen area and the adherence to proper food handling and preparation practices.
Service quality (SQ)	1. Responsiveness: The ability of restaurant staff to provide timely and efficient service to customers (Parasuraman et al. 1988). 2. Assurance: The knowledge and courtesy of staff, as well as their ability to instill trust and confidence in customers (Parasuraman et al. 1988). 3. Empathy: The level of individualized attention and care provided by restaurant staff towards customers (Parasuraman et al. 1988). 4. Reliability: The consistency and dependability of the service provided, ensuring that customers receive accurate and correct service (Parasuraman et al. 1988). 5. Tangibles: The physical appearance and presentation of the restaurant, including the cleanliness, equipment, and staff uniforms (Parasuraman et al. 1988).
Restaurant atmosphere (RA)	1. Lighting: The level of brightness and the color temperature of the lighting in the restaurant, which can influence customers' mood and dining experience (Kwon et al. 2017). 2. Music: The genre, volume, and tempo of the music played in the restaurant, which can affect customers' emotions and behavior (Biswas et al. 2018). 3. Interior design: The style, color scheme, and overall aesthetic of the restaurant's interior design, which can impact customers' perceptions and satisfaction (Lin 2004). 4. Seating arrangement: The layout and comfort of the seating options in the restaurant, which can influence customers' social interactions and overall enjoyment (Robson 2008). 5. Ambient scent: The presence and intensity of pleasant aromas in the restaurant, which can enhance customers' perceptions of food quality and overall atmosphere (Spence 2020). 6. Noise level: The level of background noise, including conversations and ambient sounds, which can affect customers' comfort and satisfaction (Kwon et al. 2017).

Customer satisfaction (SAT)	1. Food and Drink Quality: Taste, presentation, variety, and freshness of the food and beverages (Namkung and Jang 2007, Ryu et al. 2012). 2. Service Quality: Efficiency, friendliness, and professionalism of the restaurant staff (Parasuraman et al. 1988, Liu and Jang 2009). 3. Ambiance: Lighting, music, interior design, and seating arrangement contributing to the overall dining experience (Bitner 1992, Jang and Namkung 2009). 4. Price: Perception of fairness in the price paid for the goods and services received (Kivela et al. 1999, Qin and Prybutok 2008). 5. Cleanliness: Cleanliness of the restaurant environment, tableware, and staff uniforms affecting customers' perceptions (Soriano 2002, Tuncer et al. 2021).
Customer loyalty (LOY)	1. Repeat patronage: The frequency of a customer's return visits to a particular restaurant (Oliver 1999). 2. Positive word-of-mouth: The extent to which customers recommend a restaurant to friends, family, or colleagues (Reichheld and Sasser 1990). 3. Emotional attachment: The degree of emotional connection a customer feels towards a specific restaurant (Bowen and Chen 2001). 4. Brand preference: The extent to which customers prefer a particular restaurant over its competitors (Dick and Basu 1994). 5. Resistance to switching: The likelihood that a customer will not switch to a competitor, even when faced with incentives or better offers (Hennig-Thurau et al. 2002).
Customer retention (RET)	1. Customer lifetime value: The total net profit a restaurant expects to earn from a customer over the duration of their relationship (Berger and Nasr 1998). 2. Customer churn rate: The percentage of customers who stop visiting a particular restaurant over a given period (Reichheld and Teal 1996). 3. Frequency of repeat visits: The average number of times a customer returns to a restaurant within a specified time frame (Mascarenhas et al. 2006). 4. Length of customer relationship: The duration of time a customer has been frequenting a restaurant, usually measured from the date of their first visit (Bolton 1998).

Source: The author (2023).

The required sample size for obtaining the desired data was at least five times the number of observed variables (Hoang and Chu 2008). For this study, the author used 39 observed variables in the research model, necessitating a minimum sample size of (n = 39x5 = 195). Eventually, the author decided on a sample size (n=300) of Vietnamese domestic tourists and foreign tourists in Can Tho City, using non-random purposive sampling to increase data reliability. The participants selected for the survey had to meet the condition: "planning to undertake a new trip in 2023". Survey participants' names were anonymized for privacy protection. To conduct the study, a total of 12 mid-range restaurants near or within the 12 most typical tourist destinations in Can Tho city were chosen. Direct surveys were conducted with small groups of 2-3 people, based on specific cases at each survey

site, lasting an average of 30 to 40 minutes per session. About 20-25 tourists were surveyed at each destination.

(4) <u>Data Analysis</u>

Upon completing the official survey, the initially obtained primary data were checked for validity. The data were then input and stored on Excel before being transferred to SPSS 20.0 for descriptive statistics. Additionally, Structural Equation Modeling (SEM) validation, supported by SMARTPLS 3.0 software, was applied to evaluate the scale and determine the importance of factors as well as test the research hypotheses.

The study took place over ten months (from June 2022 to March 2023) during the recovery phase following the pandemic. This duration allowed sufficient time for recruiting interview and survey participants, gathering data through interviews, surveys, field observations, and conducting data analysis. The research was conducted during two primary peak tourism periods: summer and year-end. This strategic timing ensured that the most reliable and persuasive information was obtained for the study. It was also a crucial period for the restaurant sector in Can Tho City, Vietnam. The selected timeframe facilitated the assessment of tourist satisfaction as businesses adjusted to new health and safety protocols while working to regain customer confidence. Examining this period offered valuable insights into the factors that affected satisfaction, enabling stakeholders to make informed decisions to bolster the industry's resilience and long-term prosperity.

Results

Demographic Profile of Survey Respondents

A total of 300 questionnaires were distributed, and 286 valid responses were collected, yielding a response rate of approximately 95.3%. This actual sample size was confirmed to be more than the minimum required, allowing for the execution of further analytical methods. Descriptive statistics of the sample were presented in Table 2 thanks to the data analysis software SPSS 20.0.

The demographics of the survey respondents in this research sample reveal that the majority are female (51.7%), compared to 46.2% male. Most of the tourists surveyed were young, aged between 18 and 35, accounting for 64.4% of the sample. Middle-aged individuals, from 36 to 49 years old, made up 21.6%, while those aged 50 to over 60 represented only 14%.

Regarding professional backgrounds, 28.7% of the respondents were trained staff/workers, 28.3% were artisans, traders, or business administrators, and 27.3% were executives or high-level intellectual professionals. Agricultural workers constituted 8.7%, and untrained staff/workers made up 4.2% of the sample, highlighting its diverse nature. This heterogeneity can provide insights into varying customer preferences and expectations across different occupations,

contributing to a comprehensive understanding of factors influencing satisfaction in the restaurant industry.

In this sample, Vietnamese domestic tourists comprised 58%, while international tourists accounted for 42%. The majority of surveyed tourists had relatively high incomes, with 56.6% earning between $25,000 and $49,000, 22.4% earning below $25,000, and only 19.9% earning between $50,000 and $100,000.

Approximately 72% of the tourists were first-time visitors to Can Tho City. Most respondents opted for short stays in the city, either 1-2 days (51.7%) or 3-4 days (39.2%), with longer stays of 1-2 weeks being quite rare at only 9.1%. Throughout the year, their preferred travel periods were during the summer months of June through August (39.2%) and the end of the year, from December to January (34.3%). In contrast, 21.3% of the respondents chose to travel between February and May, while a mere 5.2% preferred the period from September to November for their visit. The majority of respondents in the sample chose to travel to Can Tho City in groups, with friends being the most common choice (45.8%), followed by couples (24.8%) and families (22.7%). Solo travelers accounted for a smaller proportion, at 6.7%.

Table 2. *Demographics of Research Sample (n=286)*

Survey Respondents		Frequency	Percent (%)
Gender	Female	148	51.7
	Male	132	46.2
	Other/Decline to disclose	6	2.1
Age group	18-25 years old	50	17.5
	26-35 years old	134	46.9
	36-49 years old	62	21.6
	50-60 years old	26	9.1
	> 60 years old	14	4.9
Job title	Agricultural workers	25	8.7
	Artisans, traders, business administrators	81	28.3
	Executives and high-level intellectual professionals	78	27.3
	Trained staff/workers	82	28.7
	Untrained staff/workers	12	4.2
	Not specified	8	2.8

Place of origin	Vietnamese domestic tourists	166	58.0
	International tourists	120	42
Yearly earnings	Below $25,000	64	22.4
	$25,000 - $49,000	162	56.6
	$50,000 - $74,000	48	16.8
	$75,000 - $100,000	9	3.1
	Different amount	3	1.1
First visit to Can Tho City	Yes	206	72.0
	No	80	28.0
Duration of stay	Brief journey: 1-2 days	148	51.7
	Short excursion: 3-4 days	112	39.2
	Week-long getaway	23	8.0
	Prolonged visit: over two weeks	3	1.1
Optimal Travel Season	February - May	61	21.3
	June - August	112	39.2
	September - November	15	5.2
	December - January	98	34.3
Type of travel group	Partner	71	24.8
	Individual	19	6.7
	Family members	65	22.7
	Group of friends	131	45.8
Total		286	100.0

Source: The author (2023)

Evaluating the Measurement Model

The assessment of the measurement model from the gathered data comprised of (1) Composite Reliability (CR) for assessing the internal consistency and individual reliability of each observed scale/variable; (2) Average Variance

Extracted (AVE) for evaluating convergent validity; and (3) Fornell-Larcker criterion and cross-loading for examining discriminant validity.

Initially, the convergent validity of the model was determined through Factor Loading, CR, and AVE. The results indicated that all Factor Loading coefficients for the observed variables exceeded 0.7, thus meeting the convergent validity requirements (Sovey et al. 2022). Furthermore, the CR values for the scales ranged from 0.957 to 0.968, and the AVE levels for the scales all met the threshold, reflecting satisfactory reliability ranging from 0.651 to 0.895. Consequently, the measurement model was deemed appropriate. Next, the researcher assessed the discriminant validity between constructs, which was characterized by the low correlation between the observed variables measured for one related construct and the observed variables measured for another construct. The results demonstrated that the square root value of AVE (value on the diagonal) for each construct was larger than the corresponding correlation coefficients for that construct compared with other constructs in the research model. As a result, the discriminant validity of the constructs was confirmed. Lastly, the discriminant value achieved in the measurement for the constructs of the research model was also validated, as the cross-load coefficient of the observed variables on the construct itself was greater than that on other constructs.

While the Fornell-Larcker criterion and cross-loading testing are regarded as accepted methods in SmartPLS for assessing discriminant validity between constructs, they have limitations (Ha 2022, Ha 2023). Hence, Dijkstra and Henseler (2015) argued that the HTMT index, developed through simulation studies, provided a better measure of discriminant validity. If the HTMT index value was below 1, the discriminant value between the two related variables was confirmed (Garson 2016 as cited by Kante et al. 2018). Additionally, the HTMT index needed to be less than 0.9 (Dijkstra and Henseler 2015). The study results showed that the Heterotrait-Monotrait Ratio values for each construct were below 0.9, thereby establishing the discriminant validity criterion for the HTMT.

Assessing the Structural Model

Testing for Multicollinearity in Partial Least Squares Structural Equation Modeling (PLS-SEM)

Multicollinearity arises between the respective exogenous and endogenous variables (Lowry and Gaskin 2014). Multicollinearity involving latent variables is present when the Variance Inflation Factor (VIF) value exceeds 5 or falls below 0.2 (Wong 2013 as cited by Ha 2022). The results revealed that all VIF coefficients remained under the limit of 5 (the highest VIF value being 2.271 (less than 5) and the lowest VIF value being 1.812 (greater than 0.2)). Consequently, multicollinearity was not observed among the latent variables.

Moreover, several researchers (e.g., Tenenhaus 2005, Wetzels et al. 2009 as cited by Huynh 2020, Ha 2022) have shown that the PLS structural model's quality should be assessed using an Effect Size Index, Communality Value, and Goodness of Fit (GoF) index. Hence, this study examined these indicators.

Evaluating Effect Size Index

The Effect Size Index measures the impact of a specific exogenous latent variable on an endogenous variable when the exogenous variable is removed from the model. The Effect Size Index is categorized into three groups: large effect size with f-values above 0.40; medium effect size with f-values between 0.25 and 0.4; and small effect sizes with f-values less than 0.10 (Cohen 1988 as cited by Rosenthal et al. 1994). Cohen's f-index corresponds to an R^2 value above 0.26 for a significant effect, between 0.13 and 0.26 for moderate influence, and less than 0.02 for minor impact (Wetzels et al. 2009 as cited by Huynh 2020). The contributions of FL, RP, CL, SQ, and RA in predicting customer satisfaction were found to be highly predictive ($R^2 = 0.624$), with a value exceeding 0.26. The study's outcomes also demonstrated that customer satisfaction (SAT) accounted for 61.5% of customer loyalty (LOY) and 59.1% of diners' intention to return (RET). For customer loyalty (LOY), the findings indicated that it accounted for 68.2% of diners' intentions to return (RET).

Communality Value

Communality Value is employed to evaluate and validate the overall PLS model (Tenenhaus 2005, Wetzes et al. 2009 as cited by Huynh 2020). To fit the model, these researchers suggested that the communality index, equivalent to AVE in the PLS model, should have a value greater than 0.5 (Fornell and Larcker 1981 as cited by Ha 2022). Consequently, this study's structural model was found to be in good agreement with the experimental data, as the AVE values of the structures were all greater than 0.5.

Goodness of Fit (GoF)

GoF, proposed by Tenenhaus et al. (2005), is the criterion for the overall assessment of the model's fit using a measure that combines effect size with convergence value. SmartPLS does not typically provide values for the GoF metric, so the metric must be manually calculated by taking the square root of the average of the AVE values of the structures multiplied by the average of the R^2 values of the latent variables. The GoF impact can be classified into (1) large effect (GoF = 0.36), (2) moderate effect (GoF = 0.25), and (3) small effect (GoF = 0.1) (Wetzes et al. 2009 as cited by Ha et al. 2014). The study's model showed that the GoF index was 0.624, greater than 0.36, indicating a significant influence on the model. In summary, all the data analysis results presented have confirmed that the PLS model established in this research was in good agreement with the experimental data.

Evaluating Hypotheses: Unveiling the Findings of Hypothesis Testing

In this research, the author investigated eight hypotheses, pinpointing five factors that influence tourist satisfaction in Can Tho City's restaurant industry following the COVID-19 pandemic: (1) flavor of food and drinks (FL); (2) reasonable price (RP); (3) cleanliness (CL); (4) service quality (SQ); and (5) restaurant atmosphere (RA). Furthermore, the study outcomes also verified the

favorable effect of tourist contentment on their devotion and ongoing patronage, as well as the encouraging role of customer allegiance in maintaining their long-term engagement (i.e., the positive impact of SAT on LOY, SAT on RET, and LOY on RET). Consequently, the overall results validated all eight research hypotheses.

More specifically, the research results have shown that the model, which includes five factors: (1) flavor of food and drinks; (2) reasonable price; (3) cleanliness; (4) service quality; and (5) restaurant atmosphere, explains 62.4% of the variation in tourist satisfaction ($R^2 = 0.624$), with a value exceeding 0.26. The study findings also emphasized that customer satisfaction (SAT) accounted for 61.5% of customer loyalty (LOY) and 59.1% of diners' intentions to return (RET). Additionally, customer loyalty (LOY) contributed to 68.2% of the diners' intentions to revisit (RET).

The research results have confirmed the H1 with ($\beta = 0.559$, P-value = 0.001 < 0.05) that demonstrated a strong positive relationship and statistical significance. Among the eight hypotheses, H1 ranked first in determining the factors influencing tourist satisfaction in Can Tho City's restaurant industry, Vietnam, following the COVID-19 pandemic. Among the observed variables, "Taste" (Mean Value = 3.48) and "Freshness" (Mean Value=3.93) were found to be the highest-rated factors, whereas "Aroma" (Mean Value = 2.46) and "Presentation" (Mean Value = 1.46) were the lowest-rated factors. In conclusion, the research results have revealed that the overall taste profile and freshness of ingredients played crucial roles in determining customer satisfaction in Can Tho City's restaurant industry, Vietnam, after the COVID-19 pandemic, while the aroma and presentation were less influential factors.

The research outcomes have validated the H2 with ($\beta = 0.518$, P-value = 0.003 < 0.05) that demonstrated a strong positive relationship and statistical significance. Among the eight hypotheses, H2 ranks second in determining the factors influencing tourist satisfaction in Can Tho City's restaurant industry, Vietnam, following the COVID-19 pandemic. After evaluating the observed variables, the highest-rated factor was found to be the "Price-value ratio" (Mean Value = 2.9) while the lowest-rated factor was the "Menu price range" (Mean Value = 2.13). In conclusion, the research outcomes have demonstrated that reasonable pricing, particularly in terms of the price-value ratio, significantly contributed to customer satisfaction in Can Tho City's restaurant industry after the COVID-19 pandemic, whereas the menu price range had a lesser impact.

The findings of the study have affirmed the (H3) with ($\beta = 0.472$, P-value = 0.031 < 0.05) that demonstrated a strong positive relationship and statistical significance. Among the eight hypotheses, H3 ranks third in determining the factors influencing tourist satisfaction in Can Tho City's restaurant industry, Vietnam, following the COVID-19 pandemic. Upon evaluating the observed variables, the highest-rated factor was "Cleanliness of dining area" (Mean Value = 3.91) while the lowest-rated factor was "Cleanliness of staff uniforms" (Mean Value = 2.1). In conclusion, the research outcomes have proven that cleanliness, particularly the cleanliness of the dining area, played a vital role in customer satisfaction in Can Tho City's restaurant industry after the COVID-19 pandemic, while the cleanliness of staff uniforms had a lesser impact.

The study findings have substantiated the (H4) with (β = 0.423, P-value = 0.038 < 0.05) that demonstrated a positive relationship and statistical significance. Among the eight hypotheses, H4 ranks fourth in determining the factors influencing tourist satisfaction in Can Tho City's restaurant industry, Vietnam, following the COVID-19 pandemic. The highest-rated observed variable was "Responsiveness" (Mean Value = 4.1) while the lowest-rated observed variable was "Tangibles" (Mean Value = 2.04). In conclusion, the research findings have shown that service quality, particularly staff responsiveness, played a crucial role in customer satisfaction in Can Tho City's restaurant industry after the COVID-19 pandemic, whereas tangibles had a lesser impact.

The investigation of the research has affirmed the results of the (H5) with (β = 0.315, P-value = 0.042 < 0.05) that demonstrated a positive relationship and statistical significance. Among the eight hypotheses, H5 ranks fifth in determining the factors influencing tourist satisfaction in Can Tho City's restaurant industry, Vietnam, following the COVID-19 pandemic. The highest-rated observed variable was "Interior Design" (Mean Value = 4.02) while the lowest-rated observed variable was "Noise Level" (Mean Value = 2.01). In conclusion, the research findings indicated that restaurant atmosphere, particularly the interior design, played a significant role in customer satisfaction in Can Tho City's restaurant industry after the COVID-19 pandemic, while noise level had a lesser impact.

The research findings have specifically confirmed the (H6) with (β = 0.718, P-value = 0.000 < 0.05) that demonstrated a strong positive relationship and statistical significance. The importance of the factors was ranked in descending order as follows: (1) flavor of food and drinks (Mean Value = 4.12); (2) reasonable price (Mean Value = 4.01); (3) cleanliness (Mean Value = 3.62); (4) service quality (Mean Value = 3.52); and (5) restaurant atmosphere (Mean Value = 3.14). In conclusion, this study highlighted the significance of prioritizing these factors, with particular emphasis on food and drink flavors and reasonable pricing, in order to enhance customer satisfaction and loyalty in the restaurant industry.

The research investigation has affirmed the results of the (H7) with (β = 0.602, P-value = 0.001 < 0.05) that demonstrates a strong positive relationship and statistical significance. After analyzing the variables, it was found that the highest-rated factors were repeat patronage (Mean Value = 4.92) and positive word-of-mouth (Mean Value = 4.13), while the lowest-rated factors included emotional attachment (Mean Value = 3.01), brand preference (Mean Value = 3.00), and resistance to switching (Mean Value = 2.11). In conclusion, the findings of this study confirmed the importance of understanding and addressing these key factors in order to boost customer retention in Can Tho City's restaurant industry following the COVID-19 pandemic.

The study conclusions have reinforced the evidence of the (H8) with the β value (0.621) and the P-value = 0.000 < 0.05) that demonstrated a strong positive relationship and statistical significance. After analyzing the variables, it was found that the highest-rated factors were customer lifetime value (Mean Value = 4.45) and frequency of repeat visits (Mean Value = 4.21), while the lowest-rated factors included customer churn rate (Mean Value = 2.51) and length of customer relationship (Mean Value = 2.15). In conclusion, the findings of this study

emphasized the importance of understanding and addressing these key factors to enhance customer loyalty and retention in Can Tho City's restaurant industry following the COVID-19 pandemic.

Discussion

The present study aimed to explore the factors influencing customer satisfaction, loyalty, and retention in the restaurant industry of Can Tho City following the COVID-19 pandemic. The findings validated all eight hypotheses, emphasizing the significance of five factors on customer satisfaction in descending order as follows: (1) food and drink flavor; (2) reasonable pricing; (3) cleanliness; (4) service quality; and (5) restaurant ambiance. Furthermore, the study also confirmed the positive impact of customer satisfaction on customer loyalty and retention, and the positive influence of customer loyalty on customer retention.

These results corroborate previous research in the hospitality industry, which emphasized the importance of food and drink quality, pricing, cleanliness, service quality, and ambiance on customer satisfaction (e.g., Sulek and Hensley 2004, Ryu et al. 2012, Ha 2023). The study's findings are particularly relevant in the context of the Post-COVID-19 pandemic, where customer expectations and preferences have shifted towards a greater emphasis on safety, hygiene, and value for money (Brizek et al. 2021, Martino et al. 2021, Alhemimah 2023).

The study also provided valuable insights into the relationships between customer satisfaction, loyalty, and retention. The results highlighted the importance of understanding and prioritizing these factors to enhance customer satisfaction, loyalty, and retention in the restaurant industry, particularly in the post-pandemic context. This is consistent with previous research demonstrating the role of customer satisfaction in building customer loyalty and retention (e.g., Chang and Chen 2008, Oliver 1999, Ha 2022, Ha 2023).

From a practical standpoint, the findings of this study can assist restaurant operators and policymakers in Can Tho City and beyond in implementing effective strategies to enhance customer satisfaction, loyalty, and retention. By prioritizing the identified factors, businesses can better cater to the evolving needs and preferences of customers in the post-pandemic era. By comparing the results of this study with the findings in the "Literature Review" section, it is evident that the research has effectively addressed the research questions and objectives, providing a comprehensive understanding of the factors driving customer satisfaction, loyalty, and retention in Can Tho City's restaurant industry following the COVID-19 pandemic.

Conclusions

This study has successfully addressed the research questions and objectives by exploring the key factors influencing tourist satisfaction, loyalty, and retention in the restaurant industry in Can Tho City after the COVID-19 pandemic. The

findings revealed that food and drink flavor, reasonable pricing, cleanliness, service quality, and restaurant ambiance are the most significant factors affecting customer satisfaction, in that order. By understanding the relative importance of these factors, stakeholders can better prioritize their strategies to cater to customers' evolving needs and preferences in the post-pandemic context.

Moreover, the study confirmed that customer satisfaction serves as an intermediary in creating customer loyalty and return intention, emphasizing the importance of enhancing satisfaction to foster loyalty and retention. The positive relationship between customer satisfaction, loyalty, and retention found in this study is consistent with previous research and offers valuable insights for restaurant operators and policymakers in Can Tho City and beyond.

Furthermore, based on the obtained results, the study proposed the following concrete recommendations to help the restaurant industry enhance tourist satisfaction by addressing the key factors identified in the research.

Strategic Recommendations for Enhancing Can Tho's Restaurant Industry

(1) Develop a diverse and flavorful menu: Offer a wide variety of dishes catering to different tastes and dietary preferences, ensuring that food and drink items are consistently high in quality and flavor. Moreover, focus on the presentation and decoration of artistic and attractive dishes to better attract and satisfy customers.

(2) Implement competitive and transparent pricing: Set reasonable prices for menu items and clearly communicate them to customers, fostering trust and encouraging repeat visits.

(3) Maintain impeccable cleanliness and hygiene: Adhere to strict cleanliness standards throughout the establishment, including the kitchen, dining area, and restrooms, ensuring the safety and comfort of guests. Additionally, invest in uniforms for employees to project a neat, clean, and professional image, making it easier to impress and connect with diners.

(4) Invest in staff training and development: Provide comprehensive training and ongoing support for employees to enhance their service skills, enabling them to deliver attentive, efficient, and personalized customer service.

(5) Create a comfortable and inviting atmosphere: Design the restaurant's interior and exterior spaces to promote a welcoming and relaxing environment for guests, positively impacting their overall dining experience. Emphasize noise control management by limiting the number of people in a space or installing soundproof walls. Encourage the division of service spaces to suit different tourist segments, avoiding mixing between customer groups (e.g., families with or without children, couples, groups of friends, or elderly diners).

(6) Establish a loyalty program with special offers to further enhance diners' satisfaction, loyalty, and desire to return to the restaurant, ultimately contributing to the establishment's success.

By implementing these recommendations, restaurant owners and managers can cultivate a more enjoyable and satisfying dining experience for their customers, ultimately resulting in increased customer loyalty and retention. These factors are

crucial for achieving long-term success in the highly competitive restaurant industry.

In summary, the findings of this study have provided valuable insights into both theoretical and practical aspects of the restaurant industry. From a theoretical standpoint, the research has contributed to the existing literature on customer satisfaction by identifying and examining the key factors that influence tourist satisfaction in Can Tho City's restaurant industry following the COVID-19 pandemic. In terms of practical implications, the study provides a comprehensive understanding of the crucial factors driving customer satisfaction and offers valuable insights into their role in fostering loyalty and return intention. These findings have been utilized by the author to provide practical recommendations for stakeholders in Can Tho's restaurant industry. The aim is to facilitate the development of effective strategies that enhance the customer experience and promote long-term success.

Limitations and Future Research

This study acknowledged several limitations that may have impacted the generalizability of the findings. One such limitation is the sample size, which may not be representative of the broader population of tourists visiting Can Tho City's restaurants. Additionally, the geographical scope of the study was confined to Can Tho City, and thus the results might not be applicable to other locations with different cultural and economic contexts. Methodological constraints, such as the reliance on self-reported survey data and potential biases in participant responses, may also have influenced the study's conclusions. Future research is encouraged to address these limitations by increasing the sample size, exploring other geographical areas, and incorporating a variety of methodological approaches. This would contribute to a more comprehensive and nuanced understanding of tourist satisfaction in the restaurant industry.

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From the Exclusive to the Excessive. Lake Garda's Long History of Tourism from the Belle Époque to Overtourism

By Maria Paola Pasini[*]

There are destinations that have a long tourism history marked by different transformations and phases and generally with a continuous growth of the tourism phenomenon. In recent years, some of these locations are overwhelmed by overtourism, which focuses on specific places because of their beauty, notoriety, history and reputation. Recently local governances are beginning to implement sustainable strategies to curb flows and mitigate the impacts on the territory of tourism excesses. This is the only opportunity for the destination to continue its life and avoid decline: a new model of sustainable rejuvenation. The paper sets out to analyze some aspects of the long-term history of Lake Garda, one of the most popular destinations in Italy. Starting from a tourism history that has been mainly established since the 19th century with a very "exclusive" form, this contribution aims to focus on the main trends that have seen Garda's attractiveness grow over the decades. It also analyzes the problem of "overtourism" that has affected some lake locations in recent years and the strategies implemented at the local level to contain this phenomenon.

Keywords: *history of tourism, overtourism, sustainability, lake Garda, growth.*

Introduction

Limiting or declining? How an historical touristic destination cope with "overtourism"? Some Italian destinations have a long history that started from ancient times and then found wider development between the 19th and 20th centuries with a growing tourist precence. Today some of them are facing serious problems of tourist overcrowding. What is the current situation expecially in the aftermath of the Covid 19 pandemic crisis? What are the main problems? What solutions are local communities pursuing to contain excessive growth?

The paper aims to analyze some aspects of the long-term history of Lake Garda, Italy's largest lake (see Figures 1 & 2), from the origins of tourism to phenomenon of overtourism that has occurred in recent years. Lake Garda is actually one of the most popular destinations in Italy and in Europe.

In 2022 it was the first destination searched on the net so with a high demand pressure index ahead of Riviera Romagnola and Salento (Lybra Zucchetti 2022). More than 27 million presences were recorded in 2022 (Bresciatoday.it 2022).

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Figure 1. *Lake Garda in the Heart of Europe*
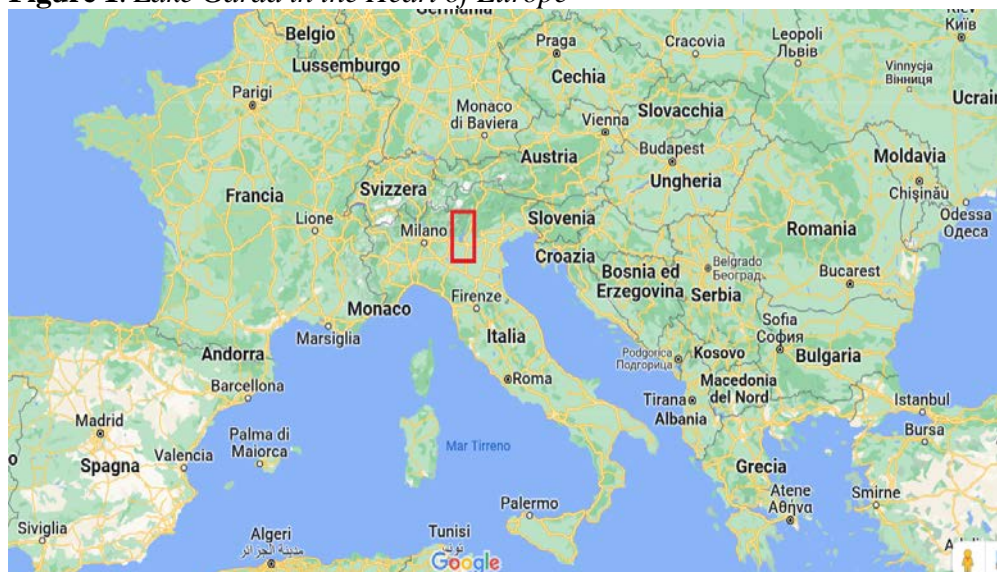
Source: Google Maps.

Figure 2. *Satellite image of Lake Garda (2023)*

Source: European program Copernicus.

After illustrating the Lake's long tradition of tourism, the study focuses on the impacts of the massive influx of tourists over the last years, and some economic, environmental, social, and cultural aspects. In addition, the study discusses some initiatives and possible proposals advanced by local institutions to control the growing tourist pressure on the territory and its local residents. Municipalities consider improving infrastructure and making the impact of tourism on the area more sustainable, but they are also beginning to talk about "limit" in attendance.

The earliest history of tourism on Lake Garda saw destinations providing very high standards of tourist hospitality for that time with attention to the environment and health. Actually it seems that the orientation is resuming its

historical one with an increasing focus on the quality of services and sustainability of the proposed offer: a sort of return to the past for the future.

Overtourism in the World

Over the past decade, the term "overtourism" has received much attention from the media, administrators, stakeholders, scholars, residents of tourist destinations, and tourists themselves (Capocchi et al. 2019). This is not a new phenomenon. More recently, its linguistic codification can be traced back to Skift, a New York-based company specializing in tourism research and marketing, and its founder Rafat Ali (2018). The neologism refers to the negative impact that popular destinations can experience in the absence of proper and conscious management of the dynamics that fuel tourism. Underestimating the phenomenon from an economic, environmental, social, and cultural point of view can lead to a series of imbalances and negative consequences, even to the decline of the tourism industry itself. The UNWTO (2018) describes the phenomenon as "the impact of tourism on a destination, or parts thereof, that excessively influences perceived quality of life of citizens and/or quality of visitor experiences in a negative way". Specifically, the occurrence or non-occurrence of overtourism would be closely related to the ability of institutions and stakeholders to manage tourist congestion in certain destinations. A significant factor to be considered and on which a wide-ranging debate is underway (Wall 2020, Postma et al. 2020, Butler 2020) is the concept of "carrying capacity", understood as the maximum number of people that can simultaneously visit a tourist destination without jeopardizing the system-territory and, at the same time, without compromising visitor satisfaction.

In general, we can define the term "overtourism" as "an excessive presence of tourists that carries negative socio-cultural and environmental consequences for residents, destinations and tourists". (Volo 2020) or also "a contemporary phenomenon, rapidly evolving and underlined by what is evidently excessive visitation to tourist destinations" (Milano et al. 2019a).

There are different approaches to this topic. In some cases, emphasis is placed on the accessibility of tourist destinations that can be reached via different modes of transportation: canals, roads, railways, ports, and it is impossible to set limits in this regard with respect to "carrying capacity". Another aspect is related to particularly fragile and delicate tourist destinations, such as some islands, the Greek Chrissi for example, where the excessive presence of people could cause an immediate deterioration of the natural characteristics of the places (Sheyvens and Momsen 2008). In other cases, the most important issue concerns the "contention" of space between residents and tourists, which causes friction and tension (Milano et al. 2019b). The excessive presence of tourists can place a burden on collective services (waterworks, urban waste collection, sewage) causing inconvenience to residents. The need to adjust these services imposes significant costs on the communities which are not always balanced by the adequate and widespread economic benefits derived from local tourism.

After a few years during which the issue of overtourism had remained under the radar, the phenomenon has recently begun to appear in public discourse, with an element of alarm and partly as a form of protest at first, and eventually leading to the creation of a European network of cities against tourism excesses (Montalto Monella 2018). In general, stakeholders, residents, politicians, and tourists themselves have not yet clearly identified priorities for a multifaceted problem that requires appropriate solutions for each individual case (Butler and Dodds 2022). However, this is an urgent problem that, if not solved, could lead to the very downfall of those tourist destinations which are unable to find an alternative model (Benner 2020). It is therefore necessary to encourage strategies to implement concrete actions based on the "sustainability pillars", leading to "responsible tourism" (Mihalic 2020).

In Italy, on the eve of the pandemic outbreak, the discussion had begun to take shape with the involvement of European institutions and the Italian government. A debate on the phenomenon had been initiated not only in regard to large cities like Venice, Rome, Florence (Ianniello and Cánoves 2021) but also to smaller towns, focusing on deseasonalization as a possible remedy (Riva 2019). The pandemic crisis imposed an inevitable halt to the discussion, which has however resumed again in more recent times (Aragú and Mestanza 2021, Koh 2020).

At Lake Garda, the issue of increasing tourist flows has arisen as well, in particular in after the pandemic Covid-19 period and this has become a real problem.

Working Method

Every tourist destination faces several stages during its existence from exploration to maturity (see Figure 3). According to Butler's Tourism Area Life Cicle Model (1980), after the maximum expansion with the 'consolidation', the stage of 'stagnation' is reached. This phase opens the way to two possibilities for the tourist destination: either ultimate decline or a chance for revival through a new development model. But in recent years, sometimes after the 'consolidation' phase, and then at the full utilization of the resources without serious imbalances for the territory, a progressive increase in tourist flows can be witnessed. This progressive increase can lead to 'saturation' defined as a large overrun of the destination's carrying capacity. We are facing the phenomenon of 'overtourism'. Thus, in some cases instead of the "stagnation" phase as a progressive reduction in flows, we see an unsustainable increase in tourist attendance. So not a 'stagnation' but a 'saturation'.

A condition that could threaten the survival of a lot of destination. So the contribution investigates the long history of Garda along this path from exploration to saturation till the possibility of rejuvenation. The approach draws part from sociology, which aims to represent situations with a partecipative observation, an experiential perspective that is very close to reality, while maintaining a certain detachment and relying on available data and documentation. So I draw

from medium and long term data; documents provided by local institutions; articles in Italian and foreign press; direct partecipations and observations of initiatives; interviews with administrators, local residents and tourists. It is important to have a systemic point of view of the complex touristic phenomenon and not a particular vision. I believe that the synergistic approach, as a mix of different initiatives advanced on Lake Garda, could represent a method to analyze other similar situation of historical touristic destinations. And the possible solutions tested on Lake Garda could be transferred to other contexts as well.

Figure 3. *The Saturation in the Tourist Destination Life*
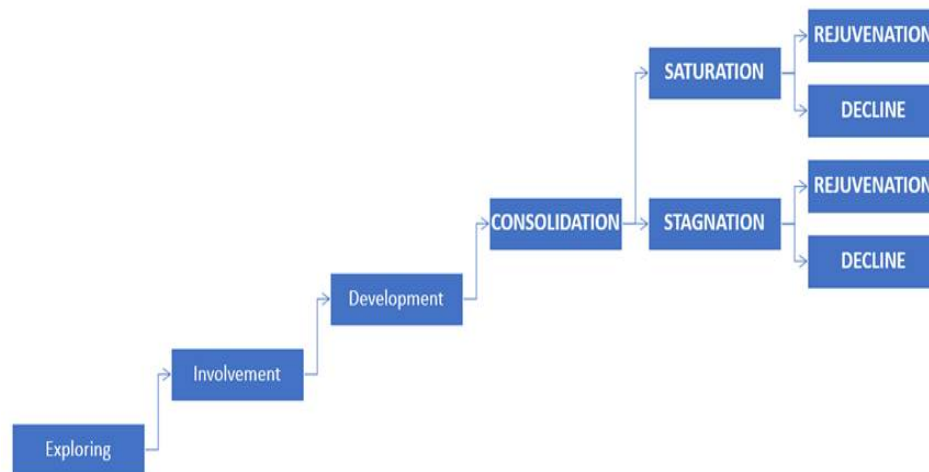
Source: own revisiting on Butler's lifecycle model.

I aim to reinterpret from the inside the history of tourism through the transformations that have characterized it. I start from the stage of exploration up to the moment of the "saturation" which is determined by the "overtourism", an excess of flows. The choice presented to the Garda communities is to decide between the progressive decline (dictated by the excessive pressure that will push tourists to look for new, less congested destinations) and the proposal of a new model, which is the one that is coming forward through the discussion of reducing flows (relieving pressure through initiatives in different areas: mobility, hospitality, environment).

The "Foreign Industry" at Lake Garda: 150 Years of History

Lake Garda is the largest Italian lake around which an interregional tourism system has been consolidating over time. With its 163 km of coastline, a maximum depth of 346 meters, and an extension of 370 km^2, it constitutes the largest freshwater reserve in Italy: about 50 km^3. The water is directly used for irrigation, potable (some coastal municipalities supply their aqueducts by drawing water from the lake), and industrial purposes (for the countryside in the Brescia and Mantua areas and for the operation of some hydroelectric power plants). Lake Garda has 25 coastal municipalities, divided between two regions, Lombardy and

Veneto, and the autonomous province of Trento, with a total of over 188,000 residents. However, the number of inhabitants reaches 315,000 if the 50 municipalities traditionally included in the basin by the Garda Community – an interregional body to which the municipalities of Lake Garda voluntarily adhere – are taken into account.

Tourism at Lake Garda is a long-standing phenomenon of middle-European origin, known as "foreign industry" at the time. It took off in the last quarter of the 19th century, when the northern part of the lake was under Austrian rule, but manifested itself on a large scale along its shores only after World War II. Over time, the tourist industry has taken on a new complexity and has become increasingly important from an economic point of view.

The presence of the lake, the mild climate, and the morphology of the landscape are at the origin of a multipurpose tourism that has gradually taken on different settlement patterns.

The trends observed, albeit in alternating phases, have always been characterized – in the medium and long term – by an increase in tourist flows and growing pressure on the "lake ecosystem" and its infrastructures, particularly over the last twenty years.

Since the 2000s, especially during the summer season, tourism has increased considerably, contributing to economic growth, but also leading to environmental degradation, traffic congestion, and strained services. This has caused some localities in particular to report overtourism phenomena. Regions and local communities have entered into a dialogue on finding potential strategies to "unburden" and transform the tourism development model with two macro-objectives: on the one hand, managing tourism influx, and on the other implementing and adapting services. In this regard, the local government has indicated four strategic guidelines: the adaptation of infrastructures (road network, new railway connections, tramway); the implementation of a variety of sustainability initiatives and practices (cycle route, water treatment system); the improvement of service quality in both the hotel and non-hotel industries; a better integration between the administrative entities of the "Garda region" through the strengthening of the role of the Garda Community. The objective of this body, created in 1955 and now counting on the voluntary membership of 40 municipalities, is to strengthen the connection between the entities through discussion tables on the main works planned and mediation between the various interests in the area.

With the annexation of the Veneto region to Italy in 1866, Alto Garda Trentino became the only riviera of the Habsburg Empire. This circumstance increased the notoriety of the Garda area among the middle-European elites, as new ideas were gaining ground in connection with natural medicine and the search for healing places with a sunny and salubrious atmosphere, following the dictates of German Naturphilosopie (Tonelli 1995, 34-40, Taiani 1996, 127-140, Schlude 2008, Giovannini 1996, Scatamacchia 1999). In northern Garda, the center of Arco stood out for the salubriousness of its climate and the rapid construction of services dedicated to holidaymakers-patients, followed by Riva del Garda (Berrino 2011, 193, Battilani 2009, 323-334, Grazioli 1993, 2003, Orandini 1980, Leonardi

1996, 2007, 2010, Simoni 1992, Tonelli 1995, 137-138, D'Agostino and Cunaccia 2015). A few years later, in 1885, two German doctors, Ludwig Rohden and Carl Königer, explored the Italian territory on the western shore and "discovered" Gardone. This marked the beginning of the takeoff of international tourism in the Medio Lago (Rohden 1885, Königer 1907, Mazza 1997, 161-183, 2013). The first large hotels were born, representing a driving force for the entire area (Aresi 2016).

Gardone was transformed into a "garden-city" with the creation of parks and public spaces for recreation and walking, and the introduction of plant and flower species, typical of the Mediterranean coast, which until then had not been present on the Riviera (Ferro 2008, Monicelli 1995, Terraroli 2017, Treccani 2001). After the Great War (Carera 2002, Capuzzo 2020), other centers experienced significant development (Mocarelli and Tedeschi 2017, Berrino 2017). Thermal spa tourism developed in Sirmione, which became best known from the Fascist era onward (Touring Club Italiano 1936, Tedeschi et al. 2017).

Tourism development on the Veneto shore was more delayed (Simoni 1992, 162-163). Only after World War II did the tourist influx increase substantially as shown in Figure 4 (Pasini 1992).

If one considers the resorts of Riva del Garda, Gardone Riviera and Malcesine with reference to the hotel industry, a considerable leap forward can be observed between the mid-1930s and the mid-1950s, with arrivals tripling from 40,000 to around 120,000 and presences more than doubling from around 220,000 to over 500,000. Looking at 16 of the 25 riparian municipalities (which were most touristy in those years) between 1964 and 1982, arrivals rose from 500,000 to over a million, and presences from 3,400,000 to over 7,500,000. In 1988, arrivals were over 1,500,000 versus 9,000,000 presences (Pagetti 1990).

The aggregate data available for Lombardy, Veneto and Trentino show a considerable growth trend in both arrivals and presences, especially in the last twenty years, reaching over 5.5 million arrivals and almost 24 million presences in 2019, an all-time high for Lake Garda.

Despite difficulties with the survey systems, in the post-World War II period, there was a considerable increase in the offer concerning accommodation, which went hand in hand with the onset of mass tourism (see Figure 5). In 1949, 67 hotels had been surveyed on the entire lake, a decrease compared to 10 years earlier due to the war, with a total of 2,653 beds. Twenty years later, the number of hotel establishments rose to 922 with 35,410 beds. In the 1960-1970 decade, the development of the Garda hotel industry was greater than the national one both in terms of the increase in establishments (56% against 20%) and in terms of beds (85% against 50%). Moreover, while up until the first half of the 20th century tourism had been mainly hotel-based, it began to take on different forms after World War II: namely, campsites and residences. Another phenomenon that emerged strongly was that of the so-called "second homes" (holiday homes), which in some contexts acquired staggering proportions, accounting for 70% of the housing stock (Pasini 2003).

Despite the marked increase in tourist flows, the territory's main infrastructures still follow the historical access routes, without having undergone substantial

changes. Over time, there has also been a gradual transfer to land of the functions previously performed by and on water with regard to communications and transport (Pasini 2001, 394-396). This is the origin of many actual problems of viability.

Figure 4. *Representation of the Trends of Tourist Presences at Lake Garda (1935-2022)*
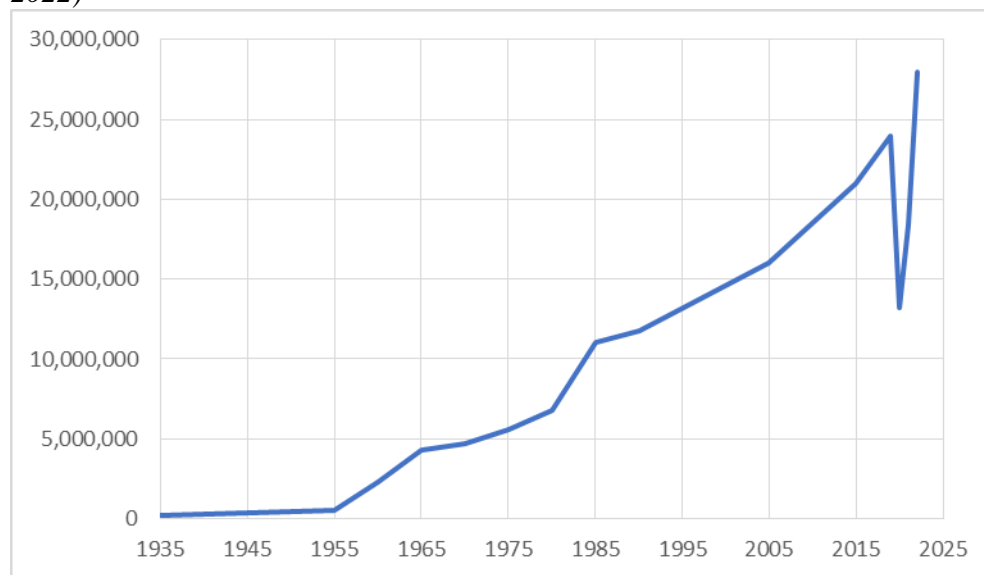
Source: Author's elaboration from different sources.

Figure 5. *Hotels and Bed Availability (1940-1991). Trend Representation with the Notable Growth since the Sixties*
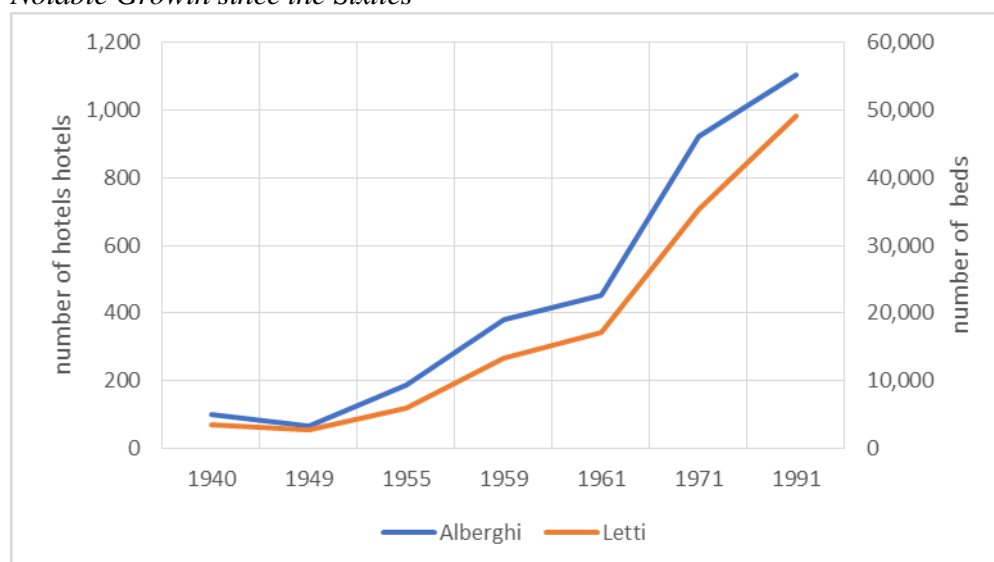
Source: Author's own elaboration.

Another important issue concerns water regulation, Lake Garda being the country's main freshwater reserve with about 40% of the national water supply (De Bernardi et al. 2000, Baldoli and Mongiello 2007). The regulation of levels and

flows dates back to 1949 with the construction of a regulating dam at Salionze in the Mantua area. Since then, the Garda has also served as a mixed-use reservoir. Regulation allows greater control over flooding and water storage in times of abundance, as opposed to gradual release in times of shortage. However, it is not easy to meet all the different needs revolving around the lake's waters. The Garda Community is responsible for safeguarding both the quantitative and qualitative water balance in the lake (Onger 2005, 34-44, Chiaudani and Premazzi 1990, Berbenni et al. 1992, Ceresa 1996, De Bernardi et al. 2000). Specific studies have been commissioned over the years in order to monitor water and environmental quality[8]. A debate on water treatment was initiated back in the 1970s. The construction of the wastewater collection system and the treatment plant in the Paradiso locality in Peschiera del Garda (Verona) began in 1977, based on a project designed by Italconsult, a Rome-based company. The first part of the plant went into operation in 1981. The plant was built on an area of 50,000 m² on the left bank of the Mincio River in modular form to initially serve 110,000 inhabitants with the possibility of expansion up to 550,000-inhabitant capacity (Consorzio Garda 1, 1990).

Development and Consolidation

In 2014, the number of presences recorded at Lake Garda reached 20 million and in 2019, before the Covid-19 crisis, they exceeded 23 million, with 5.5 million arrivals. To these, one should also add the so-called "commuter" tourists who do not appear in the statistics, but who visit Garda in a single day to reach the big theme parks or for short-distance trips from the provinces of Brescia, Verona, Mantua, and Trento. These are significant numbers if compared to those of local residents who, as of 1st January 2022, are fewer than 190,000. The demographic trend of the municipalities of Lake Garda, after a consistent growth until the 2000s, has essentially stabilized. The individual municipalities are characterized by a slight upward trend.

The important tourist development of the 25 coastal centers (and some of the hinterland) is also linked to the presence of a considerable number of municipalities with a high "tourist density", as classified according to law 17th July 2000, no. 77, art. 182[9], which assigns category L1 destinations (municipalities of cultural, historical, artistic, lacustrine, and landscape related interest, or of other interest) the highest importance in the tourist field, second only to some large cities. In Italy, 431 municipalities are part of this category: very relevant for their specific appeal, they are mainly located in the Central-Northern Regions of the country and less so in the South and Islands. The share of days of tourist presence they represent stands at 7.8% of the national total. These L1 municipalities have 17,690 residents on average.

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[8]Archivio Comunità del Garda (ACG), *Progetto finalizzato alla formulazione di un piano di gestione di controllo volto al contenimento di eventuali fenomeni di eutrofizzazione delle acque del lago di Garda. Rapporto finale,* July 1993.
[9]ISTAT Data available online at https://www.istat.it/it/archivio/247191

Lake Garda shows a high concentration of L1 classified municipalities compared to the national median. Over a 1,064 km^2 area, which composes 0.35% of the total land area of Italy (301,230 km^2) there are 14 L1 municipalities, accounting for 3.24% of all Italian L1 municipalities (431).

The 14 L1 Garda municipalities are on average smaller, with about half the number of inhabitants: 8,753. To this must be added the presence of the remaining 11 municipalities that fall in the D category (lake tourism municipalities, also with a high "tourist density"), represented in Italy by 167 municipalities (6.51% at lake Garda). Therefore, the Garda area proves to be extraordinarily appealing, causing it to become invaded by tourists over recent years.

From Tourism to Overtourism

From the early 2000s to the present day, the figures for presences and arrivals have been growing steadily. From 2005 to 2019, a record year for tourism at Lake Garda, arrivals almost doubled from 3 million to over 5.5 million, while presences rose from around 16 million to almost 24 million. In the last 2022 they reached 27 million.

The tourist offer has adapted to the growing demand. Significant changes emerge from the analysis of the transformation of the accommodation capacity at Lake Garda compared to the data of the last years and in particular from 2016 to 2021, limited to the Brescian shore. Table 1 shows that the number of hotel beds has slightly increased, while the giant leap is recorded in non-hotel accommodation and is linked to the phenomenon of short-term rental of holiday homes (Airbnb, Naturehouse, etc.). In 45 years, from 1960 to 2016, hotel beds increased by 82.62%, while in the five-year period they increased by 7.50%. Non-hotel beds over the same period increased by 125.28% and by 34.47% over the five-year period under review.

Table 1. *Beds Availability at Lake Garda (Brescia). Beds Availability Shows the Increase of Hotel and Non-hotel Accommodation*

Beds	1960	2016	2021	2016-2021 %
Hotel	14,227	24,779	26,638	+7.50
Non-hotel	22,732	51,212	68,867	+34.47
Total	36,959	75,991	95,505	+25.67

Source: Data for the Province of Brescia.

Furthermore, other circumstances evince the pressure exerted in recent years on services in the lake system. The increased presence of motor and sailing boats has necessitated the constant presence of a surveillance, control, and rescue service. Since 1999, a Coast Guard unit has been active to ensure the safety of navigation and the suppression of dangerous behavior. In 23 years, the Harbor Guard has grown from one to five vessels deployed on Lake Garda. The number of personnel has increased from 8 to 35. From 1999 to 2006, the Coast Guard was on duty exclusively during the summer period: from 1st June to 30th September.

Since 2007, patrol boats on the lake are on duty 24 hours a day, 365 days a year (Guardia Costiera 2022).

As far as public navigation is concerned, the service is managed by Navigarda, a governmental body existing since 1957 which has been in charge of public navigation services on Lakes Maggiore, Garda, and Como with a total fleet of 98 vessels. On Lake Garda, the fleet consists of 28 ships, including motorboats, catamarans and hydrofoils connecting 25 ports of call. The service runs from April to October.

Data on public navigation and the number of passengers aboard watercraft also show the increase in tourists over the last twenty years, albeit with a less pronounced trend. It follows that the number of tourists using watercraft is proportionally lower. In 1999, the presences on Lake Garda were calculated at about 14 million tourists against about 2 million tickets sold: one tourist out of 7 sailed; in 2019, 2.5 million tickets were sold against 24 million tourists, which means that only about one tourist out of 11 used the Navigarda vessels.

The German press was the first to sound the alarm about the overcrowding at Lake Garda. The Suddeutsche Zeitung, one of the most widely read newspapers in Germany, published an article in 2018 entitled "Lake Garda has reached its limit" and the summary stated: "Full beaches, congested roads, millions of hotel guests and polluted water: Lake Garda is becoming increasingly popular with travelers from all over the world. How long can it last?". The report signed by Elisa von Britzelmeier, which was widely echoed on social media and in the Italian press (Cassol 2018), started with Sirmione and moved on to Lazise, taking into consideration the entire situation of Lake Garda.

Lake Garda is becoming increasingly popular with tourists, with over 24 million overnight stays per year. Germans have always come, but now Chinese and Russians are also arriving. And those who come stay less than before because of the increased traffic... Cars clog the roads around the lake. Natural areas disappear under the hotels, environmentalists are concerned about water quality. In addition to overnight guests, day trippers arrive, and there is not much room... overtourism, the kind of mass tourism that ultimately destroys a tourist destination. Of course, there are no cruise ships on Lake Garda, and tourists do not flock to one town, but also to many places less vulnerable than Sirmione. Here there are no anti-tourist protests like in Mallorca. Not yet?... While cheap flights take tourists elsewhere, Lake Garda is still typically reached by car: not easily accessible by train, with poorly developed bus lines.... Traffic is also evident in CO_2 pollution: and on the water, motorboats are only banned in the upper part of the lake, but after all, there are so many of them that their roar annoys even tourists.... even finding a parking space is not easy around the lake. (Britzelmeier 2018).

The article in the Munich daily newspaper also denounces the failure to control sewage spills into the lake, the overbuilding in some areas, and the proliferation of holiday homes ("second homes"). The author concluded with some irony: "There should be restrictions on the number of tourists, but how? Maybe a huge fence around the entire Lake Garda will do?". The report is indicative of the new perception about the lake that has been emerging in recent years. The data confirm a situation that is not comforting. While the road network

has remained virtually intact and so has the not very relevant railway network, the number of "official" presences on the lake has tripled in less than forty years, going from 7,500,000 in 1982 to 15,000,000 in 2005 to 24,000,000 in 2019. But the numbers would be far higher: at least double that, 50,000,000, according to some administrators and tour operators (Gamba 2018). In addition, forecasts for 2022 report reaching, if not further exceeding, pre-Covid flows (Borelli 2022).

The most striking case of overtourism at Lake Garda is represented by the town of Sirmione, a peninsula characterized by a particular morphology, a tongue of land that stretches into the Garda basin, with spectacular beaches and archaeological remains, testimony of the presence of the Latin poet Valerius Catullus on the Lake. In addition, Sirmione is a historic spa resort where many hotels were built during the 20th century (TCI, 1954). Sirmione is extraordinarily difficult to access because authorized pedestrian and motorized transit can only enter through a single street that is no more than four-meter wide. The characteristics of this town attract millions of visitors every year, most of whom spend only a few hours in the Sirmione area. This causes a serious inconvenience for residents who abandon the historic center, victim of galloping "gentrification", while there is no shortage of problems for the maintenance of services, as in the case of the serious blackout recorded in mid-August 2021 that blocked the supply of energy and water to homes and hotels (Roman 2021). According to estimates, in 2017, the town of 8,000 inhabitants had 1,360,000 presences, to which commuting tourists should be added, for an estimate of hundreds of thousands more to well exceed 2 million. These data have had a great resonance both in Italy and abroad, and in particular in Germany, from which about 80% of foreign tourists come (Bottura 2018, Obermeier 2018, Binge 2018). Over the years, successive municipal administrations have tried to solve the issue by launching several initiatives: adjusting parking spaces, increasing parking fees, setting up small electric shuttles from the farthest parking lots to the central streets, alternating one-way pedestrian transit, limited access to beaches especially during the Covid-19 emergency (Roman 2020). However, the situation remains essentially unresolved.

Sustainability: Work in Progress

In recent years, many actors have been engaged in the mitigation of the negative effects of overtourism, with the aim of improving the quality of the tourist offer in a more sustainable way, also in accordance with the UN Agenda 2030.

The strategies being studied to stem the phenomena of overtourism and guarantee sustainable tourism on the lake start from the issue of mobility (see Figure 6). One of the symbols of the modernization of the Lake Garda area in terms of tourism was the construction of the two main roads running along the two shores, the eastern and western. The two Gardesana roads were built during the Fascist era. The western Gardesana in particular stood out as an example of daring, spectacular architecture. Even today, the "very Italian artery" offers - between one tunnel and another - extraordinary scenic views that make it one of the most

beautiful roads in Italy (Bolis 1931; Brescia, 1931). However, its functionality, in spite of some sporadic upgrading work, is largely overtaken by the exorbitant increase in road traffic. The situation is also congested on the eastern bank, especially during the summer period (P.M. 2022). On the other hand, because of the very lay of the land there is not much room for improvement, even if some projects (still at the feasibility study stage) are being examined by the operational groups promoted by the Garda Community. These include the working group dedicated to the possible construction of a tunnel that would cross the coastal road at Toscolano Maderno and, through a longer tunnel, enter the Vallesabbia – a valley to the west of the Garda basin – which is less congested by traffic, so as to offer an alternative route to road traffic. The tunnel would have a length of about 7 kilometers and within it a pipeline could also be placed to pump sewage water inland. The proposal launched in recent years by the municipality of Toscolano Maderno is currently under discussion, but no formal steps have been taken in this direction yet[10].

As it pertains to the lower lake area where the theme parks are located, the construction of a new freeway exit at Castelnuovo (Verona) is being studied, as it could divert traffic directed towards the parks, alleviating a situation that along the A4 highway is untenable, especially at weekends and during the summer. In this case, the work is at the awarding stage for an amount of 67 million euro (Stoppele 2022).

A pre-feasibility study is currently being prepared at the University of Brescia for the construction of a subway from the city to the Tormini junction, a few kilometers from Salò. The route would be about twenty kilometer long and an extension of the city's existing light rail system (Bacca 2022).

Still on the subject of mobility, special attention is being paid at this stage to cycle tourism, which has been showing great potential for development (Formato 2009, Pavione and Canciani 2015) also with a view to overcoming the difficulties generated by the pandemic crisis (Saldanha et al. 2021). A strategic project, partly already implemented, partly planned, and also financed with funds from the National Recovery and Resilience Plan (PNRR), is certainly that of the Garda cycle route, included among the 10 cycle routes of national interest[11].

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[10]ACG, Nuovo collettore di depurazione del Garda sponda occidentale. Nuovo tunnel viario Toscolano Maderno-Collio di Vobarno, Proposta di fattibilità, February 2019.
[11]Law n°. 208 28th December 2016, art. 1, p. 640.

Figure 6. *Proposal and Initiatives. Numerous Activities are in the Works to Orient Tourism at Lake Garda towards a more Sustainable Dimension*
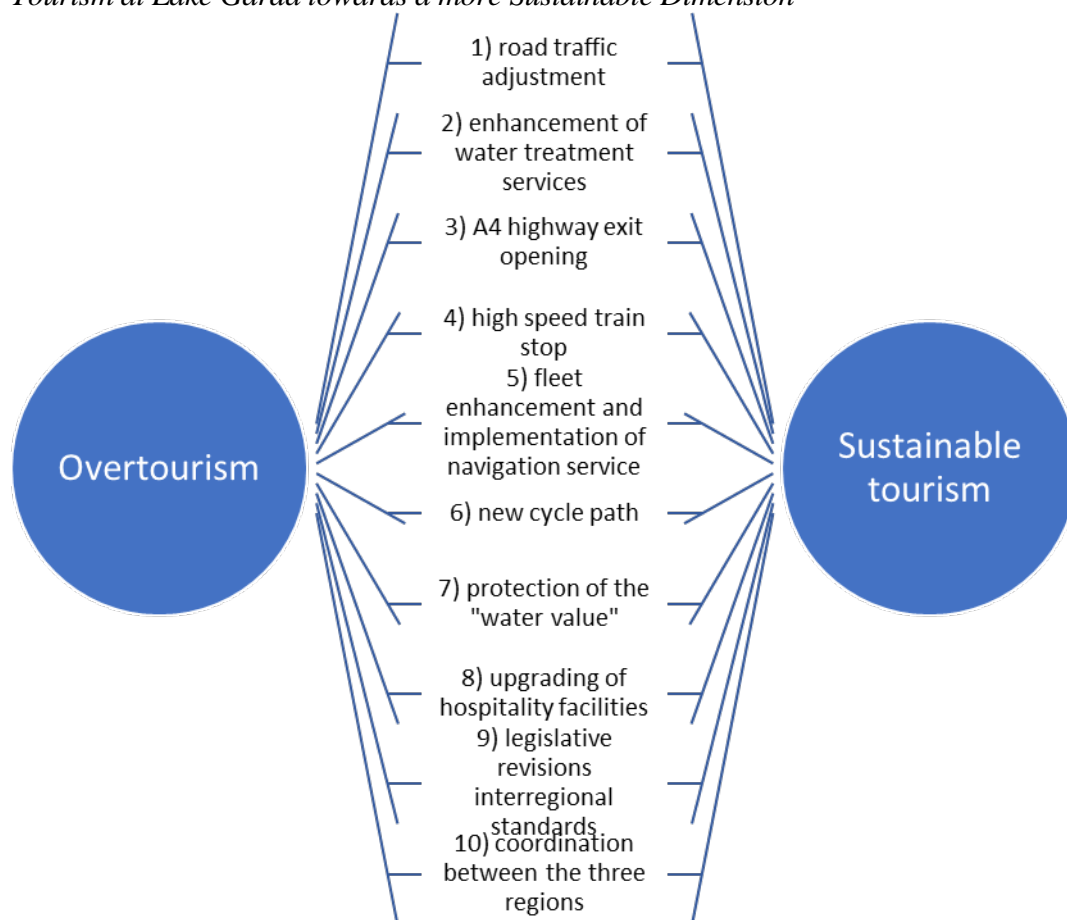
The interregional infrastructure, according to the original indications, should cover the entire circumnavigation of Lake Garda for about 164 km owing to an investment of 344 million euro. The project envisages the construction of new cycle path stretches and a series of connecting works to existing ones. Expectations regarding the realization of this work are very high. According to ANCMA data (2022), the phenomenon of cycle tourism and bicycle-related activities is growing strongly in the Eurozone. In 2021, 22 million bikes and e-bikes were sold in Europe. According to ANCMA estimates, cycle tourism accounts for between 6.1% and 15% of the total tourism economy. Confirmation of this trend is provided by Navigarda's data on the transport of bicycles by boats, which has been recorded in recent years and is increasing considerably.

Moreover, investing in the navigation system is regarded by many as the main solution for alleviating the access and transport difficulties on Lake Garda. Some proposals are underway: the further upgrading of the Navigarda fleet, the scheduling of additional boat trips even during the autumn and winter period, therefore serving not only tourist but local commuters as well, and the introduction of new hybrid diesel-electric boats (Francesconi 2022).

The water issue is generally the focus of public interest. Water is in fact a resource for multiple uses: potable (most riparian municipalities use the lake water for their waterworks); tourist-recreational; economic-productive, for irrigation of the countryside for agricultural purposes and the production of electricity. There is no lack of conflict between the different interests and users upstream and downstream. Water management requires constant compromise between the parties involved. Considering that the Sarca-Garda-Mincio basin (the lake with its tributary and its emissary) is shared by different provinces and regions, the issue of water use has to be addressed in an interregional perspective with a shared and agreed vision, while being sensitive to the local needs. It can be difficult to strike the right balance and it is important to minimize global damage (Berbenni et al. 1992, 21-40). Recently, the Garda Community organized a round table to manage the water emergency following the prolonged drought that brought agriculture to its knees.

From the environmental perspective, in the face of the pressure that has become unsustainable on the Peschiera plant, a radical revision and implementation of the wastewater collection and treatment system has been debated since 2015. On the Lombard shore, two new plants should be built in the hinterland of Lake Garda, in the municipalities of Gavardo and Montichiari, which could process the effluents of the middle lake. The proposal is in the hands of the Associazione Temporanea di Scopo (ATS) called Garda Ambiente (Garda Community 2022)[12]. However, the proposal has found widespread opposition from some environmental committees. On the other hand, the renewal of the drainage system on the Veneto shore is at a more advanced stage, with the transition from the planning to the implementation phase.

The Garda Community is also working on several fronts: the revision of the interregional law on navigation, the revision of fishing regulations, various cultural initiatives, and the establishment of a new "Garda Tourism Observatory" in collaboration with Università Cattolica del Sacro Cuore of Milan[13]. In these areas, the Garda Community is following some guidelines already present in programmatic studies of the 1970s, which already spoke of "coordination of territorial initiatives" and of the "recognition of a strong vocation for tourism in the Garda area and the validity of the principle of taking advantage of the appealing characteristics of territories in planning their development"[14].

On the hospitality front, a trend is underway – reinforced by significant private investments – towards a qualitative improvement of the offer both with the construction of new high-end hotels and the upgrading of existing ones.

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[12]Comunità del Garda, Official web https://www.comunitadelgarda.it/primo-piano/garda-ambiente/52-3.html

[13]ACG, deliberazione del consiglio direttivo della Comunità del Garda, 14th June 2022; verbale consiglio di Facoltà di scienze linguistiche Università Cattolica del Sacro Cuore di Milano, 29th June 2022.

[14]ACG, Sintesi del modello di sviluppo economico e sociale. Documento programmatico per la politica urbanistica a cura di Technital e comunità del Garda 10 giugno 1974, p. 3-8. Cf. ACG, Programma di interventi coordinati. Attività economiche. Parte prima conoscitiva. Bozza di lavoro. Settembre 1973 a cura di Technital e Comunità del Garda, September 1973.

Overall, if we examine the situation of hotels on the Brescia side of the lake in the five-year period 2016-2021 (see Table 2), we can notice an increase in the number of facilities (from 416 to 420), with a surge in the number of those in the higher category and corresponding number of beds (from 4 stars upwards) and a decrease in those in the lower category (from 3 stars downwards). Thus, the widespread tendency to improve the quality of the hospitality offer by increasing the number of beds in the highest category can be confirmed (Scarpetta 2022, Piva 2022).

Table 2. *Beds Availability/Hotel Categories (2016-2021)*

	Hospitality activities		Number of beds	
Hotel stars	2016	2021	2016	2021
1	20	15	515	315
2	67	63	1,341	1,243
3	198	195	9,732	9,533
4	85	94	9,514	10,609
5	10	11	1,061	1,303

Source: Author's elaboration of data for the Province of Brescia.

Moreover, round-table discussions on sustainability are in progress, promoting initiatives aimed at extending the tourist season at Lake Garda and enhancing its hinterland. At the moment, the most drastic hypotheses, such as access quotas and entrance fees, which are difficult to apply on a vast area such as the lake, are still unthinkable even for individual resorts.

Conclusions

For the first time, during its long history, Lake Garda must engage with this serious problem, i.e., to cope with the phenomenon of overtourism, which has come to the fore in recent years. The actions implemented by local communities go in two directions: on the one hand, the upgrading of infrastructures, their adaptation to more efficient parameters of sustainability, and the implementation of new projects to improve the services available; on the other hand, some forces are pushing for a quantitative "decrease" of the tourist phenomenon, directing it towards a "redevelopment" of the offer that raises the level of hospitality, selects presences, but at the same time guarantees satisfactory economic results for operators. The search for a new "balanced" development model that reconciles these demands is the general orientation confirmed by local institutions and stakeholders.

Many of the recent investments have gone in this direction, i.e., the upgrading and enhancement of the hospitality offer. This seems to be the path on which Lake Garda has recently been setting out: in the wake of the recovery, in a sense, of the great middle-European tradition that saw the high quality of the offer as a privileged tourist model. Thus, for Garda we could speak of a sort of "return to the past for the future", in which the goal is represented by an enhancement of the area's resources (climate, vegetation, landscape, water, etc.) and their "sustainable" use (cycle paths, thermalism, water and wind sports, navigation). All this could be

complemented by the presence of high-end hospitality facilities with high standards (5 and 4-star hotels and glamping), flanked by low-invasive hospitality solutions (holiday farms, B&Bs) that are compatible with the demand for "sustainability" made increasingly pressing by tourists. The balanced presence of these objectives could be a guarantee for the balance of the lake-ecosystem itself and at the same time for the maintenance of the economic assets traditionally represented by tourism at lake Garda.

All these initiatives represent the opportunity to avoid decline and reach rejuvenation of the destination.

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