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**Polytechnic of Medimurje in Cakovec**



# **Economic and Social Development**

106<sup>th</sup> International Scientific Conference on Economic and Social Development

## **Book of Proceedings**

Editors:

**Igor Pihir, Vojko Potocan, Zivanka Miladinovic - Bogavac**

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## **CONTENTS**

### **ACCOUNTING HISTORY IN 18TH CENTURY PORTUGAL: THE ROLE PLAYED BY THE ENTREPRENEUR JOSÉ FRANCISCO DA CRUZ..... 1**

Miguel Goncalves

### **SUSTAINABLE DEVELOPMENT AND LOGISTIC PERFORMANCE IN AFRICA: A PANEL ANALYSIS OF 40 COUNTRIES..... 13**

Jihane Ktite, Meryem El Alaoui

### **GREEN ORIENTATION IN ASSOCIATIONS REGISTERED FOR SOCIAL ENTREPRENEURSHIP ACTIVITY ..... 23**

Laura Golub, Irena Konecki

### **UNVEILING THE FACADE: A CRITICAL EXAMINATION OF GREENWASHING AND CORPORATE RESPONSIBILITY IN THE EUROPEAN CONTEXT..... 32**

Mislav Ante Omazic

### **SUSTAINABLE SELF-EMPLOYMENT: REGIONAL SPECIFICITIES AND THEIR IMPACT IN LESS DEVELOPED DISTRICTS OF SLOVAKIA ..... 46**

Anna Kalafutova

### **WHAT MAKES HUMAN RESOURCE PROFESSIONALS USE ARTIFICIAL INTELLIGENCE FOR REDESIGNING JOBS: A UTAUT2 STUDY ..... 56**

Ljupcho Eftimov, Bojan Kitanovikj

### **THE ROLE OF EXAMINATIONS OF TOURIST SATISFACTION IN PLANNING THE DEVELOPMENT OF A TOURIST DESTINATION: AN EMPIRICAL STUDY OF DESTINATION NOVIGRAD..... 64**

Tina Sugar Korda

### **IMPACT OF ELECTRIC VEHICLE MARKET GROWTH ON AUTOMOTIVE INDUSTRY TRANSFORMATION: TRENDS, POTENTIALS, AND CHALLENGES ANALYSIS..... 73**

Damir Sebo

### **ACCESSIBLE TOURISM OPPORTUNITIES FOR PEOPLE WITH DISABILITIES FROM THE AREA OF THE REPUBLIC OF CROATIA..... 82**

Marijana Jurisic Mustapic, Filipa Marusic

### **STATE OWNERSHIP AND FIRM PERFORMANCE – EVIDENCE FROM LARGE CROATIAN ENTERPRISES ..... 96**

Boris Crnkovic

### **THE ROLE OF CULTURAL ROUTES IN THE DEVELOPMENT OF OUTDOOR TOURISM..... 106**

Elena Rudan, Christian Stipanovic, Vedran Zubovic

**THE INTERCONNECTION BETWEEN THE ECONOMIC LAW OF INTELLECTUAL PROPERTY AND THE FASHION INDUSTRY IN BRAZIL ..... 114**

Rodrigo O. Salgado, Thais O. C. de Freitas, Ricardo Begosso, Luisa Ferreira Duarte

**THE ROLE OF TOURISM AS A FACTOR OF RURAL DEVELOPMENT IN THE STRATEGIC AND FIELD CONTEXT OF CROATIA: EXPERTS' PERSPECTIVES**

..... 124

Toni Popovic, Renata Relja

**SUSTAINABLE TOURISM INDICATORS AS A FACTOR OF SUSTAINABLE DEVELOPMENT OF RURAL AREAS – A LITERATURE REVIEW ..... 140**

Valentina Vinsalek Stipic, Nikolina Grizelj, Sanja Juric

# ACCOUNTING HISTORY IN 18TH CENTURY PORTUGAL: THE ROLE PLAYED BY THE ENTREPRENEUR JOSÉ FRANCISCO DA CRUZ

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## ABSTRACT

*The paper introduces José Francisco da Cruz (1717-1768), the first general treasurer of the Portuguese Royal Treasury (1761). A businessman from Lisbon, shareholder in the three largest monopolist trade companies of the time, this accounting technocrat made a decisive contribution for the transfer and spread of double entry bookkeeping (DEB) in eighteenth century Portugal. The article is intended as a study that explores which social and political agents were involved in the emergence and development of DEB in Portugal. The main contribution of the paper has to do with the systematisation of José Francisco da Cruz's biographic features and professional traces as an attempt to place on Portuguese accounting history research agenda the study of individuals who were instrumental in initiating the process of accounting's social recognition. The paper examines José Francisco da Cruz's profile, his career and his relations with Portugal's Chief Minister. More particularly, we outline the role of José Francisco da Cruz in the development and application of DEB in the Portuguese context: on the one hand, due to his managerial positions in the Royal Treasury and in two monopolist overseas trading companies concerning Colonial Brazil, Company of Grão-Pará and Maranhão and Company of Pernambuco and Paraíba, organizations where DEB was compulsory by means of their statutes; and, on the other hand, due to his political contribution for the establishment of the Portuguese School of Commerce (1759) as Provedor [President] of the Board of Trade.*

**Keywords:** *Portugal, Eighteenth Century, Double Entry Bookkeeping, José Francisco da Cruz, Portuguese Royal Treasury*

## 1. INTRODUCTION

In 1761 a new accounting method was implemented in Portugal's public finances; the double entry bookkeeping (DEB) system. By means of the Letter of Law of 22 December 1761, it was created the Royal Treasury, the first central government organization in Portugal to adopt DEB (Gomes, 2007; Gomes *et al.*, 2008). In 2007 special attention was devoted by Gomes to the roles played at the Royal Treasury by key individuals in the process of transferring DEB from the private to the public sector in eighteenth century Portugal, namely its general inspector, Sebastião José de Carvalho e Melo<sup>1</sup> (see Gomes, 2007, pp. 114-125), and its clerk of the general treasurer, João Henrique de Sousa (see Gomes, 2007, p. 153, p. 156, pp. 222-223, p. 247). Notwithstanding, besides Pombal and João Henrique de Sousa (for a profound and interpretive vision of Sousa's bio and bibliographic details see Rodrigues & Craig, 2009, 2010), there were in Portugal other protagonists of accounting change who as well performed important roles regarding the transfer of accounting expertise from the private to the public sector. Accordingly, this is the main objective of the paper: the characterization of individualities who, together with Pombal and João Henrique de Sousa, have contributed to the implementation of the DEB system in the Royal Treasury and other organizations in eighteenth century Portugal.

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<sup>1</sup> As usual we shall frequently refer to Sebastião José de Carvalho e Melo as *Conde de Oeiras* [Count of Oeiras] (1759) or as *Marquês de Pombal* [Marquis of Pombal] (1770), or simply Pombal, although those designations may not always correspond to the time in his life when he indeed owned these noble titles (Gonçalves, 2011, p. 117). Pombal was a member of Portugal's government since 1750, becoming Portugal's Chief Minister in 1756 (until 1777).

This investigation has as background the second half of the eighteenth century, as this period is marked in Portugal by the existence of a series of events which permitted great accounting development, for example: the foundation of the Company of Grão-Pará and Maranhão, in 1755 (Carreira, 1983; Marcos, 1997; Pinto, 2008, 2009; Pinto & West, 2012; Rodrigues *et al.*, 2009); the establishment of the Board of Trade, in 1755, with statutes approved in 1756 (Faria, 2008; Marcos, 1997); the foundation of the Company of Agriculture and Upper Douro Vineyards, in 1756 (Oliveira, 2008, 2009; Oliveira, 2009, 2010); the re-establishment of the Royal Silk Factory, in 1757 (Carvalho *et al.*, 2007); the establishment of the Company of Pernambuco and Paraíba, in 1759 (Carreira, 1983; Júnior, 2004; Marcos, 1997; Rodrigues & Sangster, 2012); and the institution of the Portuguese School of Commerce, in 1759 (Cardoso, 1984; Ferreira *et al.*, 1995; Rodrigues & Craig, 2004; Rodrigues *et al.*, 2003, 2004; Santana, 1985), the most paradigmatic event for the time. As pointed out by Faria (2011, p. 139), “the interest in the eighteenth century could be explained by the fact that it is where the roots of the Portuguese accounting lies”. Concerning the research method, it was used the technique known in literature as analysis of texts and documents (Carnegie & Napier, 1996). Likewise recent Portuguese studies published in international journals (see, for all, Rodrigues & Sangster, 2012), our sources include archival data accessed in Lisbon at the *Arquivo Nacional da Torre do Tombo* [National Archive of Torre do Tombo; hereafter ANTT] and *Biblioteca Nacional de Portugal* [National Library of Portugal], and also contemplate, following the track of Rodrigues *et al.* (2004, p. 55), “the text of decrees issued by [the government of Portugal], and a wide range of scholarly literature in several languages (principally Portuguese but also including English [...])”. The motivation of this paper is related to the fact that it is believed that the analysis and interpretation of the biographic profiles of the eighteenth century Portuguese businessmen can be of great use to the history of accounting in Portugal, especially in terms of unveiling their roles in DEB’s implementation. The remainder of the paper is organized as follows. Section 2 presents a review about biographic studies about accounting persons relevant to the development of accounting. Section 3 gives an overview of the Portuguese political, social, and legal context (1750-1761). Section 4 outlines the main biographic features of José Francisco da Cruz showing some examples of his professional experience linked to Pombal’s institutions. Section 5 highlights the personal relations established between Cruz and Pombal. Section 6 presents the discussion. The final section contains the conclusion, the limitations of the work and a call for further research.

## 2. LITERATURE REVIEW

This presentation is expected to prompt the realization in Portugal of more biographic works that can highlight the pioneering role played by some agents in the emergence and development of accounting. In this sense, in what relates to this particular area of historical investigation, the biographies (Carnegie & Napier, 2006, pp. 21-22; Gomes & Rodrigues, 2009, p. 225; Previts *et al.*, 1990, pp. 137-139), the following works must be underlined: (1) Carqueja (2010), Gomes (2007), Rodrigues and Craig (2009, 2010), Rodrigues *et al.* (2010), Santana (1974); (2) Sousa (1999); (3) Carqueja (2002); (4) Carqueja (2002a), Ferreira (2006), Ferreira (2000), Guimarães (2005, 2007); (5) Caiado (2006); (6) Gomes (2007), Gomes *et al.* (2008); (7) Tavares (2008); (8) Rodrigues and Craig (2009, 2010), Santana (1974); (9) Pinto (2009); (10) Guimarães (2009); (11) Guimarães (2010); (12) Guimarães (2010a); and (13) Rodrigues (2011). The preceding authors have examined the life itineraries and biographic details of several Portuguese personalities that helped the social recognition and dignifying of accounting in Portugal, namely: (1) João Henrique de Sousa (accounting professor and clerk of the general treasurer of the Royal Treasury, as mentioned); (2) Martim Noel Monteiro (accounting professor); (3) Rodrigo Afonso Pequito (accounting professor); (4) Gonçalves da Silva (accounting professor); (5) Cabral de Mendonça (author of an eighteenth century accounting



book); (6) Marquis of Pombal (Portugal's Chief Minister); (7) Lopes Amorim (accounting professor); (8) Albert Jacquéri de Sales (accounting professor); (9) José António Sarmiento (accounting professor); (10) Camilo Cimourdain de Oliveira (accounting professor); (11) Lopes de Sá (Portuguese-Brazilian accounting professor); (12) Rogério Fernandes Ferreira (accounting professor); and (13) the officers of the Royal Treasury, 1762. This work is an attempt to follow through these researches, being important to stress that José Francisco da Cruz (hereafter sometimes referred to as 'Cruz') is an unexplored theme in accounting history literature. In fact, literature does not contain in-depth studies on Cruz and his involvement in the process of development of accounting in Portugal. Therefore, this article seeks to assist the process of filling this void by demonstrating the key role performed by Cruz in this matter.

### 3. THE POLITICAL, SOCIAL, AND LEGAL CONTEXT IN PORTUGAL (1750-1761)

In 1750 King *D. José I*, succeeding his father King *D. João V*, formed a government based as well on three Secretaries of State: (i) Internal Affairs of the Kingdom; (ii) Navy and Overseas Dominions; and (iii) Foreign Affairs and War. The first one was entrusted to Priest Pedro da Mota e Silva (he transitioned from the previous cabinet of *D. João V*), the second committed to Diogo de Mendonça Corte-Real, and the last assigned to Pombal, one of the most emblematic personalities ever in the political and social history of Portugal. The earthquake in Portugal on 1 November 1755 granted Pombal the hegemony and political preference in the government of *D. José I*, due to his constant presence near the king in such a difficult and tragic situation. With the death of Pedro da Mota e Silva “which occurred few days before the earthquake” (Correia, 1931, p. 5), followed in 1756 by the imprisonment of Diogo de Mendonça Corte-Real for political reasons (Serrão, 1982, p. 74), Pombal gradually concentrated upon himself the powers of the other two Secretaries of State, assuming in that year functions of a true Chief Minister. In the beginning of the 1760s the conflicts of the *pombaline* cabinet with the three arms of the state were thought to be resolved: with the people, due to the death sentences to those involved in the protest action in February 1757, in Oporto, against the privileges of the Company of Agriculture and Upper Douro Vineyards; with the nobility, due to the execution of some members of the Távora, Aveiro and Atouguia families, in January 1759; and with the clergy, through the expelling of the Jesuits in September 1759. It is within this political and social context that the observation of Rodrigues (2000, p. 375) should be understood: “at the end of the 1750s, with the internal opposition brutally crushed, Carvalho e Melo [Pombal] will have time to make the changes in the administrative apparatus of the country”. One last note to mention that in December 1761, date of the Letter of Law which constituted the Royal Treasury, the ministerial cabinet of *D. José I* included the usual three Secretaries of State: (i) Internal Affairs of the Kingdom, headed by the Count of Oeiras (Pombal); (ii) Navy and Overseas Dominions, with Secretary of State being Francisco Xavier de Mendonça Furtado, Pombal's brother<sup>2</sup>; and (iii) Foreign Affairs and War, a department entrusted to D. Luís da Cunha Manuel, nephew of the diplomat with the same name D. Luís da Cunha (1662-1749), one of Pombal's protectors in the reign of *D. João V*. With the official recognition of the Royal Treasury, in substitution of the *Casa dos Contos* [Customs House], promulgated by the Letter of Law of 22 December 1761, the government of Pombal tried to control and make more efficient the collection of public taxes (Rodrigues, 2000). The Customs House would engage as far as to the control of the received revenues and the paid expenditures made by the fiscal agents, whereas the Royal Treasury (1761) was to be the only receiver and payer of money in an attempt to improve the control of public accounts and to reduce fraud.

<sup>2</sup> As argued by Monteiro (2011, p. 151), up to the nineteenth century the cases of brothers not using the same surname were frequent in Portugal.

Rodrigues (2011, p. 62) states that “contrary to what was happening at the Customs House where single entry bookkeeping was used, the Royal Treasury uses double entry bookkeeping, a more sophisticated technique for accountability purposes and respective transparency”. In order to achieve these objectives, DEB was seen as a means to legitimate the new organization, as it was considered to be the best method for the management of public accounts (Gomes, 2007, p. 94, p. 158, p. 172, p. 241).

#### **4. JOSÉ FRANCISCO DA CRUZ (1717–1768)<sup>3</sup>: BIOGRAPHIC FEATURES AND PROFESSIONAL EXPERIENCE**

Following Pombal, who was appointed general inspector of the Royal Treasury, the second most important officer was the general treasurer (Rodrigues & Craig, 2010, p. 49). The position was of great importance and an individuality belonging to the entrepreneurial group close to Pombal was chosen for it – José Francisco da Cruz. A businessman from Lisbon, coming from the very close to Pombal *família dos Cruzes* [Cruzes family], Cruz was the second of four brothers who usually get along in private terms with Pombal: Priest António José (1715-1782); José Francisco (1717-1768); Joaquim Inácio (1725-1781); and Anselmo José (1728-1802). After having emigrated to Brazil (Bahia) for 12 years from February 1735 to February 1747 (Lisboa, 2009, p. 25), he returned to the metropolis, gaining the trust of Pombal maybe through the influence of his older brother, the Priest António José da Cruz who, in his turn, as admitted by Ratton (1992, p. 193), may have been behind the political rise of Pombal in 1750. Cruz became part of the *entourage* which Pombal selected, protected and kept close to himself while in power, especially after 1756. Pedreira (1995, p. 460) argues that an analysis of Pombal’s private letters sent to Manuel Teles da Silva, a friend from the time he was the Portuguese ambassador in the Austrian court (in Vienna, 1745-1749), permit to conclude that “Pombal had as goal to form a *solid group of merchants* [italic added] which, through investment in monopolist trading companies that he organized and through their own individual actions, were able to sustain his project of nationalization of Portugal’s foreign trade and the reorganization of public finances as well”. It is not risky to claim that one of these solid merchants was in fact José Francisco da Cruz. As a businessman from Lisbon and a prestigious merchant, he was familiar with the DEB technique. Cruz was one of the proponents of the statutes of the School of Commerce in 1759 (see statutes of the School of Commerce), institution where DEB was obligatory taught (paragraph 15 of the statutes of the School of Commerce). Moreover, “he contributed with his work and his own funds for the foundation of the School [of Commerce]” (Castilho, 1956, p. 11). Table 1 shows some of the positions he occupied until his death in May 1768, at the age of 50.

*Table following on the next page*

<sup>3</sup> From the set of literature written on Cruz, only Lisboa (2009, p. 18) indicates his life period: 16 September 1717 to 16 May 1768.

ORGANIZATION (YEAR)	ACTIVITY OR POSITION	SOURCES	NOTES
<i>Depósito Público</i> (1751) [ <b>Public Deposit</b> ]. Guardian of movable goods and voluntary funds of individuals.	Involved in its creation	Gomes (2007, p. 152); see also Rodrigues and Craig (2009, p. 387) and Rodrigues <i>et al.</i> (2009, p. 431)	
<i>Mesa do Bem Comum</i> (prior to 1755) [ <b>Board of the Common Good</b> ]. Also known as The Board of Businessmen, the Board of The Common Good had connections to the <i>Confraria do Espírito Santo da Pedreira</i> [Brotherhood of Espírito Santo da Pedreira]. The Board of the Common Good consisted in a corporate institution representative of Lisbon's mercantile elite, being extincted on 30 September 1755 in order to be replaced on the same date by the <i>Junta do Comércio</i> [Board of Trade].	Deputy (Director)	Pedreira (1995, p. 155)	
<i>Companhia Geral do Grão-Pará e Maranhão</i> (1755) [ <b>Company of Grão-Pará and Maranhão</b> ]	Proponent of the statutes	Statutes of the Company of Grão-Pará and Maranhão	
	Shareholder (23 shares)	Pedreira (1995, p. 164)	
	Deputy of the first Board of Directors (1755)	Marcos (1997, p. 700)	To be eligible for the position of Deputy one must hold at least 10 shares (see § 2 of the statutes of the Company)
	President of the second Board of Directors (1760)	Marcos (1997, pp. 708-709)	To be eligible for the position of President one must hold at least 10 shares (see § 3 of the statutes of the Company)
<i>Junta do Comércio</i> (1755) [ <b>Board of Trade</b> ]	Deputy (Director)	Rodrigues and Craig (2010, p. 55)	
	President	Ratton (1813, p. 247); see also Madureira (1997, p. 614)	
Donativo dos 4% (1756) [ <b>Donation of the four percent</b> ]. An offer made by 46 merchants of four percent of the entry rights of the imported goods to finance the rebuilding of the Customs Lisbon House, which in 1755 was destroyed by the earthquake.	Involved in its creation	Decree of 2 January 1756	
<i>Companhia Geral da Agricultura das Vinhas do Alto Douro</i> (1756) [ <b>Company of Agriculture and Upper Douro Vineyards</b> ]	Shareholder (10 shares, in 1767)	Lisboa (2009, p. 88)	
<i>Real Fábrica das Sedas</i> (1757) [ <b>Royal Silk Factory</b> ]	Deputy (Director)	Decree of 6 August 1757	
<i>Aula do Comércio</i> (1759) [ <b>Portuguese School of Commerce</b> ]	Proponent of the statutes	Statutes of the Portuguese School of Commerce	
	Responsible, with the provision of funds, for the foundation of the French School (1761) in the School of Commerce	Teles (1768)	
<i>Companhia Geral de Pernambuco e Paraíba</i> (1759) [ <b>Company of Pernambuco and Paraíba</b> ]	Shareholder (107 shares, in 1762)	Pedreira (1995, p. 164); see also Júnior (2004, p. 94)	
	Vice-President of the first Board of Directors (1760)	Marcos (1997, p. 735)	To be eligible for the position of Vice-President one must hold at least 10 shares (see § 3 of the statutes of the Company)
<i>Contrato dos Diamantes</i> (1761) [ <b>Diamonds Contract</b> ]	Administrator (until his death)	Rodrigues (1982, p. 224); see also Lisboa (2009, p. 88)	
<i>Real Colégio dos Nobres</i> (1761) [ <b>Royal College of Nobles</b> ; inaugurated in 1766]	Superintendent	Castilho (1956, p. 15)	
<i>Junta do Provitimento Geral das Tropas</i> (1762) [ <b>Board for Supplying Provisions to the Troops</b> ]. Provisions supplied to the Portuguese Army fighting in the Seven Years War.	President	Teles (1768)	
<i>Conselho da Fazenda</i> (1763) [ <b>Treasury Council</b> ]	Regular advisor	National Archive of Torre do Tombo (ANTT) - Chancellery of <i>D. José I</i> , book 86, sheet 313	
Alfândega de Lisboa (1763) [ <b>Lisbon Customs House</b> ]	Administrator	Macedo (1951, p. 143); see also Maxwell (2004, p. 96) and Ratton (1813, p. 344)	
Alfândegas do Reino (not available) [ <b>Customs of the Kingdom</b> ]	<i>Feitor-Mor</i> (President) of all Customs	Lisboa (2009, p. 87)	
Obras Públicas da Cidade de Lisboa (not available) [ <b>Public Construction Lisbon Office</b> ]	Fiscal officer	Lisboa (2009, p. 88)	
Real Fábrica de Lanfícios da Covilhã (1764) [ <b>Royal Wool Factory of Covilhã</b> ]	Director	Castilho (1956, p. 11)	
Real Fábrica de Lanfícios de Pombal (1764) [ <b>Royal Wool Factory of Pombal</b> ]	Director	Castilho (1956, p. 11)	

*Table 1 Positions held by José Francisco da Cruz after his return from Brazil in 1747*

In addition to being highly respected by other businessmen (Gramoza, 1882, p. 126), in the beginning of 1762 Cruz held the office of general treasurer of the Royal Treasury, as acknowledged earlier, and was, at the same time, *Provedor* [President] of the second Board of Directors of the Company of Grão-Pará and Maranhão (since January 1760) (Marcos, 1997, pp. 708-709), and *Vice-Provedor* [Vice-President] of the first Board of Directors of the Company of Pernambuco and Paraíba (since January 1762) (Marcos, 1997, p. 735).

Furthermore, Cruz was in 1762 the largest Portuguese shareholder of the Company of Pernambuco and Paraíba, amounting to a total of 107 shares (3,14% of the capital stock) (Júnior, 2004, p. 94). As importantly, as Table 1 shows, Cruz was also a shareholder of the Company of Agriculture and Upper Douro Vineyards (Lisboa, 2009, p. 88). This circumstance made him an investor in the three biggest chartered trading companies established in the reign of *D. José I* (1750-1777). The plutocrat José Francisco da Cruz was also engaged in the tobacco business through a firm he established in Brazil, in Bahia. As Pedreira (1995, pp. 235-236) describes, Cruz “set off across the sea to Bahia [in 1735] where he began to work in a tobacco storehouse until he ventured into wholesale [...] [and when he returned to Lisbon] became the leading figure of the trade body assuming multiple institutional responsibilities”. In Portugal, the tobacco import business was assigned to a monopolist contractor in the form of a rent for a given period, normally for three years. The Cruzes family was the trustee of what was considered to be the most important monopolist contract of the crown. Therefore, to head the Royal Treasury, *D. José I* and Pombal may have foreseen that a merchant with connections to the tobacco business would be an added value in terms of knowledge and control of its taxes, more so at a time when smuggling was reaching high proportions. After all, the Treasury’s incomes in 1762-1776 indicate that tobacco’s taxes (17%) was the second highest source of revenues, behind Customs and Consulates’ taxes (24,15%) (Tomaz, 1988, p. 376).

## 5. JOSÉ FRANCISCO DA CRUZ AND POMBAL: PERSONAL RELATIONS

Some reports of friendship between Cruz and Pombal indicate that they were very close. For example, Cruz’s two older children and Pombal’s youngest son were three of the 24 students assisting the opening ceremony of the Royal College of Nobles in Lisbon, on 19 March 1766, which they were to frequent from its first year (Carvalho, 1959, pp. 181-183). Azevedo (1893, p. 49) goes further to state that Pombal and Cruz were, in several meetings held to that end, the authors of the final draft of the 55 chapters of the statutes of the Company of Grão-Pará and Maranhão, confirmed by Royal Decree issued on 7 June 1755. Maxwell (2004, p. 109) also informs that “the typical assistant of the prime-minister [Pombal], José Francisco da Cruz”, helped him to write the statutes of the Company of Grão-Pará and Maranhão in 1755. In this firm, Cruz was elected President of the second Board of Directors in January 1760 (Marcos, 1997, pp. 708-709). It is believed that one of the 55 votes he received (Marcos, 1997, p. 708) might have been Marquis of Pombal’s vote, as the Secretary of State in 1757 had subscribed and paid six shares which he held until 1764, when he transferred the ownership to his wife, the Countess of Daun (shares no. 901 to 903, and no. 1099 to 1101; see ANTT, CGGPM, shares book, book 3rd). The six shares in Pombal’s possession entitled him to have one vote in the election of the Board of Directors, due to the fact that only shareholders owning at least five shares could exercise the right to vote<sup>4</sup> (paragraph 3 of the statutes of the Company of Grão-Pará and Maranhão). Only investors owning 10 shares could be elected for the Board of Directors of the company (paragraph 2 of the statutes of the Company of Grão-Pará and Maranhão), being that Cruz largely fulfilled this requirement (Marcos, 1997, p. 708; see also Pedreira, 1995, p. 164). Ratton (1813, p. 287) explains that discussions about royal public finances affairs were taking place at Pombal’s house every Friday morning and that Cruz and more two or three high-level officials of the public administration were present at those meetings. Cruz’s profile matched that of an experienced and well-traveled businessman – he was one of the owners of the *Fábrica de Rapé de Lisboa* [Tobacco Factory in Lisbon], an enterprise for industrial processing of imported tobacco (Macedo, 1951, p. 142) –, familiar with modern accounting techniques and knowledgeable in public administration due to his position at the *Depósito Público* [Public Deposit] (see Table 1; see also Gomes, 2007, p. 152).

<sup>4</sup> The vote was single and secret.

The circumstance that Cruz was at the time one of the few Portuguese familiar with the DEB technique is believed to be the reason why he was chosen as Pombal's man of trust in the Royal Treasury.

## 6. DISCUSSION

The article sought to respond to calls by (1) Burchell *et al.* (1980) to understand which social and political agents were involved in the emergence and development of accounting, and (2) Hopwood (1985), to identify the driving political factors of accounting change. This paper's primary contribution to the literature has to do with the systematisation of biographic features and professional traces of a prominent figure linked to the development and expansion of accounting in eighteenth century Portugal. From 1761 until 1768, for the administration and accounting of public finances, with the position of general treasurer of the Royal Treasury, Portugal's Prime Minister surround himself by the reputable and successful José Francisco da Cruz, a businessman with international experience in trading companies and also with strong colonial experience in Portuguese America. Likewise the big merchants of the eighteenth century (Costa & Olival, 2005; Pedreira, 1992, 1995), Cruz did part of his learning experience in Brazil (12 years in the Portuguese colony), corresponding his settlement in the court in Lisbon the culmination of his commercial career. In addition, Cruz presented a relevant characteristic: practical knowledge of DEB. As Rodrigues and Sangster (2012, p. 1158) stress, the important merchants from Lisbon at that time were all quite familiar with DEB and commercial techniques. Together with Pombal (see Gomes, 2007; see also Gomes *et al.*, 2008), the political responsible for the foundation of the School of Commerce, João Henrique de Sousa, first accounting professor of the School of Commerce (1759-1762), and Albert Jacquéri de Sales, second accounting professor of the School of Commerce (1762-1784) (see, for both professors, in an overall analysis, Rodrigues & Craig, 2009, 2010), three individualities that scholarly literature has highlighted, namely in issues regarding to state intervention in commercial (including accounting) education, this study has shown that José Francisco da Cruz is equally worthy of a prominent place in the history of accounting in Portugal, as he was the President of the Board of Trade when the Portuguese School of Commerce was created in May 1759. In these public school established in Lisbon by Portugal's Board of Trade, accounting was to be taught according to the DEB method.

## 7. CONCLUSION

This article is an attempt to rescue Cruz from the oblivion in the debates concerning the emergence of DEB in Portugal. The study is justified by the importance attributed to José Francisco da Cruz in DEB development in the Portuguese context, due, on the one hand, to his managerial roles in the Royal Treasury and in two monopolist trade companies (Company of Grão-Pará and Maranhão and Company of Pernambuco and Paraíba), organizations where the use of accounting books under DEB was obligatory since 1755 and 1759, respectively, and, on the other hand, to his political contribution for the foundation of the Portuguese School of Commerce in 1759 as President of the Board of Trade, the entity that has served as her supervisory authority. This work has one limitation which is to be promptly highlighted; it has to do with the preliminary nature of the study and, consequently, with the choice made in order to analyse more secondary sources rather than primary ones. The paper makes a call for more studies on businessmen and other commercial or accounting agents to enhance understanding of their roles in the process of accounting change during the eighteenth century in Portugal, a time which, using a metaphor conveniently adapted of Donoso Anes (1996, p. 122)<sup>5</sup>, may be considered the Century of Enlightenment of Portuguese accounting.

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<sup>5</sup> Donoso Anes (1996, p. 122) refers to the sixteenth century and to the Spanish public accounting.

**LITERATURE:**

1. Azevedo, J. L. (1893). *Estudos de História Paraense*. Pará: Tipografia Tavares Cardoso.
2. Burchell, S., Clubb, C., Hopwood, A., Hughes, J., & Nahapiet, J. (1980). The roles of accounting in organizations and society. *Accounting, Organizations and Society*, 5(1), 5-28.
3. Caiado, A. P. (2006). A vida e a obra de Cabral de Mendonça. *Revista de Contabilidade e Comércio*, 237, 55-69.
4. Cardoso, J. L. (1984). Uma ‘notícia esquecida’: o ensino da Economia na Aula do Comércio. *Estudos de Economia*, 5(1), 87-112.
5. Carnegie, G., & Napier, C. (1996). Critical and interpretive histories: insights into accounting’s present and future through its past. *Accounting, Auditing & Accountability Journal*, 9(3), 7-39.
6. Carqueja, H. O. (2002). Rodrigo Afonso Pequeto. *Revisores e Empresas*, 17, 5-6.
7. Carqueja, H. O. (2002a). Fernando Vieira Gonçalves da Silva. *Revisores e Empresas*, 18, 5-6.
8. Carqueja, H. O. (2010). *Arte da escritura dobrada que ditou na Aula do Comércio João Henrique de Sousa copiada para instrução de José Feliz Venâncio Coutinho no ano de 1765 – comentário, fac-símile e leitura*. Lisboa: OTOC.
9. Carreira, A. (1983). *As companhias pombalinas* (2nd Ed.). Lisboa: Editorial Presença.
10. Carvalho, J. M., Rodrigues, L. L., & Craig, R. (2007). Early cost accounting practices and private ownership: the Silk Factory Company of Portugal, 1745-1747. *The Accounting Historians Journal*, 34(1), 57-90.
11. Carvalho, R. (1959). *História da fundação do Colégio Real dos Nobres de Lisboa (1761-1772)*. Coimbra: Atlântida – Livraria Editora.
12. Castilho, J. (1956). *Lisboa antiga: o Bairro Alto, vol. III* (3rd Ed.). Review by Gustavo de Matos Sequeira. Lisboa: Oficinas Gráficas da C.M.L.
13. Correia, F. A. (1931). *A administração do Marquês de Pombal: o comércio e as companhias privilegiadas*. Lisboa: Oficinas do Instituto Superior de Ciências Económicas e Financeiras.
14. Costa, F. D., & Olival, F. (2005). Élités económicas. In P. Lains, & Á. F. Silva (Eds.), *História económica de Portugal, 1700-2000, vol. I* (pp. 323-343). Lisboa: ICS – Imprensa de Ciências Sociais.
15. Donoso Anes, R. (1996). *Una contribución a la historia de la contabilidad: análisis de las prácticas contables desarrolladas por la tesorería de la Casa de la Contratación de las Indias de Sevilla (1503-1717)*. Sevilla: Universidad de Sevilla.
16. Faria, A. R. (2008). An analysis of accounting history research in Portugal: 1990-2004. *Accounting History*, 13(3), 353-382.
17. Faria, A. R. (2011). A organização contabilística no sector conserveiro entre o final do século XIX e a primeira metade do século XX: o caso Júdice Fialho. *Pecunia*, 13, 59-81.
18. Ferreira, L. F. (2006, February). *Gonçalves da Silva: aspectos da vida e obra de um mestre da Contabilidade do século XX*. Paper presented at the III Jornada de História da Contabilidade (CEHC-APOTEC), Lisboa, Portugal.
19. Ferreira, L. F., Kedslie, M., & Freitas, M. V. (1995, May). *The history of accounting in Portugal, with special reference to the Aula do Comercio*. Paper presented at the 18th European Accounting Association Annual Congress, Birmingham, UK.
20. Ferreira, R. F. (2000). Alocução – homenagem ao professor Gonçalves da Silva. *Revista de Contabilidade e Comércio*, 226, 193-205.
21. Gomes, D. (2007). *Accounting change in central government: the institutionalization of double entry bookkeeping at the Portuguese Royal Treasury (1761-1777)*. Ph.D. Thesis. Universidade do Minho/Portugal.

22. Gomes, D., Carnegie, G., & Rodrigues, L. L. (2008). Accounting change in central government: the adoption of double entry bookkeeping at the Portuguese Royal Treasury (1761). *Accounting, Auditing & Accountability Journal*, 21(8), 1144-1184.
23. Gomes, D., & Rodrigues, L. L. (2009). Investigação em história da Contabilidade. In M. J. Major, & R. Vieira (Eds.), *Contabilidade e controlo de gestão - teoria, metodologia e prática* (pp. 211-239). Lisboa: Escolar Editora.
24. Gonçalves, M. (2011). Aula de Comércio do Porto (1803): sua criação e confronto crítico com a correlativa aula lisboeta. *Portuguese Journal of Accounting and Management*, 10, 115-163.
25. Gramoza, J. P. F. (1882). *Sucessos de Portugal: memórias históricas, políticas e civis em que se descrevem os mais importantes sucessos ocorridos em Portugal desde 1742 até ao ano de 1804, vol. I*. Lisboa: Tipografia do Diário da Manhã.
26. Guimarães, J. C. (2005). F.V. Gonçalves da Silva e as ‘Doutrinas Contabilísticas’. *Jornal de Contabilidade*, 342, 346-350.
27. Guimarães, J. C. (2007). Fernando Vieira Gonçalves da Silva - divulgador/publicista. *Revista da Câmara dos Técnicos Oficiais de Contas*, 88, 50-57.
28. Guimarães, J. C. (2009). Panegírico a Camilo Cimourdain de Oliveira. *Revista da Câmara dos Técnicos Oficiais de Contas*, 106, 31-32.
29. Guimarães, J. C. (2010). Panegírico a António Lopes de Sá. *Revista da Ordem dos Técnicos Oficiais de Contas*, 124, 37-44.
30. Guimarães, J. C. (2010a). Panegírico a Rogério Fernandes Ferreira. *Revista da Ordem dos Técnicos Oficiais de Contas*, 125, 31-37.
31. Hopwood, A. G. (1985). The tale of a committee that never reported: disagreements on intertwining accounting with the social. *Accounting, Organizations and Society*, 12(3), 361-377.
32. Júnior, J. R. (2004). *Colonização e monopólio no Nordeste Brasileiro* (2nd Ed.). São Paulo: Hucitec.
33. Lisboa, M. E. (2009). *O solar do morgado de Alagoa: os irmãos Cruz e os significados de um património construído (segunda metade do século XVIII)*. Lisboa: Edições Colibri.
34. Macedo, J. B. (1951). *A situação económica no tempo de Pombal: alguns aspectos*. Porto: Livraria Portugália.
35. Madureira, N. L. (1997). A ‘sociedade civil’ do Estado. Instituições e grupos de interesses em Portugal (1750-1847). *Análise Social*, 142, 603-624.
36. Marcos, R. M. F. (1997). *As companhias pombalinas – contributo para a história das sociedades por acções em Portugal*. Coimbra: Livraria Almedina.
37. Maxwell, K. (2004). *O Marquês de Pombal* (2nd Ed.). Translation by Saul Barata. Lisboa: Editorial Presença.
38. Monteiro, N. G. (2011). Casa, casamento e nome: fragmentos sobre relações familiares e indivíduos. In J. Mattoso, & N. G. Monteiro (Eds.), *História da vida privada em Portugal - a Idade Moderna* (pp. 130-158). Lisboa: Círculo de Leitores.
39. Oliveira, I. G. (2008). *Contabilidade do vinho do Porto: o período pombalino*. M.Sc. Dissertation. Universidade do Minho/Portugal.
40. Oliveira, I. G. (2009). A Contabilidade da Real Companhia Velha no período pombalino (1756-1777). *Jornal de Contabilidade*, 392, 361-374.
41. Oliveira, J. M. (2009, June). *A contabilidade da Companhia Geral da Agricultura das Vinhas do Alto Douro (1756-1834)*. Paper presented at the II Encontro de História da Contabilidade da Câmara dos Técnicos Oficiais de Contas, Lisboa and Santa Maria da Feira, Portugal.

42. Oliveira, J. M. (2010, June). *Gestão de resultados: o caso da Companhia Geral da Agricultura das Vinhas do Alto Douro (1756-1834)*. Paper presented at the III Encontro de História da Contabilidade da Ordem dos Técnicos Oficiais de Contas, Lisboa and Braga, Portugal.
43. Pedreira, J. (1992). Os negociantes de Lisboa na 2.<sup>a</sup> metade do século XVIII: padrões de recrutamento e percursos sociais. *Análise Social*, 116-117, 407-440.
44. Pedreira, J. (1995). *Os homens de negócio da praça de Lisboa. De Pombal ao Vintismo. Diferenciação, reprodução e identificação de um grupo social*. Ph.D. Thesis. Universidade Nova de Lisboa/Portugal.
45. Pinto, J. (2009). *O ensino da Contabilidade na FEP – o contributo do Prof. J. A. Sarmento*. M.Sc. Dissertation. Universidade do Porto/Portugal.
46. Pinto, O. (2008, September). *A contabilidade e o negócio dos escravos na Companhia Geral do Grão-Pará e Maranhão*. Paper presented at the I Encontro de História da Contabilidade da Câmara dos Técnicos Oficiais de Contas, Lisboa and Porto, Portugal.
47. Pinto, O. (2009, June). *As companhias como instrumento de concretização da política do Estado – o caso da Companhia Geral do Grão-Pará e Maranhão*. Paper presented at the II Encontro de História da Contabilidade da Câmara dos Técnicos Oficiais de Contas, Lisboa and Santa Maria da Feira, Portugal.
48. Pinto, O., & West, B. (2012, July). *Humans as cost objects: 18th century Portuguese slave trading*. Paper presented at the 13th World Congress of Accounting Historians, Newcastle, UK.
49. Previts, G. J., Parker, L. D., & Coffman, E. N. (1990). An accounting historiography: subject matter and methodology. *Abacus*, 26(2), 136-158.
50. Ratton, J. (1813). *Recordações de Jacome Ratton sobre ocorrências do seu tempo em Portugal, durante o lapso de sessenta e três anos e meio, aliás de Maio de 1747 a Setembro de 1810* (1st Ed.). Londres: H. Bryer.
51. Ratton, J. (1992). *Recordações de Jacome Ratton sobre ocorrências do seu tempo em Portugal, durante o lapso de sessenta e três anos e meio, aliás de Maio de 1747 a Setembro de 1810* (3rd Ed.) (Fac-Símile). Lisboa: Fenda.
52. Rodrigues, E. G. (1982). Pombal e a questão dos diamantes. *Brotéria*, 115 (Agosto), 209-238.
53. Rodrigues, L. L., & Craig, R. (2004). English mercantilist influences on the foundation of the Portuguese School of Commerce. *Atlantic Economic Journal*, 32(4), 329-345.
54. Rodrigues, L. L., & Craig, R. (2009). Teachers as servants of state ideology: Sousa and Sales, Portuguese School of Commerce, 1759-1784. *Critical Perspectives on Accounting*, 20(3), 379-398.
55. Rodrigues, L. L., & Craig, R. (2010). Os dois primeiros professores da Aula de Comércio e a ideologia do Estado. *Revista da Ordem dos Técnicos Oficiais de Contas*, 126, 44-55.
56. Rodrigues, L. L., Gomes, D., & Craig, R. (2003). Aula do Comércio: primeiro estabelecimento de ensino técnico profissional oficialmente criado no mundo? *Revista da Câmara dos Técnicos Oficiais de Contas*, 34, 46-54.
57. Rodrigues, L. L., Gomes, D., & Craig, R. (2004). Portuguese School of Commerce, 1759-1844: a reflection of the ‘Enlightenment’. *Accounting History*, 9(3), 53-71.
58. Rodrigues, L. L., & Sangster, A. (2012). ‘Public-Private Partnerships’: the Portuguese General Company of Pernambuco and Paraíba. *Business History*, 54(7), 1142-1165.
59. Rodrigues, L. L., Guimarães, J. C., & Ferreira, L. F. (2010). Prefácio (pela Comissão de História da Contabilidade da OTOC). In H. O. Carqueja, *Arte da escritura dobrada que ditou na Aula do Comércio João Henrique de Sousa copiada para instrução de José Feliz Venâncio Coutinho no ano de 1765 – comentário, fac-símile e leitura* (pp. 3-7). Lisboa: OTOC.



60. Rodrigues, L. L., Ricardino, Á., & Martins, S. T. A. (2009). “Corporate governance regulations”: a new term for an ancient concern? The case of Grão Pará and Maranhão General Trading Company in Portugal (1754). *Accounting History*, 14(4), 405-435.
61. Rodrigues, M. B. (2000). Carta de Lei de 22 de Dezembro de 1761 sobre a extinção dos Contos e a criação do Real Erário. *Revista de Contabilidade e Comércio*, 226, 361-414.
62. Rodrigues, M. B. (2011). Os homens do Erário Régio. *Pecunia*, 13, 59-81.
63. Santana, F. G. (1974). *Contributo para um dicionário de professores e alunos das Aulas de Comércio*. Lisboa: Associação Comercial de Lisboa – Câmara de Comércio.
64. Santana, F. G. (1985). A Aula do Comércio: uma escola burguesa em Lisboa. *Ler História*, 4, 19-30.
65. Serrão, J. V. (1982) *O Marquês de Pombal – o homem, o diplomata e o estadista*. Lisboa: Câmara Municipal; Oeiras: Câmara Municipal; Pombal: Câmara Municipal.
66. Sousa, J. F. (1999). Martim Noel Monteiro e a Revista de Contabilidade e Comércio: contributo para uma abordagem bibliográfica. *Jornal de Contabilidade*, 272, 365-369.
67. Tavares, A. F. (2008). *A influência de Jaime Lopes Amorim no desenvolvimento da Contabilidade em Portugal*. Braga: InfoContab Edições.
68. Teles, R. B. (1768). *Elogio fúnebre e histórico que na sentidíssima morte do senhor Joseph Francisco da Cruz Alagoa, recitou dentro das enlutadas sombras do seu coração e oferece ao senhor Joaquim Ignacio da Cruz, Rogério Barbuda Teles*. Lisboa: Oficina de Joseph da Silva Nazareth.
69. Tomaz, F. (1988). As finanças do estado pombalino 1762-1776. In AA.VV., *Estudos e ensaios em homenagem a Vitorino Magalhães Godinho* (pp. 355-388). Lisboa: Livraria Sá da Costa Editora.

#### **ARCHIVAL SOURCES:**

*Arquivo Nacional da Torre do Tombo* (ANTT) [National Archive of Torre do Tombo]

1. .Chancellery of D. José I, book 86, sheet 313
2. .Company of Grão-Pará and Maranhão (CGGPM). Shares book, book 3rd

*Biblioteca Nacional de Portugal* [National Library of Portugal]

3. *Alvará Real de 7 de Junho de 1755* [Royal Decree of 7 June 1755; Statutes of the Company of Grão-Pará and Maranhão]. *Estatutos (gerais) da Companhia Geral do Grão-Pará e Maranhão (data da aprovação régia dos estatutos)*. *Colecção da Legislação Portuguesa desde a última compilação das Ordenações redigida pelo Desembargador António Delgado da Silva. Legislação de 1750 a 1762*. Lisboa: Tipografia Maignense. Ano 1830. 376-391.
4. *Decreto de 2 de Janeiro de 1756* [Decree of 2 January 1756]. *Decreto aceitando a oferta dos negociantes de quatro por cento para a Reedificação da Alfândega de Lisboa*. *Colecção da Legislação Portuguesa desde a última compilação das Ordenações redigida pelo Desembargador António Delgado da Silva. Legislação de 1750 a 1762*. Lisboa: Tipografia Maignense. Ano 1830. 407-408.
5. *Decreto de 6 de Agosto de 1757* [Decree of 6 August 1757]. *Nomeação de directores para a Real Fábrica das Sedas*. *Colecção da Legislação Portuguesa desde a última compilação das Ordenações redigida pelo Desembargador António Delgado da Silva. Legislação de 1750 a 1762*. Lisboa: Tipografia Maignense. Ano 1830. 546.
6. *Alvará Real de 19 de Maio de 1759* [Royal Decree of 19 May 1759; Statutes of the Portuguese School of Commerce]. *Estatutos da Aula do Comércio (data da aprovação régia dos estatutos)*. *Colecção da Legislação Portuguesa desde a última compilação das Ordenações redigida pelo Desembargador António Delgado da Silva. Legislação de 1750 a 1762*. Lisboa: Tipografia Maignense. Ano 1830. 655-660.

7. *Alvará Real de 13 de Agosto de 1759* [Royal Decree of 13 August 1759; Statutes of the Company of Pernambuco and Paraíba]. *Estatutos (gerais) da Companhia Geral de Pernambuco e Paraíba (data da aprovação régia dos estatutos)*. *Colecção da Legislação Portuguesa desde a última compilação das Ordenações redigida pelo Desembargador António Delgado da Silva. Legislação de 1750 a 1762*. Lisboa: Tipografia Maignense. Ano 1830. 695-713.
8. *Carta de Lei de 22 de Dezembro de 1761* [Letter of Law of 22 December 1761; Institution of the Portuguese Royal Treasury]. *Instituição do Erário Régio e Extinção da Casa dos Contos*. *Colecção da Legislação Portuguesa desde a última compilação das Ordenações redigida pelo Desembargador António Delgado da Silva. Legislação de 1750 a 1762*. Lisboa: Tipografia Maignense. Ano 1830. 816-835.

# SUSTAINABLE DEVELOPMENT AND LOGISTIC PERFORMANCE IN AFRICA: A PANEL ANALYSIS OF 40 COUNTRIES

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## **ABSTRACT**

*Green logistics represents a crucial approach to achieve sustainable development goals, particularly in Africa. The current context of Africa is marked by significant sustainable development challenges, encompassing economic, social, and environmental aspects. Therefore, optimizing logistical performance can be considered a crucial lever to attain these sustainable development objectives. In this regard, the present study investigates the link between logistical performance and sustainable development across 40 African countries over a 12-year period, spanning from 2007 to 2018. Panel data was utilized to estimate an econometric model using the E-views software, while considering control variables encompassing economic and environmental factors. The findings demonstrate that the Logistics Performance Index (LPI) has a positive and significant impact on the Sustainable Development Index (SDI). This study suggests that by investing in green logistics practices, African states could enhance their logistical performance while simultaneously contributing to sustainable development, aiming to ensure a sustainable future for current and future generations.*

**Keywords:** *Africa, Analysis, Development, Logistic, Performance*

## **1. INTRODUCTION**

Sustainable development stands as a pivotal issue of our time, intricately linked to environmental preservation and the economic and social well-being of both current and future generations. Indeed, sustainable development is a concept aimed at meeting present needs without compromising the ability of future generations to meet their own needs (*Commission mondiale sur l'environnement et le développement*, 1987). It centers on balancing economic, social, and environmental dimensions, seeking to minimize negative impacts on the environment while promoting economic performance and social well-being. Consequently, sustainable development has become a critical concern for numerous countries and organizations worldwide, owing to the imperative of finding enduring solutions to global challenges such as climate change, poverty, food security, natural resource management, and energy. In this context, understanding the impact of various factors on sustainable development, notably that of logistical performance, is crucial. Logistics represents a key domain for the efficient management of goods and services flows within the supply chain, playing a significant role in economic growth and contributing to sustainable development. It is intrinsically linked to the environment, given that managing these flows involves the mobilization of natural resources and raw materials. This can result in negative environmental impacts, subsequently affecting economic and social performance. Faced with these challenges, implementing the Green logistics approach entails developing sustainable logistical practices that minimize

negative environmental impacts while maximizing economic and social performance. Hence, effective logistical performance can contribute to enhancing business efficiency, reducing production costs, bolstering economic competitiveness, and mitigating environmental impact (J. Liu et al., 2018; Singh et al., 2022). Considering the specific context of Africa, marked by significant sustainable development challenges on economic, social, and environmental fronts, this study aims to investigate the impact of logistical performance on sustainable development. It relies on a data panel covering the period 2007-2018 for 40 African countries. Our research hypothesis postulates that logistical performance positively and significantly contributes to sustainable development in Africa, where sustainable development is a major concern, and optimizing logistical performance can serve as a lever to achieve sustainable development goals.

## **2. LITERATURE REVIEW**

Before delving into our model, we provide an overview of the green logistics approach, which constitutes the central focus of our study. Additionally, we underscore the theoretical linkage existing between sustainable development and logistical performance.

### **2.1. Green Logistics, Sustainable Logistics, or Eco-Logistics**

Logistics encompasses activities necessary to efficiently plan, implement, and control the flow of goods, information, and resources from origin to destination. It includes purchasing management, inventory management, supply chain management, production management, and warehouse and transportation management (Io Storto & Evangelista, 2023; Mohsin et al., 2022). Despite being a crucial lever for economic development, logistics faces several environmental challenges such as air pollution, increased energy consumption, waste generation, environmental degradation, and contribution to climate change (Maji et al., 2023; Yingfei et al., 2022). In this context, green logistics, also referred to as sustainable logistics or eco-logistics, has evolved as an approach aiming to reduce the environmental impact of logistical operations while enhancing their economic efficiency. Green logistics has been defined by several researchers as an approach focusing on the design and implementation of environmentally friendly logistics solutions by reducing greenhouse gas emissions, energy consumption, waste, and noise pollution (Maji et al., 2023; Mohsin et al., 2022; Yingfei et al., 2022). Thus, adopting green logistics practices can assist businesses in addressing sustainable development concerns (Sharma et al., 2023).

### **2.2. Implementation of Green Logistics**

In their study, (Mohsin et al., 2022, p. 2) approached the definition of green logistics as an environmentally friendly logistics system and a prerequisite for sustainable supply chain management. They emphasized that green logistics involves implementing eco-responsible practices to reduce negative environmental impacts within supply chain management, thereby contributing to its economic performance. In this regard, researchers have discussed several approaches and practices for implementing green logistics. (Aldakhil et al., 2018) mentioned the importance of collaboration among different supply chain actors to achieve green logistics goals. Moreover, (Io Storto & Evangelista, 2023) affirmed that infrastructure efficiency can ensure and maintain the competitiveness of logistical systems. Their study offers several suggestions to policymakers to integrate environmental sustainability issues into defining policy measures aimed at improving freight transport and logistics performance at the national level. The study of (Yingfei et al., 2022) study also highlights the importance of transport infrastructure and technology use to improve logistical environmental performance. The authors emphasized the importance of efficient use of information technologies to reduce transport and trade costs and boost the international trade system.

Additionally, (C. Liu & Ma, 2022) mentioned that Industry 4.0 and Internet of Things technologies are key elements for implementing green logistics and supply chain systems. Indeed, their usage helps improve the efficiency and environmental sustainability of logistical operations, thus contributing to sustainable development. Finally, the study by (Sharma et al., 2023) highlights the importance of institutional pressures to encourage the adoption of sustainable green logistics practices. The authors also emphasize the significance of logistical chain flexibility to allow the adoption of new sustainable practices.

### **2.3. Sustainable Development and Logistical Performance**

In the literature, several research works suggest that logistical performance can be enhanced through the implementation of sustainable logistics practices, contributing to sustainable development. Indeed, (Gu et al., 2022) demonstrated that managing green logistics can stimulate sustainable economic growth. Furthermore, research by (Singh et al., 2022) highlighted that sustainable logistical operations can improve both economic and environmental performance. The study suggests the need to enhance logistical performance to avoid negatively impacting the global economy. Research by (Karaduman et al., 2020) showed that green logistics can contribute to reducing greenhouse gas emissions and preserving natural resources. Moreover, research by (Aldakhil et al., 2018) emphasized the determinants of green logistics, including innovation, regulation, and transport costs, suggesting that logistical performance can significantly impact sustainable development by promoting the adoption of sustainable practices and fostering innovation to reduce the negative impact of logistical activities on the environment. While the reviewed references primarily address the environmental and economic dimensions of logistical performance, some also mention the social dimension, highlighting the importance of considering the social impacts of logistical activities to ensure overall sustainable performance. For example, the study by (Singh et al., 2022) suggests that managing green logistics can stimulate sustainable economic growth while improving quality of life, health, and the environment. Furthermore, the study by (Wen et al., 2023) emphasizes the importance of measuring sustainable performance among logistics service providers in supply chains to ensure a fair distribution of economic and social benefits. Through this literature review, it is evident that logistical performance can significantly impact sustainable development. Therefore, it is essential for businesses to incorporate sustainable practices into their logistical operations to optimize their logistical performance while contributing to environmental protection and sustainable development.

## **3. METHODOLOGY**

In this section, we outline the strategy adopted to achieve the objective of our research, particularly the empirical model studied.

### **3.1. Research strategy**

For our study on the impact of logistics performance on sustainable development in 40 African countries, the key steps of our research strategy are as follows:

- **Data Collection:** We compiled a dataset spanning the period 2007-2018 for 40 African countries. These data were gathered from international organizations such as the World Bank and the United Nations.
- **Variable Selection:** We formulated several key variables for our study to analyze the impact of logistics performance on sustainable development. This was done while considering the control of economic and environmental factors.
- **Analysis of Data:** In the context of panel data analysis using the E-Views software, we opted for the robust least squares method to estimate the parameters of our multiple linear regression model. This method is known for its ability to minimize the impact of outliers or

measurement errors (Bourbonnais, 2015). Additionally, we employed descriptive statistics and correlation methods to examine the collected data and the relationships between the different variables.

Dependent Variable		
Sustainable Development		Measured by the Sustainable Development Index (SDI) This index assesses a country's level of sustainable development by considering economic, social, and environmental dimensions. Calculated by the United Nations (UN) to assist countries in gauging their progress toward sustainable development <sup>1</sup> .
Independent Variable		
Logistical Performance		Measured by the Logistics Performance Index (LPI) This index evaluates the quality of logistics worldwide. It relies on a survey conducted among businesses and logistics professionals who assess skills, infrastructure quality, customs processes, and operational performance in their respective countries. Created by the World Bank. <sup>2</sup>
Control Variables		
Economic Factors	Gross Domestic Product (GDP)	Measures the value of all goods and services produced within a country during a specified period. Used to gauge a country's economic growth.
	Trade Openness (TO)	Measures the fluidity of goods and services exchange between countries. Generally measured by the sum of a country's exports and imports as a percentage of its GDP.
	Foreign Direct Investments (FDI)	Refers to investments made by foreign enterprises in the host country.
Environmental Factors	Natural Resource Rents (NRR)	This variable measures the share of income derived from natural resources in a country's economy.
	Renewable Energy Consumption (REC)	This variable represents the proportion of renewable energies in total final energy consumption.
	Greenhouse Gas Emissions (GHG)	This variable measures the quantity of greenhouse gases emitted.

*Table 1: Key variables of the study*

*(Source: authors elaboration based on data provided by the United Nations and the World bank.)*

### 3.2. Modeling

The equation of our regression model is as follows:

$$IDDit = C + \beta_1 IPLit + \beta_2 PIBit + \beta_3 OCit + \beta_4 IDEit + \beta_5 RRRit + \beta_6 CRNit + \beta_7 GESit + \epsilon it$$

<sup>1</sup> Data from the United Nations

<sup>2</sup> Data from the World Bank

Where:

- $IDD_{it}$  is the dependent variable, sustainable development, measured by the Sustainable Development Index (IDD) of each country  $i$  at each time period  $t$ .
- $IPL_{it}$  is the independent variable, logistical performance, measured by the Logistics Performance Index (IPL) of each country  $i$  at each time period  $t$ .
- $PIB_{it}, OC_{it}, IDE_{it}, RRN_{it}, CRN_{it}$ , and  $GES_{it}$  are the control variables, measured respectively by Gross Domestic Product (GDP), Trade Openness (TO), Foreign Direct Investments (FDI), Natural Resource Rents (NRR), Renewable Energy Consumption (REC), and Greenhouse Gas Emissions (GHG) of each country  $i$  at each time period  $t$ .
- "C" is a constant.
- $\beta_1, \beta_2, \beta_3$  et  $\beta_4, \beta_5, \beta_6, \beta_7$  are the regression coefficients for the independent variables IPL, PIB, OC, IDE, RRN, CRN, and GES respectively.
- $\epsilon_{it}$  is the error term for each observation  $i$  at each time period  $t$ .

**Results and Discussion** We present the results derived from various statistical analyses using the E-Views software. Firstly, we conducted descriptive statistics to better understand the characteristics of the collected data. Subsequently, we performed a correlation matrix analysis to assess the relationships between the different variables. Lastly, we estimated an empirical model.

## 4. RESULTS AND DISCUSSION

### 4.1. Descriptive Statistics

The descriptive statistics in Table No. 2 provide an overview of the characteristics of each variable. Specifically, for IPL and IDD:

- The average IDD is 0.57, suggesting that, on average, the included countries have a moderate level of sustainable development.
- The average IPL is 2.51, indicating that, on average, countries exhibit relatively high logistical performance.
- The maximum values of IPL and IDD are 3.78 and 0.79, respectively. This suggests that some countries exhibit very high logistical performance and/or relatively high sustainable development levels.
- The minimum values of IPL and IDD are 1.77 and 0.33, respectively. This indicates that some countries have very low logistical performance and/or relatively low levels of sustainable development.

	IDD	IPL	PIB	OC	IDE_12	RRN	CRN	GES
Mean	0,57	2,506683	6,17E+10	70,64653	15,50026	11,11292	57,52380	75578,40
Median	0,560000	2,490000	1,65E+10	61,96943	14,62146	7,624241	73,60000	31170,00
Maximum	0,791000	3,775321	4,98E+11	300,3987	40,21616	63,70424	97,03000	560860,0
Minimum	0,329000	1,770000	1,13E+09	20,72252	3,700949	0,001260	0,070000	1330,000
Std. Dev.	0,108110	0,331282	1,04E+11	36,38624	4,113438	10,72982	30,80555	113676,6
Skewness	0,250224	0,996080	2,557045	3,231099	2,620655	2,058829	-0,60	2,647313
Kurtosis	2,391517	4,837306	8,744970	19,14648	15,33044	8,045817	1,877847	9,969783
Jarque-Bera	4,836283	57,22511	460,9440	2356,736	1398,690	330,4865	20,87613	596,9270
Probability	0,089087	0,000000	0,000000	0,000000	0,000000	0,000000	0,000029	0,000000

*Table 2: descriptive statistics  
(Source: E-views output.)*

Figure No. 1 provides statistics summarizing the properties of the distribution of residuals from the statistical model. Residuals represent the difference between the values predicted by the model and the actual observed values in the data.

- The mean of the residuals is very close to zero (-0.001), suggesting that the model is fairly well-balanced. The median is also close to zero (0.001), reinforcing this idea.
- The distribution of residuals is slightly left-skewed, as indicated by the negative skewness coefficient (-0.216). This suggests that the tail of the distribution is slightly longer on the negative values side.
- The Jarque-Bera test has a value of 1.91 with a probability of 0.38. This indicates that the residuals do not reject the hypothesis of normality at a 95% confidence level. Therefore, it can be said that the distribution of residuals is close to normality. This implies that our model is valid, and its forecasts can be considered reliable.

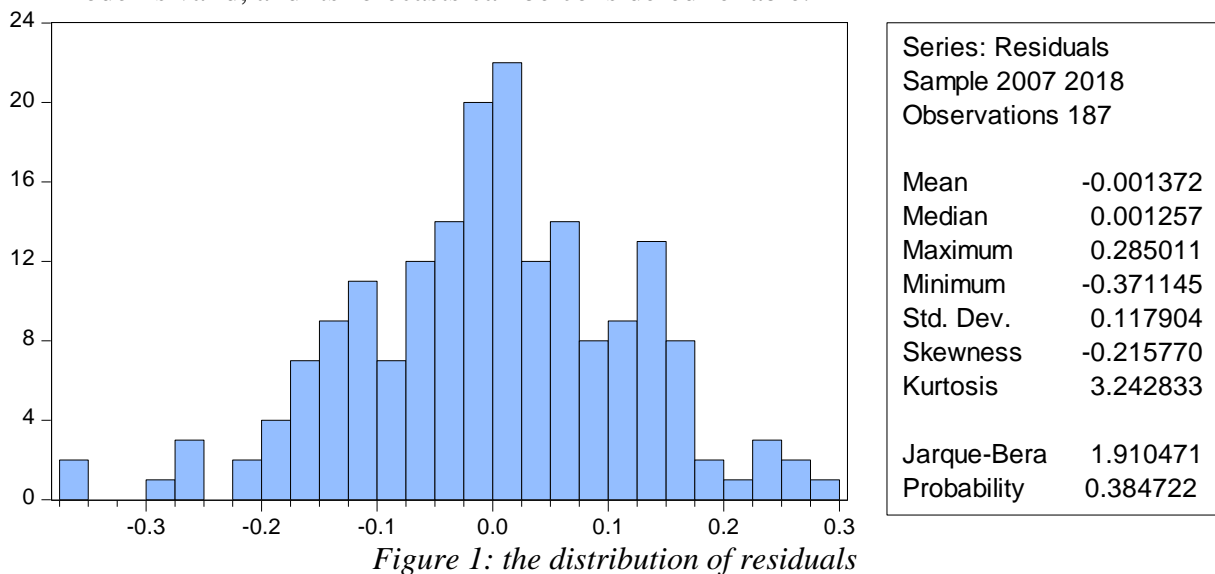


Table No. 3 displays the correlation coefficients between each pair of variables. We focus on the first column concerning the correlation between our dependent variable, the Sustainable Development Index (IDD), and the other variables:

- There is a moderate positive correlation between a country's logistics performance and its sustainable development. This suggests that an efficient logistics system can contribute to sustainable development. The study by (Suki et al., 2021) explores the role of logistics performance in achieving sustainable development. Results show that logistics performance positively impacts economic growth and helps reduce carbon emissions. Additionally, the study by (Aldakhil et al., 2018) supports green growth by encompassing all possible factors of green logistics within environmental and socio-economic sustainability. The findings emphasize the importance of integrating sustainable practices in logistics management to enhance its performance and environmental sustainability.
- There's a moderate positive correlation between GDP and IDD. This indicates that countries with higher GDP tend to be more developed sustainably. However, GDP might not fully reflect environmental and social sustainability. Results from (Destek & Sinha, 2020) show a positive relationship between real GDP and environmental quality represented by the environmental footprint. After a certain threshold of economic growth, increasing environmental awareness urges policymakers to take corrective measures. Conversely, results from (Sikder et al., 2022) indicate that economic growth can cause short-term environmental degradation, particularly due to the significant contribution of the industry



to this growth. Nevertheless, it's crucial for governments in developing countries to implement appropriate environmental policies to minimize the negative impacts of economic growth on the environment.

- There's a weak correlation between OC and IDD, suggesting no significant link between a country's trade and its sustainable development. However, research findings by (Destek & Sinha, 2020) indicate that OC can impact environmental quality positively or negatively depending on the country's level of development and industrialization. For developed and industrialized countries, international trade opens doors for cross-border technology transfer and access to cleaner technologies, which in turn can enhance environmental quality. Conversely, in developing countries, policymakers primarily seek growth, even at the expense of the environment.
- There's a negative correlation between IDE and IDD. This suggests that countries attracting foreign direct investments are not necessarily the most sustainable in development. Empirical results from the study by (Djellouli et al., 2022) also reveal that FDI significantly contributes to environmental degradation. Thus, the authors highlight the significant and mixed role of FDI, both in terms of economic development and environmental quality.
- There's a positive correlation between RRN and IDD. This suggests that countries rich in natural resources may have relatively high IDD scores due to their favorable economic situation. However, other research models align with the theoretical link indicating the negative effect of increased use of natural resources on the environment. For example, research results from (Ullah et al., 2021) show that environmental degradation increases with rising incomes from natural resources.
- There's a strong negative correlation between CRN and IDD. While using renewable energy is one of the most effective ways to achieve sustainable development, this negative correlation could be explained by the fact that countries with high IDD tend to have more varied and efficient energy sources, or they score higher on other levels. A similar outcome was found by (Güney, 2023). However, the author emphasizes that the use of renewable energy is a critical factor for sustainable development and has a positive long-term effect. It suggests that countries should support projects enabling them to use more renewable energy resources. The study suggests that countries should focus on reducing the use of non-renewable energy while increasing the use of sustainable energy sources to meet the needs of future generations.
- There's a positive correlation between greenhouse gas emissions (GES) and IDD. Despite the negative impact of greenhouse gas emissions on the environment and their potential to compromise long-term sustainability, this positive correlation might be due to the fact that greenhouse gas emissions could be linked to economic activity, which can also contribute to sustainable development. Under this possible hypothesis, results from the study by (Mariano et al., 2017) indicate a positive correlation between logistics performance and CO<sub>2</sub> emissions from the transport and logistics sector. However, they argued that this correlation could be explained by the fact that countries with good logistics performance tend to have higher economic production, leading to higher CO<sub>2</sub> emissions.

*Table following on the next page*

	IDD	IPL	PIB	OC	IDE	RRN	CRN	GES
IDD	1,00	0,28	0,36	0,08	-0,13	0,17	-0,63	0,38
IPL	0,28	1,00	0,45	-0,15	-0,14	-0,31	-0,33	0,53
PIB	0,36	0,45	1,00	-0,27	-0,21	0,03	-0,31	0,88
OC	0,08	-0,15	-0,27	1,00	0,22	0,01	-0,32	-0,26
IDE	-0,13	-0,14	-0,21	0,22	1,00	-0,05	0,20	-0,22
RRN	0,17	-0,31	0,03	0,01	-0,05	1,00	0,03	0,08
CRN	-0,63	-0,33	-0,31	-0,32	0,20	0,03	1,00	-0,40
GES	0,38	0,53	0,88	-0,26	-0,22	0,08	-0,40	1,00

*Table 3: matrix of correlation  
(Source: E-views output.)*

#### 4.2. Estimation results

The regression output in Table No. 4 provides the results of the linear regression between the dependent variable, the logarithm of the Sustainable Development Index (IDD), and the independent variables, which are the logarithms of (IPL), (GDP), (OC), (RRN), (GES), (CRN), and (FDI). Thus, the equation is estimated as follows:

$$\text{LOG(IDD)} = -3.194841 + 0.075937 * \text{LOG(IPL)} + 0.150105 * \text{LOG(GDP)} + 0.057579 * \text{LOG(OC)} + 0.006897 * \text{LOG(RRN)} - 0.111982 * \text{LOG(GES)} - 0.060171 * \text{LOG(CRN)} + 0.034988 * \text{LOG(FDI)}$$

This regression suggests that the Logistics Performance Index (IPL) is positively associated with the Sustainable Development Index (IDD) after controlling for other variables such as Gross Domestic Product (GDP), Openness to Commerce (OC), Renewable Resource Consumption (RRN), greenhouse gas emissions (GES), Foreign Direct Investments (FDI), and Natural Resource Consumption (CRN). Specifically, the estimation suggests that for every one-percentage point increase in log(IPL), log(IDD) increases by 0.075937 units (approximately 7.6%). This relationship is statistically significant at a confidence level of 99.9%, as the associated probability is very low (0.0000). Additionally, the R-squared value is 0.549, indicating that the independent variables explain around 54.9% of the variation in the dependent variable. Finally, all probabilities associated with the regression coefficients are very low (0.0000), suggesting that each independent variable has a significant influence on the dependent variable, and the model is statistically significant.

Variable	Coefficient	Std. Error	z-Statistic	Prob.
LOG(IPL)	0,08	0,01	8,21	0,00000
LOG(PIB)	0,15	0,00	86,09	0,00000
LOG(OC)	0,06	0,00	19,52	0,00000
LOG(RRN)	0,01	0,00	8,74	0,00000
LOG(GES)	-0,11	0,00	-59,80	0,00000
LOG(CRN)	-0,06	0,00	-67,08	0,00000
LOG(IDE)	0,03	0,00	8,05	0,00000
C	-3,19	0,03	-91,60	0,00000
<b>Robust Statistics</b>				
R-squared	0,55	Adjusted R-squared	0,53	
Rw-squared	0,66	Adjust Rw-squared	0,66	
Akaike info criterion	182,23	Schwarz criterion	222,34	
Deviance	2,14	Scale	0,11	
Rn-squared statistic	23677,71	Prob(Rn-squared stat.)	0,00	
<b>Non-robust Statistics</b>				
Mean dependent var	-0,58	S,D, dependent var	0,19	
S.E. of regression	0,12	Sum squared resid	2,59	

*Table 4: regression output  
(Source: E-views output.)*

## 5. CONCLUSION AND RECOMMENDATIONS

The study highlights the importance of green logistics for sustainable development in Africa, considering the continent's numerous economic, social, and environmental challenges. The study's findings reveal that the logistics performance index has a significant and positive impact on the sustainable development index, suggesting that improving logistics performance can contribute to the sustainability of economic activities. Furthermore, economic factors such as GDP, foreign direct investment (FDI), and organizational capital (OC) also have a positive and significant impact on the sustainable development index, emphasizing the importance of economic development in achieving sustainability in Africa. Our study recommends African states to invest in green logistics practices to enhance their logistics performance, ensuring a sustainable future for upcoming generations. This could involve providing tax incentives for businesses adopting green logistics practices, implementing environmental regulations for logistics and transportation companies, and initiating stakeholder awareness programs on the significance of green logistics. Moreover, collaborating with international partners to establish common standards and regulations for the green logistics sector would be beneficial. This collaboration aims to ensure that businesses operating in African countries comply with international environmental standards and contribute to achieving sustainable development goals.

## LITERATURE:

1. Aldakhil, A. M., Nassani, A. A., Awan, U., Abro, M. M. Q., & Zaman, K. (2018). Determinants of green logistics in BRICS countries : An integrated supply chain model for green business. *Journal of Cleaner Production*, 195, 861-868. <https://doi.org/10.1016/j.jclepro.2018.05.248>
2. Bourbonnais, R. (2015). *Économétrie* (9<sup>e</sup> éd.). Dunod.
3. Destek, M. A., & Sinha, A. (2020). Renewable, non-renewable energy consumption, economic growth, trade openness and ecological footprint : Evidence from organisation for economic Co-operation and development countries. *Journal of Cleaner Production*, 242, 118537. <https://doi.org/10.1016/j.jclepro.2019.118537>
4. Djellouli, N., Abdelli, L., Elheddad, M., Ahmed, R., & Mahmood, H. (2022). The effects of non-renewable energy, renewable energy, economic growth, and foreign direct investment on the sustainability of African countries. *Renewable Energy*, 183, 676-686. <https://doi.org/10.1016/j.renene.2021.10.066>
5. Gu, Z., Malik, H. A., Chupradit, S., Albasher, G., Borisov, V., & Murtaza, N. (2022). Green Supply Chain Management With Sustainable Economic Growth by CS-ARDL Technique : Perspective to Blockchain Technology. *Frontiers in Public Health*, 9, 818614. <https://doi.org/10.3389/fpubh.2021.818614>
6. Güney, T. (2023). Renewable Energy Consumption and Sustainable Development : A Panel Cointegration Approach. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-023-01107-0>
7. Karaduman, H. A., Karaman-Akgül, A., Çağlar, M., & Akbaş, H. E. (2020). The relationship between logistics performance and carbon emissions: An empirical investigation on Balkan countries. *International Journal of Climate Change Strategies and Management*, 12(4), 449-461. <https://doi.org/10.1108/IJCCSM-05-2020-0041>
8. Liu, C., & Ma, T. (2022). Green logistics management and supply chain system construction based on internet of things technology. *Sustainable Computing: Informatics and Systems*, 35, 100773. <https://doi.org/10.1016/j.suscom.2022.100773>
9. Liu, J., Yuan, C., Hafeez, M., & Yuan, Q. (2018). The relationship between environment and logistics performance : Evidence from Asian countries. *Journal of Cleaner Production*, 204, 282-291. <https://doi.org/10.1016/j.jclepro.2018.08.310>

10. lo Storto, C., & Evangelista, P. (2023). Infrastructure efficiency, logistics quality and environmental impact of land logistics systems in the EU : A DEA-based dynamic mapping. *Research in Transportation Business & Management*, 46, 100814. <https://doi.org/10.1016/j.rtbm.2022.100814>
11. Maji, I. K., Mohd Saudi, N. S., & Yusuf, M. (2023). An assessment of green logistics and environmental sustainability : Evidence from Bauchi. *Cleaner Logistics and Supply Chain*, 6, 100097. <https://doi.org/10.1016/j.clsn.2023.100097>
12. Mariano, E. B., Gobbo, J. A., Camioto, F. de C., & Rebelatto, D. A. do N. (2017). CO 2 emissions and logistics performance : A composite index proposal. *Journal of Cleaner Production*, 163, 166-178. <https://doi.org/10.1016/j.jclepro.2016.05.084>
13. Mohsin, A. K. M., Tushar, H., Abid Hossain, S. F., Shams Chisty, K. K., Masum Iqbal, M., Kamruzzaman, Md., & Rahman, S. (2022). Green logistics and environment, economic growth in the context of the Belt and Road Initiative. *Heliyon*, 8(6), e09641. <https://doi.org/10.1016/j.heliyon.2022.e09641>
14. *Rapport Brundtland*. (s. d.). 349.
15. Sharma, M., Luthra, S., Joshi, S., Kumar, A., & Jain, A. (2023). Green logistics driven circular practices adoption in industry 4.0 Era : A moderating effect of institution pressure and supply chain flexibility. *Journal of Cleaner Production*, 383, 135284. <https://doi.org/10.1016/j.jclepro.2022.135284>
16. Sikder, M., Wang, C., Yao, X., Huai, X., Wu, L., KwameYeboah, F., Wood, J., Zhao, Y., & Dou, X. (2022). The integrated impact of GDP growth, industrialization, energy use, and urbanization on CO2 emissions in developing countries : Evidence from the panel ARDL approach. *Science of The Total Environment*, 837, 155795. <https://doi.org/10.1016/j.scitotenv.2022.155795>
17. Singh, A., Kumari, S., Pandey, S. kumar, Singh, B., & Kumar, N. (2022). Investigating the Economic and Environmental Sustainability of Logistic Operations in India Using ARDL Procedure. In R. M. Singari & P. K. Kankar (Éds.), *Advances in Transdisciplinary Engineering*. IOS Press. <https://doi.org/10.3233/ATDE220725>
18. Suki, N. M., Suki, N. M., Sharif, A., & Afshan, S. (2021). The role of logistics performance for sustainable development in top Asian countries : Evidence from advance panel estimations. *Sustainable Development*, 29(4), 595-606. <https://doi.org/10.1002/sd.2160>
19. Ullah, A., Ahmed, M., Raza, S. A., & Ali, S. (2021). A threshold approach to sustainable development : Nonlinear relationship between renewable energy consumption, natural resource rent, and ecological footprint. *Journal of Environmental Management*, 295, 113073. <https://doi.org/10.1016/j.jenvman.2021.113073>
20. Wen, S., Tang, H., Ying, F., & Wu, G. (2023). Exploring the Global Research Trends of Supply Chain Management of Construction Projects Based on a Bibliometric Analysis : Current Status and Future Prospects. *Buildings*, 13(2), 373. <https://doi.org/10.3390/buildings13020373>
21. Yingfei, Y., Mengze, Z., Zeyu, L., Ki-Hyung, B., Andriandafiarisoa Ralison Ny Avotra, A., & Nawaz, A. (2022). Green logistics performance and infrastructure on service trade and environment-Measuring firm's performance and service quality. *Journal of King Saud University - Science*, 34(1), 101683. <https://doi.org/10.1016/j.jksus.2021.101683>

## **GREEN ORIENTATION IN ASSOCIATIONS REGISTERED FOR SOCIAL ENTREPRENEURSHIP ACTIVITY**

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### **ABSTRACT**

*Social entrepreneurship is a type of entrepreneurship that has as its primary goal the realization of a social mission, whereby the surplus of income over expenses is sought to be realized for the sake of sustainability. In Croatia, the civil sector is the most responsible for the development of social entrepreneurship. The goals of the research were to determine how many associations in Croatia have listed social entrepreneurship as one of their areas of activity; to what extent do they intend to engage in social entrepreneurship; and whether associations that intend to engage in social entrepreneurship have a stronger green orientation. For the purposes of the research, primary data were collected using a questionnaire. The research showed that the Croatian associations registered for social entrepreneurship activity which have a social entrepreneurial intention have a stronger green orientation, both in terms of protection of the natural environment and the application of the 3R principle.*

**Keywords:** *social entrepreneurship, associations, civil sector, social entrepreneurial intention, green orientation, 3R*

### **1. INTRODUCTION**

Social enterprises strive to make a profit while maximizing benefits for society and the environment. Their business models are designed for people, planet, and profits, meaning social equity, environment and economy. Croatian civil sector plays an important role in social entrepreneurship development. When registering associations can also list social entrepreneurship as their activity. One of the three pillars of social entrepreneurship is the green orientation which means that an enterprise operates in an environmentally sustainable manner. The goals of the research were to determine how many associations in Croatia have listed social entrepreneurship as one of their areas of activity; to what extent do they intend to engage in social entrepreneurship; and whether associations that intend to engage in social entrepreneurship have a stronger green orientation. The literature review examines the role of associations in society, gives a short overview of social entrepreneurship development and explains the role of green orientation in social entrepreneurship. The third chapter gives a description of the research sample and the methodology used. The next chapter presents the results, and the last chapter concludes the paper with recommendations for future research.

### **2. LITERATURE REVIEW**

#### **2.1. Associations registered for the activity Social Entrepreneurship (ARASP)**

A non-governmental organization or NGO is an organization that deals with the greater good of society and aims to alleviate social, economic, political and environmental problems (El Chaarani & Raimi, 2022). NGOs often provide aid in the form of financial support or other necessities such as food, clothing and the like. Many NGOs work to ensure equal rights for all, such as the rights of women, national minorities and various marginalized groups.

In the case of problems like global warming, NGOs take it upon themselves to spread awareness (Abiddin et al., 2022). In NGOs, people with similar interests or concerns come together and offer their support in whatever form is deemed valuable – skills, expertise, experience, funding, time and effort, etc. The third sector is a source of new ideas and energy and a driver of social progress. It is often a leader of innovation and change, devising new ways to solve social problems (Alexander, 2010). In Croatia, there is a great contribution of the third sector and volunteering to the socio-economic status of Croatia (Baturina, 2018). Because of their role, many governments consider them necessary and support their activities. An association is any form of free and voluntary association of several physical or legal persons with the same or similar ambitions and goals. Ambitions and goals can be recognized in the protection of members' interests or in the protection of human rights and freedoms, the environment, nature and sustainable development, humanitarian, social, cultural, educational, scientific, sports, health, technical, informational, professional or other beliefs and goals that do not conflict with the Constitution and the law. An association is established without the intention of obtaining profit or other economically estimable benefits (Law on Associations NN 74/2014 (NN 98/19)). Associations can be financed by members and third parties, from public subsidies and from the activities of the associations themselves (Government of the Republic of Croatia, Office for Cooperation with NGOs, 2016). Also, most organizations cannot provide financial compensation to employees and therefore prefer volunteers (El Charani & Raimi, 2022). The condition for acquiring the legal personality of an association is registration in the Register of Associations of the Republic of Croatia. Associations self-classify in the Register of Associations according to the Classification of the Activities of Associations in one or more areas of activity that they work in to achieve their goals. The Classification of the Activities of Associations consists of 17 areas of activity which are further divided into the activities which are further divided into the elaboration of the activities (Ordinance on the Content and Manner of Maintaining the Register of Associations of the Republic of Croatia and the Register of Foreign Associations in the Republic of Croatia NN 04/15 (NN 14/20)). According to the Register of Associations of the Republic of Croatia, 50,795 associations are currently active, while 1,841 associations are currently in liquidation, which makes a total of 52,636 associations. The Register of Associations of the Republic of Croatia is publicly available on the official website of the Ministry of Justice and Administration. The participants of this research were all the associations in the Republic of Croatia that opted for the field of activity "Economy" and the activity "Social Entrepreneurship" in the Register of Associations. As of May 5, 2023, 996 such associations were found in the Register of Associations actively operating in the territory of the Republic of Croatia.

## **2.2. Social entrepreneurship and green orientation**

At the turn of the 18th century into the 19th century, a system of social economy appeared for the first time, advocating a moral approach to the economy (Petričević, 2012). Today, the Organization for Economic Cooperation and Development (2023) defines social enterprises as any engagement of an individual that is carried out for the benefit of the public together with the initiation of an entrepreneurial strategy, but under the condition that the primary task is not profit maximization but the achievement and establishment of economic and social goals. In addition to the above, it is necessary to have the competence to develop innovative solutions in order to eradicate the problems of social exclusion and unemployment. While traditional entrepreneurs tend to focus on creating commercial value or profit, social entrepreneurs work to create social value, where society or the community benefits. A social entrepreneur sees where he will be able to fill a gap that the state does not fill (Thompson et al., 2000) and contribute to the community and society through the application of business models (Zahra et al., 2009). Social well-being is increased by new moves in organizations or by management of

existing organizations through innovative solutions (Abu-Saifan, 2012). Social enterprises strive to make a profit while maximizing benefits for society and the environment, and the main goal is to create lasting social change through business (Šimleša et al., 2016). Social enterprises use their profits in a transparent manner. Most social enterprises are started as social cooperatives, some are registered as private companies limited by guarantee, some are mutual, and many of them are non-profit-distributing organizations such as charities, associations, and the like (European Commission, 2023). One of the fundamental principles of public policy implementation is partnership. Every public policy includes many users from the state, business and private sectors. Due to their social goals, social entrepreneurs are natural allies of state local government in achieving numerous social goals. Government institutions may look to private social entrepreneurs as a vehicle for a faster and potentially more effective response (Muldoon et al., 2022). In Croatia, from 2006 to 2011, social entrepreneurship development was supported through the National Strategy for Generating a Stimulating Environment for the Development of the Third Sector. From 2012 to 2016, measures were taken to improve and strengthen the functions of the third sector through initiatives to start social innovations and social entrepreneurship (Šajfar & Strmota, 2020). Croatia also had the Strategy for the Development of Social Entrepreneurship in the Republic of Croatia 2015-2020 (Ministry of Labour and Pension System, 2015) which referred to the creation of optimal conditions for economic development in the field of social entrepreneurship. In Croatia, civil society is most deserving for social entrepreneurship growth and development (Petričević, 2012). Many of these projects improve people's health, protect the environment and create more economic opportunities (Vidović, 2012). A detailed SWOT analysis of social entrepreneurship in Croatia was made by Vojvodić and Banović (2019). As an opportunity they list the high-quality geographical location and natural resources that contribute to the development of products and services with high added value in eco-agriculture, agro-tourism, the energy sector, cultural tourism, social tourism and education. Social enterprises through their business models designed for people, planet, and profits, meaning social equity, environment and economy, potentially offer powerful, sustainable solutions to some of the world's most pressing problems (Molina & Rajagopal, 2023; Wilson & Post, 2013). Green orientation means that an enterprise operates in an environmentally sustainable manner considering its impact on the environment and working to minimize any adverse effects. The indicators of environmental sustainability are energy efficiency, waste reduction, emissions reduction, reduction in consumption of hazardous items, and the frequency of environmental mishaps (Cruz & Wakolbinger, 2008). Since one of the pillars of social entrepreneurship is green orientation, the following hypothesis is proposed:

**H1:** ARASP that have a social entrepreneurial intention have a stronger orientation towards the protection of the natural environment compared to ARASP that do not have a social entrepreneurial intention.

The 3R principle (reduce, reuse, recycle) is the tool to reduce the adverse impact on the environment that manufacturing and retailing have due to the huge amount of waste they create (Yu et al., 2021). The word reduce refers to the reduction of the waste created when making decisions about consumption, reuse refers to the usage of waste for a new purpose, and the waste that cannot be reused should be recycled. Since social enterprises should apply 3R principle in their business, the following hypothesis is proposed:

**H2:** ARASP which have a social entrepreneurial intention more often apply the 3R (reduce-reuse-recycle) principle in their activities compared to ARASP that do not have a social entrepreneurial intention.

### 3. METHODOLOGY

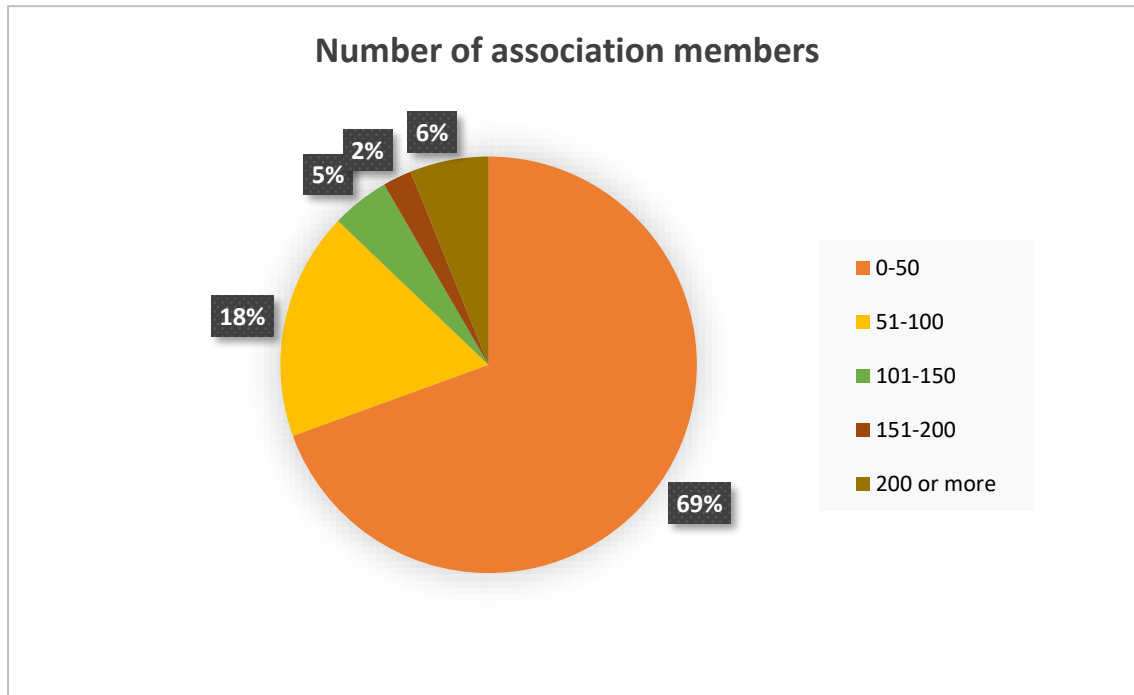
The subjects of this research were all associations in the Republic of Croatia that opted for the field of activity "Economy" and the activity "Social Entrepreneurship" in the Register of Associations. As of May 5, 2023, 996 such associations were found in the Register of Associations actively operating in the territory of the Republic of Croatia. The e-mails of the associations were available in the Register of Associations, the Register of Non-Profit Organizations and the websites and social networks of the associations. Out of a total of 996 associations, no contact information was available for 73 associations. Accordingly, the number of respondents was 923 associations. The research started on June 2, 2023. The research lasted until August 21, 2023, which is a total of 80 days. Filling in the questionnaire was completely anonymous. The first part of the questionnaire gathered information about the location of the association's headquarters, the number and age of the association's members and the number of employees of the association. The second part of the questionnaire referred to the existing activity in the field of social entrepreneurship and the intention to engage in social entrepreneurship. The third part of the questionnaire consisted of statements that examined the green orientation of associations, including actions to protect the natural environment and the application of the 3R principle. Statements about the green orientation had to be evaluated on a Likert scale from 1 to 5 (1 – completely disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, 5 – completely agree). Independent samples t-test was used to compare means of different variables between the two groups of ARASP. The test was performed at the 5% level of significance.

### 4. RESULTS

The research population consists of 923 associations registered for the activity of Social Entrepreneurship. 311 associations responded to the questionnaire which gives the response rate of 33.7%. Associations in the sample come from all counties of the Republic of Croatia. Most of the associations are from the City of Zagreb (36 responses), Osijek-Baranja County (34 responses), Split-Dalmatia County (36 responses) and Primorje-Gorski Kotar County (22 responses) which ensures the geographical representativeness of the sample. When asked how many members the association has, the associations stated the following (Chart 1). Most associations (69%) have up to 50 members. 18% of associations have 51 to 100 members, 5% have 101 to 150 members. The smallest number of associations in the sample (2%) has from 151 to 200 members, while 6% of associations have 200 or more members.

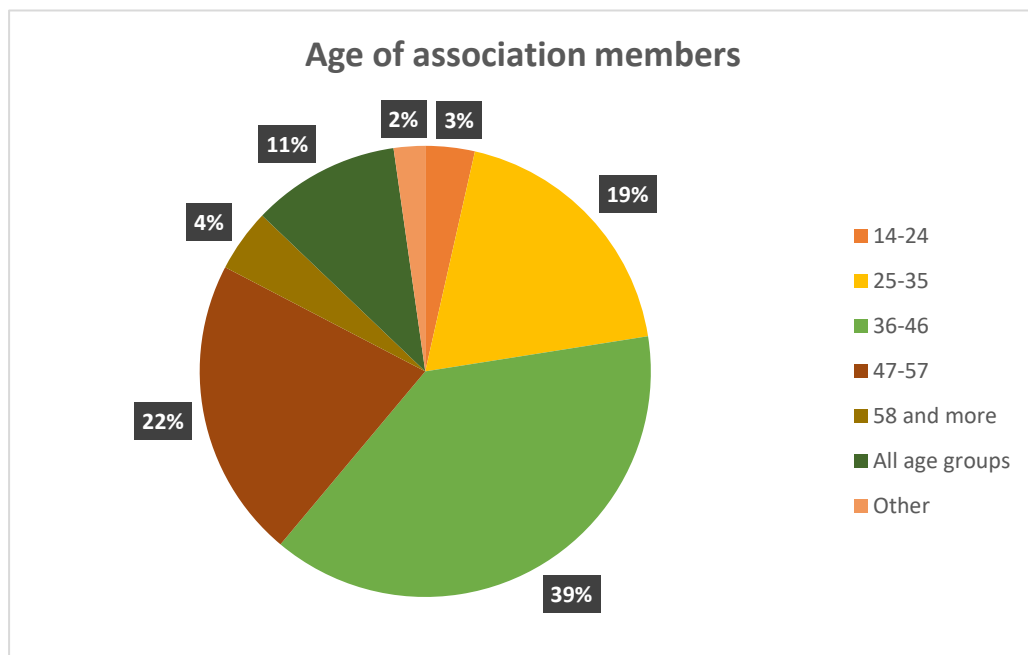
*Figure following on the nex page*





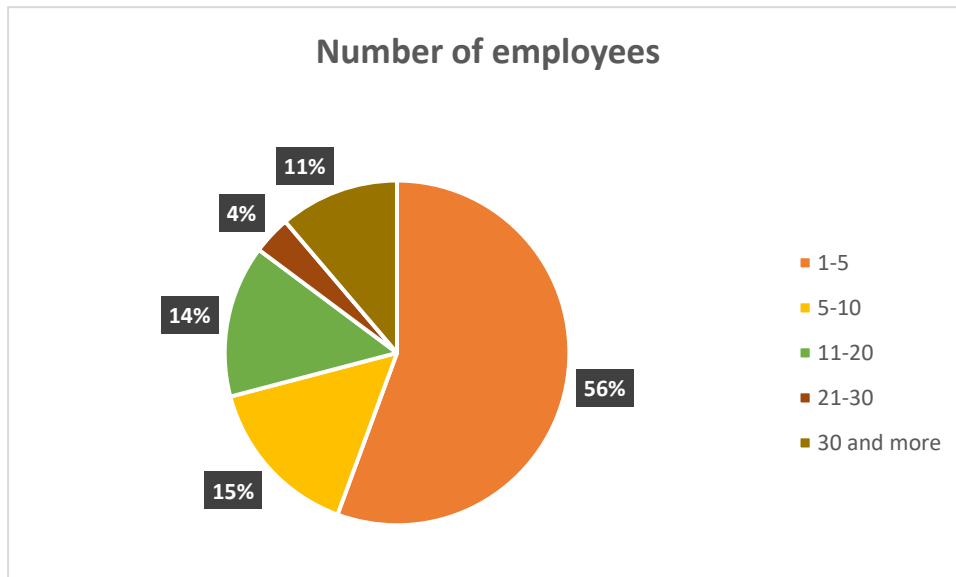
*Figure 1: Number of association members  
(Source: Authors)*

The age of the members of the associations in the sample is shown in Chart 2. In the largest number of associations (39%), the members are mostly between 36 and 46 years old. Associations whose members are mostly between 47 and 57 years old (22%) and associations whose members are between 25 and 35 years old (19%) follow in frequency. 11% of associations gather members of all age groups, while 2% of associations said that their members are legal entities. 4% of associations mostly have members of 58 years of age or older, while 3% of the associations mostly have members who are between 14 and 24 years old.



*Figure 2: Age of association members  
(Source: Authors)*

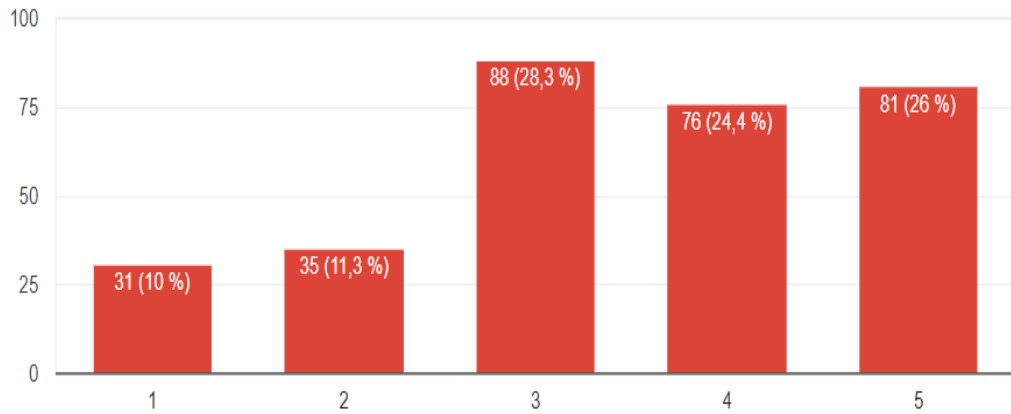
More than half of the surveyed associations (63%) have employees. These associations also gave the information on the number of their employees, which is shown in Graph 3. Most associations (56%) employ from 1 to 5 people, 15% of associations employ 5 to 10 people, 14% of associations employ 11 to 20 people, 4% of associations employ 21 to 30 people, while 11% of associations have 30 or more employees.



*Figure 3: Number of employees  
(Source: Authors)*

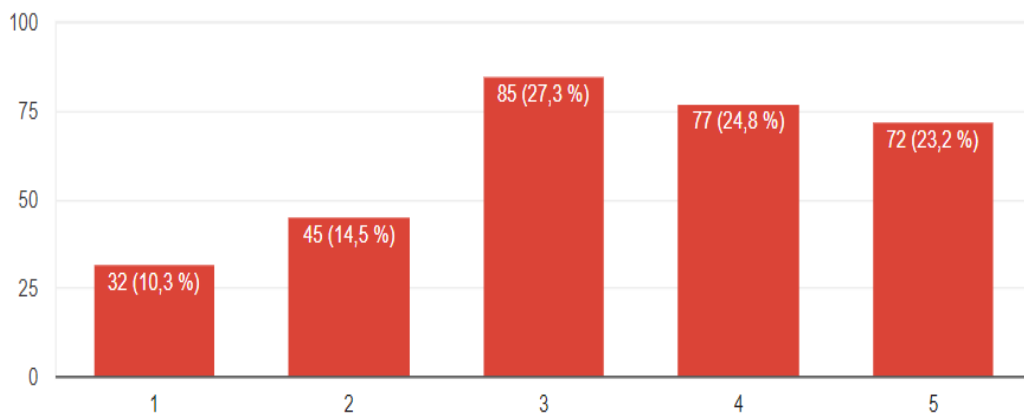
Through their activities, associations can establish a social enterprise, or they can act as social enterprises themselves. 38 associations (12.2%) reported that they were operating as a social enterprise or that they owned a social enterprise. If the respondent answered that the association is not doing business in the field of social entrepreneurship, they were asked if the association was thinking about founding a social enterprise. Of the 273 associations that do not own a social enterprise, 71.4%, or 196 associations, would not start any social enterprise while 28.2%, or 77 associations, are thinking about opening a social enterprise. As part of the analysis of the associations' green orientation, the associations had to evaluate the following statement: The activities of my association help to protect the natural environment. As shown in Chart 4, 50.4% of associations believe that their activities help to protect the natural environment, 28.3% neither agree, nor disagree that they help to protect the natural environment, while 21.3% of associations believe that their activities do not help to protect the natural environment.

*Figure following on the nex page*



*Figure 4: Protection of the natural environment (1 – completely disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, 5 – completely agree)*  
(Source: Authors)

77 associations that are thinking about starting a social enterprise ( $M = 3.81$ ,  $SD = 1.17$ ) compared to the 196 associations that do not ( $M = 3.26$ ,  $SD = 1.27$ ) are agreeing significantly stronger with the statement that their activities are protecting the natural environment,  $t(271) = 3.29$ ,  $p = .001$ . The associations also rated the following statement: My association applies the 3R principle (reduce, reuse, recycle) in its activities. 48% of associations apply the 3R principle, 27.3% neither agree, nor disagree that they apply the 3R principle, while 24.8% of associations do not apply the 3R principle in their activities. The results are presented in Chart 5. Associations that are thinking about starting a social enterprise ( $M = 3.79$ ,  $SD = 1.09$ ) compared with associations that do not ( $M = 3.07$ ,  $SD = 1.28$ ) significantly more often declare that their activity is based on the 3R principle,  $t(271) = 4.39$ ,  $p = .000$ .



*Figure 5: 3R principle (1 – completely disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, 5 – completely agree)*  
(Source: Authors)

## 5. CONCLUSION

The research was performed on the representative sample of Croatian ARASP. 69% of these associations are small, having up to 50 members. When asked how many members the association has, the associations stated the following (Chart 1). Most associations (69%) have up to 50 members.

In the largest number of associations (39%), the members are mostly between 36 and 46 years old. More than half of the surveyed associations (63%) have employees. Of those more than half (56%) employ from 1 to 5 people. 12.2% of the ARASP reported that they were operating as a social enterprise or that they owned a social enterprise. Of the remaining ARASP that do not own a social enterprise 28.2% are thinking about opening a social enterprise. Regarding the green orientation of the ARASP, 50.4% of them believe that their activities help to protect the natural environment. Approximately the same percentage of ARASP (48%) implements the 3R principle. The research showed that the ARASP which have a social entrepreneurial intention have a stronger green orientation, both in terms of protection of the natural environment and the application of the 3R principle. This result is in accordance with social entrepreneurship being the activity that aims to achieve a triple bottom line which includes environmental sustainability. Thus, the concepts of social entrepreneurship and green orientation are associated in the observed population of associations. Further research should explore whether there is a causation between the two concepts to see whether the policies that would encourage the green orientation would also be beneficial for the strengthening of social entrepreneurial intention. In addition, further research should investigate how many ARASP will start a social enterprise.

#### LITERATURE:

1. Abiddin, N. Z., Ibrahim, I., & Abdul Aziz, S. A. (2022). Non-governmental organisations (NGOs) and their part towards sustainable community development. *Sustainability*, 14(8), 4386.
2. Abu-Saifan, S. (2012). Social entrepreneurship: definition and boundaries. *Technology innovation management review*, 2(2), 22-27.
3. Alexander, C. (2010). The third sector. In K. Hart, J-L. Laville, A. Cattani (eds.), *The human economy: a citizen's guide* (pp. 213-224). Cambridge, UK: Polity Press.
4. Baturina, D. (2018). Perspektive mjerenja utjecaja trećeg sektora u Hrvatskoj. *Revija za socijalnu politiku*, 25(3), 303-325.
5. Cruz, J. M., Wakolbinger, T. (2008). Multiperiod effects of corporate social responsibility on supply chain networks, transaction costs, emissions, and risk. *International journal of production economics*, 116(1), 61-74.
6. El Chaarani, H., Raimi, L. (2022). Determinant factors of successful social entrepreneurship in the emerging circular economy of Lebanon: Exploring the moderating role of NGOs. *Journal of Entrepreneurship in Emerging Economies*, 14(5), 874-901.
7. European Commission. (2023). *Social enterprises*. Retrieved 18.7.2021. from [https://single-market-economy.ec.europa.eu/sectors/proximity-and-social-economy/social-economy-eu/social-enterprises\\_en](https://single-market-economy.ec.europa.eu/sectors/proximity-and-social-economy/social-economy-eu/social-enterprises_en).
8. Government of the Republic of Croatia, Office for Cooperation with NGOs. (2016). *Udruge u Republici Hrvatskoj*. Retrieved 4.7.2023. from [https://udruge.gov.hr/UserDocsImages/dokumenti/letak\\_udruge\\_u\\_RH\\_2016\\_hr\\_web.pdf](https://udruge.gov.hr/UserDocsImages/dokumenti/letak_udruge_u_RH_2016_hr_web.pdf).
9. Law on Associations NN 74/2014 (NN 98/19). Retrieved 19.10.2022 from <https://www.zakon.hr/z/64/Zakon-o-udrugama>.
10. Ministry of Labour and Pension System. (2015). *Strategija razvoja društvenog poduzetništva za razdoblje od 2015. do 2020*. Retrieved 18.7.2023. from <http://www.esf.hr/wordpress/wp-content/uploads/2015/02/Strategija-razvoja-dru%C5%A1tvenog-poduzetni%C5%A1tva-u-RH-za-razdoblje-2015-2020.pdf>.
11. Molina, A., Rajagopal (2023). *Challenge-Based Learning, Research, and Innovation*. Cham: Palgrave Macmillan.

12. Muldoon, J., Solomon, S. J., Stewart, G. T., Bendickson, J. S. (2022). Social entrepreneurship as a mechanism to correct institutional shortcomings. *Journal of Small Business Strategy*, 32(3), 18-28.
13. Ordinance on the Content and Manner of Maintaining the Register of Associations of the Republic of Croatia and the Register of Foreign Associations in the Republic of Croatia NN 04/15 (NN 14/20). Retrieved 19.10.2022 from [https://narodne-novine.nn.hr/clanci/sluzbeni/2015\\_01\\_4\\_76.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2015_01_4_76.html).
14. Organization for Economic Cooperation and Development (OECD). (2023). *Social entrepreneurship & Social enterprises*. Retrieved 18.7.2023. from <https://www.oecd.org/cfe/leed/social-economy/social-entrepreneurship.htm>.
15. Petričević, T. (2012). O društvenoj ekonomiji i društvenom poduzetništvu. *Poduzetništvo u službi zajednice - Zbornik radova o društvenom poduzetništvu*, 11-20.
16. Šajfar, P., Strmota, L. (2020). društveno poduzetništvo: glavne odrednice i prikaz slučaja. *Obrazovanje za poduzetništvo-E4E: znanstveno stručni časopis o obrazovanju za poduzetništvo*, 10(1), 205-219.
17. Šimleša, D., Bušljeta Tonković, A., Puđak, J. (2016). Društveno poduzetništvo u Hrvatskoj: od prepoznavanja do primjene. *Revija za sociologiju*, 46(3), 271-295.
18. Thompson, J., Alvy, G., Lees, A. (2000). Social entrepreneurship—a new look at the people and the potential. *Management decision*, 38(5), 328-338.
19. Vidović, D. (2012). *Socijalno poduzetništvo u Hrvatskoj* (Doctoral dissertation). Zagreb, Filozofski fakultet Sveučilišta u Zagrebu: [D. Vidović].
20. Vojvodić, I., Banović, R. Š. (2019). Analiza socijalnog poduzetništva u Hrvatskoj s komparativnim osvrtom na regulatorni okvir. *Pravni vjesnik*, 35(2), 105-134.
21. Wilson, F., Post, J. E. (2013). Business models for people, planet (& profits): exploring the phenomena of social business, a market-based approach to social value creation. *Small Business Economics*, 40, 715-737.
22. Yu, K. H., Zhang, Y., Li, D., Montenegro-Marin, C. E., Kumar, P. M. (2021). Environmental planning based on reduce, reuse, recycle and recover using artificial intelligence. *Environmental Impact Assessment Review*, 86, 106492.
23. Zahra, S. A., Gedajlovic, E., Neubaum, D. O., Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of business venturing*, 24(5), 519-532.

# UNVEILING THE FACADE: A CRITICAL EXAMINATION OF GREENWASHING AND CORPORATE RESPONSIBILITY IN THE EUROPEAN CONTEXT

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## **ABSTRACT**

*This paper explores the dynamic interplay between the growing trend of sustainable consumerism and the pervasive risk of greenwashing in European modern market. It underscores the transition of sustainable products from niche offerings to mainstream consumer choices, reflecting a significant shift in consumer preferences towards environmentally conscious purchasing. While the shift towards sustainable products marks a significant evolution in consumer behavior, it is juxtaposed with a growing skepticism about the authenticity of corporate sustainability claims. This dichotomy sets the stage for a deeper exploration into the prevalence of greenwashing, which is examined in the subsequent sections. Through case studies, the paper demonstrates how greenwashing undermines genuine sustainability efforts and discusses strategies for authentic ESG compliance. It also addresses the European Union's 'Green Claims' directive, a strategic measure against greenwashing, aiming to enforce stringent regulations on environmental claims. It underscores the dual challenge in today's market: the opportunity for businesses to engage in real sustainable practices and the risk of falling into deceptive sustainability tactics.*

**Keywords:** *Greenwashing, Corporate responsibility, Stakeholder management, Reputation, Consumerism, ESG*

## **1. SUSTAINABLE CONSUMERISM: BALANCING GREEN GROWTH AND GREENWASHING RISK**

Sustainable products are no longer niche and green consumerism is on the rise. Sustainable products have transitioned from a niche market to a mainstream choice. Deloitte's Global State of the Consumer Tracker reveals that as of April 2023, almost half (46%) of consumers in 23 surveyed countries reported purchasing at least one sustainable product or service (Pieters et al., 2023). Interestingly, according to the same source this proportion was even greater in 2021, reaching 61%, before the impact of inflation on household budgets made it more challenging for consumers to afford the often higher costs associated with green products. Another source is emphasizing that 80% of consumers say they think about sustainability in their day-to-day purchasing decisions (Sanghi et al., 2022). In the span of five years, there has been a substantial shift in consumer behaviour, with global online searches for sustainable goods increasing by 71% (Hirsheimer, 2021). 72% of consumers reporting a rise in their purchase of green products compared to five years ago (Cantwell et al., 2019). According to NYU Stern Centre for Sustainable Business, between 2015 and 2021 products labelled as sustainable experiencing a growth rate 2.7 times faster than their non-sustainable counterparts (Manly et al., 2023). But almost 70 % of consumers worldwide feel that companies talk about sustainability only to improve their image and sales (Sanghi et al., 2022). So, are consumers and businesses able to confidently trust that environmental claims are firmly substantiated? In 2020, an investigation by the European Commission revealed that a significant 53% of the environmental claims scrutinized within the EU were either unclear, deceptive, or baseless, with an additional 40% lacking sufficient substantiation (European Commission, 2022).

Many authors suggest that corporate social responsibility (CSR) initiatives enhance a company's image and foster stronger identification from key stakeholders, resulting in beneficial relational outcomes (Yoon et al., 2006; Torelli et al., 2012; Pérez and Rodríguez del Bosque, 2013; Mandina et al., 2014; Chen et al., 2021; Lim, 2023; Mu & Lee, 2023; Le, 2023; Fosu et al. 2024). Recently CSR in EU has ascended as a key area of focus, with a growing number of businesses emphasizing its integration into their strategic initiatives. Additionally, this approach varies: some companies adopt CSR reactively, particularly in response to legal mandates, while others pursue it proactively, recognizing the potential to build competitive advantage through genuine CSR engagement. However, under the dual pressures of maintaining corporate legitimacy and responding to stakeholder demands, some companies use CSR disclosures to cultivate or boost positive impressions and images, a process known as greenwashing. Furthermore, the practice of greenwashing not only misleads consumers but also undermines the efforts of companies genuinely committed to sustainable practices. This deceptive strategy, while offering short-term public relations benefits, risks long-term reputational damage and legal repercussions, emphasizing the need for more stringent regulations and transparent CSR reporting.

## **2. UNVEILING GREENWASHING: TRACING THE EVOLUTION, IMPACTS, AND STRATEGIC FACADES OF CORPORATE ENVIRONMENTAL DECEPTION**

The term Greenwashing was coined first in 1983, when young environmentalist Jay Westerveld went on a research trip to Samoa (Orange and Cohen, 2010; Becker-Olsen and Potucek, 2013; de Freitas Neto et al., 2020). He was an avid surfer, so he stopped in Fiji on his way to Samoa. There he stayed in a simple, small guesthouse where there were not even towels. In search of a towel, he stopped by a luxury resort in the neighborhood that was near the beach where he was surfing. Westerveld was surprised by the information he read on the paper that was in each of the guest bathrooms. It included the now-familiar request to visitors found in almost every hotel – please reuse your towels to reduce the environmental damage laundry does to the island's fragile ecosystem and coral reefs. What was not written was that less laundry would reduce costs and increase profits. The profits are later reinvested in tons of concrete to build new bungalows on a pristine piece of coastal land, a few meters away from the threatened reefs. It is how and when it started, and why is it important we'll try to cover onwards. Greenwashing, the deceptive practice of presenting an organization as more environmentally and socially responsible than it truly is, has become a critical issue in modern markets, particularly in the context of Environmental, Social, and Governance (ESG) criteria. The importance of this issue lies in the rising consumer and investor demand for sustainable and ethical business practices, making ESG a significant factor in investment decisions and brand reputation. Greenwashing, a critical issue in the realm of corporate sustainability, poses significant challenges for contemporary management. This concept, originally coined to describe superficial or deceptive practices that paint an environmentally responsible image of a company, has evolved into a key concern for stakeholders who increasingly prioritize genuine sustainability efforts. From a management standpoint, greenwashing represents not just a marketing dilemma but a fundamental challenge to building and maintaining trust with stakeholders. Recent incidents across various industries highlight the prevalence and consequences of greenwashing. For instance, Deutsche Bank's asset management arm, DWS, faced allegations of overstating its sustainable investing criteria, leading to investigations for investment fraud. Similarly, Adidas's "Primegreen" and "Primblue" product lines were scrutinized by the UK's Advertising Standards Authority for unsubstantiated environmental benefit claims. Other notable instances include Volkswagen's misleading advertisement about the environmental benefits of its e-Golf electric car, which neglected the potential non-renewable sources of electricity for charging the vehicle.

British Petroleum (BP) also faced criticism for its ads promoting a low-carbon transition, despite the majority of its spending being on oil and gas. These examples demonstrate the risks associated with greenwashing, including legal repercussions, damaged reputations, and loss of consumer trust. They underscore the need for authentic and transparent sustainability practices aligned with ESG standards. The interplay between corporate environmental narratives and actual practices is a critical point of analysis in role of modern business in society. Management teams face increasing pressure to display genuine sustainability efforts, an expectation driven by the demands of stakeholders, who range from customers and investors to employees and regulatory bodies. Within this context, the phenomenon of greenwashing becomes particularly salient. The definition of greenwashing differs (Mu and Lee, 2023). Glavas et al. (2021) elucidates greenwashing as the act of falsely portraying a company as more environmentally and socially conscientious than it is in reality. This dissonance between image and practice not only has the potential for short-term reputational gains but also poses significant risks to the authenticity of stakeholder relationships. Bridging these perspectives, Chen and Chang (2013) narrow the definition to the consumer context, describing greenwashing as the act of misleading consumers about a company's environmental practices or the environmental benefits of its products or services. The implications of greenwashing extend into the investment domain, where Laasch and Conaway (2015) recognize it as the misrepresentation of financial products or funds' compliance with ESG criteria. This misleads ethical investors who prioritize ESG factors in their investment decisions. ESMA (2023) identifies greenwashing as a practice where sustainability-related statements are misleading, potentially harming both consumers and investors. Similarly, Mitchell et al. (1997) identifies greenwashing as a strategic facade that organizations maintain to appear environmentally and socially responsible to their stakeholders, without genuinely committing to sustainable practices. Along these lines, Lyon & Maxwell (2011) offer a strategic management viewpoint, defining greenwashing as the corporate tendency to make deceptive claims about the environmental and social benefits of products, services, or company practices. This perspective underscores the strategic dimension of greenwashing, considering its role in shaping company-stakeholder interactions and competitive positioning. Bansal and Roth (2000) place greenwashing at the nexus of strategic management, ESG commitments, and stakeholder communications, highlighting the gap that can exist between a company's marketed environmental and social initiatives and its actual practices. Similarly, Bowen & Aragon-Correa (2014) emphasize the empirical relevance of greenwashing in the evaluation of a firm's environmental performance by its stakeholders. Complementing these viewpoints, Pei-yi Yu et al. (2020) examine greenwashing through the lens of ESG transparency, characterizing "greenwashers" as firms that appear forthcoming by disclosing vast amounts of ESG data yet perform poorly on actual ESG metrics. This comprehensive analysis of greenwashing across various perspectives underlines its multifaceted impact on stakeholder trust and corporate reputation in the era of sustainability. The different main approaches identified in defining the phenomenon of greenwashing have been described above. As it can be concluded greenwashing manifests in numerous forms, yet consistently represents a deliberate misrepresentation by management to stakeholders, an attempt to paint the organization as more environmentally and socially responsible than it truly is. That's why Lyon and Montgomery (2015) wrote that a rigid definition of greenwashing is absent, owing to its multifaceted nature. It is a strategic, calculated act, where misleading information is propagated to project an image of sustainability and ethical operation that contradicts the firm's actual practices. From a strategic stakeholder perspective, greenwashing is a significant risk management issue as it jeopardizes the trust and credibility that are foundational to sustainable stakeholder relationships.



Therefore, greenwashing can be succinctly redefined as the strategic dissemination of misleading or exaggerated claims by an organization's management, intended to deceive stakeholders about the company's genuine environmental and social performance, thus posing a substantial risk to the company's integrity and long-term stakeholder trust. With understanding of corporate greenwashing now grounded in real-world examples, next chapter shifts our gaze to the role of ESG criteria in the European Union, dissecting how these standards are reshaping corporate accountability.

### **3. ESG INTEGRITY IN THE EU: COMBATING GREENWASHING AND UPHOLDING STAKEHOLDER TRUST**

CSR and ESG criteria are increasingly interlinked in contemporary business practices, CSR serves as a strategic framework that enables companies to align with stakeholder expectations (Carroll and Shabana, 2010; Pfajfar et al., 2022), while ESG provides a quantifiable tool to assess a company's impact on environmental, social, and governance aspects (Markota Vukić et al., 2019; Eccles & Klimenko, 2019; Diez-Cañamero et al., 2020; Lim, 2023; Wirba, 2023). CSR, traditionally focusing on a company's ethical and social responsibilities, has evolved to include a broader spectrum of sustainable practices, aligning closely with the ESG framework. This alignment reflects a growing recognition that CSR initiatives, once considered peripheral, are integral to a company's long-term sustainability and ethical footprint, directly influencing ESG performance indicators. Therefore, the integration of CSR principles into the core business strategy is seen as a vital step in enhancing a company's ESG ratings, signaling a shift towards more sustainable and socially responsible business models (Eccles & Klimenko, 2019). In the context of an increasingly ESG-conscious consumer and investor base, the demand for authentic sustainability efforts is rising. Organizations must align their practices with their sustainability claims to maintain credibility and competitive advantage. The importance of sincere stakeholder relationships and the perils of greenwashing in a modern interconnected society are paramount (Belleucci and Manetti, 2018; Lim, 2023). Greenwashing significantly undermines the integrity of CSR initiatives within the EU, a challenge that has become more pronounced in recent years. This deceptive practice, characterized by companies exaggerating their environmental responsibility, not only misleads stakeholders but also erodes the essential trust needed for effective and sustainable ESG practices. Recent cases, such as Adidas, Deutsche bank's DSW, Volkswagen, H&M among others, highlight the real-world impacts of such discrepancies on stakeholder confidence. Such deceit directly contravenes the EU's rigorous ESG frameworks, notably the Sustainable Finance Disclosure Regulation (SFDR) (European Parliament, 2019) which demands transparency and the integration of sustainability risks in investment decisions. Additionally, the EU's Taxonomy Regulation obliges companies to classify their activities based on environmental sustainability, leaving no room for ambiguous or misleading claims (European Parliament, 2020). The European Sustainability Reporting Standards (ESRS) (EFRAG, 2023) and the Corporate Sustainability Reporting Directive (CSRD) (European Parliament, 2022) are emerging frameworks that further emphasize accurate and comprehensive sustainability reporting. These standards aim to enhance the reliability and comparability of sustainability information, thereby curtailing opportunities for businesses to misrepresent their environmental impact. The ESRS mandates accurate environmental impact reporting, while the CSRD calls for comprehensive and transparent reporting, emphasizing the significance of authenticity in corporate environmental disclosures. Adherence to these standards is deemed crucial for management. A clear discrepancy is observed in ESMA's report (2023) between the practices of greenwashing and the principles outlined in relevant regulatory framework. It is underscored in this work that the role of management in fostering genuine stakeholder relationships is of critical importance in today's interconnected and environmentally conscious society.

The risks associated with greenwashing are noted to transcend regulatory compliance, impacting stakeholder engagement and trust. The argument is presented that a dedication to authentic sustainability practices, in alignment with standards such as the ESRS and CSRD, is essential for the development and maintenance of strong stakeholder relationships. Such a commitment is identified as key to achieving sustainable growth and long-term success in a discerning global market. Having navigated the implementation of ESG criteria and anti-greenwashing measures within the EU, next chapter presents an array of case studies, critically examining the gap between ESG rhetoric and actual corporate practices.

#### **4. UNMASKING GREENWASHING: CASE STUDIES IN CORPORATE ESG CLAIMS AND REALITY**

A detailed exploration is undertaken of concrete greenwashing cases, focusing on the ways organizations misrepresent their environmental and social responsibilities. These cases illuminate the various ways greenwashing manifests and its impact on businesses and stakeholders alike. The significance of these examples lies in their ability to reveal the intricacies and challenges in discerning genuine corporate sustainability claims. They underscore the vital need for authentic compliance with ESG standards in the dynamic sphere of corporate accountability. The Volkswagen emissions scandal, commonly known as "Dieselgate," began in September 2015. It was uncovered that Volkswagen had installed software in their diesel vehicles, specifically in models from 2009 to 2015, which was designed to manipulate emissions tests. This software enabled the vehicles to meet the U.S. standards during regulatory testing by reducing nitrogen oxide (NO<sub>x</sub>) emissions. However, in real-world driving conditions, these vehicles emitted up to 40 times more NO<sub>x</sub>. The deceit came to light when researchers from West Virginia University, conducting on-road emissions tests in 2013, found significantly higher NO<sub>x</sub> emissions than expected (Sachek, 2023). This led to further investigations by the Environmental Protection Agency (EPA) and the California Air Resources Board, eventually revealing the extent of Volkswagen's actions. The scandal had far-reaching consequences, both legally and financially, for Volkswagen. It was found that about 11 million cars worldwide, including 500,000 in the United States, had been equipped with the cheating software. Volkswagen faced significant legal actions, including a guilty plea to criminal charges and agreements to pay billions in penalties. According to some relevant sources at least 30 people in management at Volkswagen knew about the emissions testing scandal (Hawranek, 2015), a claim that Volkswagen later denied. Still, at least several executives did serve prison time over the deception. In 2016, the brand announced they would no longer sell diesel-powered vehicles in the United States, choosing to focus on all-electric vehicles instead (Sachek, 2023). In January 2017, Volkswagen agreed to pay \$4.3 billion in penalties, and by June 2020, the scandal had cost the company \$33.3 billion in fines, penalties, financial settlements, and buyback costs (Shepardson, 2020). As a result of the scandal, Volkswagen's reputation suffered greatly, leading to major changes in its operational focus. The company announced that it would stop selling diesel-powered vehicles in the United States and would instead focus on electric vehicles. This scandal raised awareness about the pollution levels of diesel-powered vehicles and led to investigations into emissions practices across the automotive industry. IKEA, known as the world's largest wood consumer, has seen its wood consumption double in the last decade. In 2019 alone, IKEA used 21 million cubic meters of logs for its products, enough to circle the Earth seven times if laid end to end. Research conducted by Earthsight (2022) calculated that IKEA is currently consuming approximately one tree every second. Shockingly, their investigation uncovered that IKEA has been producing beech chairs using wood sourced illegally from the forests of the Ukrainian Carpathian region, a habitat for endangered species such as bears, lynxes, wolves, and bison.

This misuse of resources is compounded by the revelation that the illegally sourced wood was certified by the Forest Stewardship Council (FSC), the leading global system for green wood labeling. The FSC's distinctive 'tick-tree' logo is found on millions of wood and paper products worldwide, meant to assure consumers of the ethical sourcing of the materials. However, this incident raises serious questions about the ethics and transparency of FSC accreditation, suggesting that these issues may not be limited to Ukraine alone (Harvey, 2020). It highlights the complexities of environmental certifications and the need for more rigorous oversight to ensure that sustainability standards are met and maintained. The case of IKEA's wood consumption poses a significant challenge to the integrity of environmental certification systems and the corporate responsibility of large consumers of natural resources. The discovery that the Swedish furniture giant has been linked to the use of illegally harvested wood, even while carrying the FSC's certification, emphasizes the critical need for more robust verification processes and accountability in sustainability practices. This scandal not only casts doubt on the reliability of eco-labels but also demands a reevaluation of corporate supply chains to safeguard against the exploitation of critical habitats and the violation of conservation efforts. It calls for consumers, corporations, and certification bodies to push for greater transparency and stricter enforcement of environmental standards to preserve our planet's biodiversity and resources. In 2021, DWS, the asset management division of Deutsche Bank, faced allegations from its former head of sustainability, Desiree Fixler, of overstating the ESG credentials of its investment products (Eccles, 2023). This accusation brought a significant discrepancy between the sustainability claims made by DWS and the actual implementation of ESG criteria within its investment portfolios into sharp focus. Fixler's claims suggested that DWS might have engaged in 'greenwashing,' a practice where companies misrepresent their products or operations as environmentally friendly or sustainable to attract socially conscious investors. The allegations raised serious questions about the transparency and integrity of ESG reporting standards in the finance industry, triggering a broader discussion on the need for more stringent regulatory oversight. This incident highlighted the importance of accurate representation of ESG performance in investment decisions and the potential consequences of misleading investors in these areas. Consequently, the case against DWS became a cautionary tale within the financial sector, emphasizing the necessity for a genuine commitment to sustainability and ethical practices over merely using them as marketing strategies. The whistleblower's perspective offered an inside view into the challenges of aligning corporate rhetoric with actual practices, shedding light on the complexities and potential conflicts of interest in the ESG landscape. In 2022, Innocent Drinks, a company owned by The Coca-Cola Company, faced backlash after their promotional advertisements were banned in the UK. 26 viewers, one of whom identified themselves as representing environmental group Plastics Rebellion, complained to the Advertising Standards Authority (ASA) that the adverts misled customers by exaggerating the "total environmental benefits" of the drinks (Timmins, 2022). The advertising regulator determined that the adverts misled customers about the true environmental impact of their products. The commercials featured animated characters encouraging people to "start fixing the planet" by purchasing Innocent drinks, singing songs about recycling and repairing the Earth. The controversy is particularly striking given that Innocent's parent company, Coca-Cola, has been identified as the world's largest plastic polluter, producing an estimated three million tons of plastic packaging annually, equating to around 200,000 bottles every minute (Laville, 2019). The regulator's decision was based on the implication that purchasing Innocent drinks is an environmentally positive choice, which they contended is not the case (Timmins, 2022). This decision underscores the increasing scrutiny on corporate environmental claims and the rising expectations for genuine sustainable practices. In 2020, Adidas introduced its "Primegreen" and "Primeblue" product lines, which were marketed as environmentally friendly options using 100% recycled polyester.

However, the company faced scrutiny over these claims due to questions about the substantial evidence supporting the sustainability of these products. Critics argued that the company's marketing of these products potentially misled consumers about their environmental impact. This situation highlighted the broader issue of greenwashing in the fashion industry, where companies often make eco-friendly claims without adequate substantiation. The controversy surrounding Adidas underscored the need for more transparency and accountability in environmental claims within the industry (Dzhengiz et al., 2023). It also sparked a discussion about the necessity of third-party verification of such claims and the implementation of stricter standards and regulations. As a result, Adidas, along with other companies in the fashion sector, faced increasing pressure to provide more concrete and verifiable information about the environmental impact of their products. This scrutiny signaled a shift in consumer expectations, demanding greater honesty and responsibility from brands regarding their environmental commitments. Not shifting focus from the fashion industry, H&M's "Conscious Choice" collection drew significant attention and criticism in late 2022. This line, marketed for its sustainability, faced allegations suggesting its environmental claims were overstated, raising questions about the actual sustainability of the materials used in the collection. A lawsuit filed against the company alleged that the collection, marketed as sustainable, was made from materials harmful to the environment, thus making H&M's sustainability claims deceptive. Instead of calling products "environmentally friendly," H&M leaned heavily on words such as "conscious" and "sustainable" (Ferris et al., 2023). The plaintiffs specifically criticized the use of recycled polyester from plastic bottles in the garments, arguing that this ultimately leads to landfill, incineration, or being dumped in nature. H&M defended their collection, stating that it uses more sustainable materials like recycled polyester, which results in less water, fossil fuel, and carbon dioxide use compared to virgin polyester. The brand emphasized that it didn't claim the products were fully sustainable but made from more sustainable materials. This case highlights the complexities and challenges in the fashion industry regarding sustainability claims and consumer expectations. At the end in 2023 a federal judge in the Eastern District of Missouri dismissed a proposed class action lawsuit against H&M for its "Conscious Choice" line of products based, in part, on a finding that plaintiff's allegations that H&M's "sustainable" marketing violated consumer protection laws, as well as the FTC's Guides for the Use of Environmental Marketing Claims, known as Green Guides, were not supported (Ferris et al., 2023). Despite H&M successfully defending their collection in court, the brand's image undoubtedly faced challenges due to the widespread scrutiny and debate over its sustainability claims. In a significant case of alleged greenwashing, BP faced scrutiny for its advertising campaigns in 2019. ClientEarth, an environmental law organization, lodged a complaint against BP's global 'Keep Advancing' and 'Possibilities Everywhere' ad campaigns. The complaint, filed in December 2019, accused BP of misleading the public by focusing on its low carbon energy products, despite more than 96% of the company's annual spend being on oil and gas. This discrepancy highlighted the contrast between BP's public portrayal of its environmental initiatives and its actual investment priorities. In response to the complaint, BP withdrew its advertisements in February 2020, with CEO Bernard Looney stating that they would not be replaced under the company's new policy, which promised an end to 'corporate reputation advertising'. Additionally, BP committed to redirecting its advertising resources towards advocating for progressive climate policies. The UK National Contact Point for the OECD Guidelines for Multinational Enterprises (NCP) assessed ClientEarth's complaint as being material and substantiated. This decision set a precedent for complaints against corporate greenwashing, emphasizing the importance of honesty in advertising, especially concerning environmental impacts. Greenpeace has also highlighted BP's history of greenwashing.

In 2008, BP launched a multimillion-dollar marketing campaign pledging dedication to alternative energy, yet their investment data showed a significant discrepancy: 93% in oil and gas versus much smaller percentages in biofuel and solar initiatives. These cases underscore the importance of corporate transparency and the growing scrutiny of environmental claims made by major corporations. It demonstrates the necessity for companies to align their marketing messages with their actual business practices and investment priorities, especially in the context of environmental sustainability and climate change. From the insights gained through these case studies, next chapter proposes a path forward, outlining actionable strategies for corporations to transcend greenwashing and commit to authentic sustainability practices.

## **5. ENHANCING CORPORATE RESPONSIBILITY: STRATEGIES TO COUNTER GREENWASHING**

According to Bowen (2014), the decline in basic greenwashing tactics is likely due to improved stakeholder awareness and reduced information gaps, propelled by advancements in data and monitoring technologies. Simultaneously, Bowen (2014) indicates a rise in the symbolic facets of corporate environmentalism, marking a shift in how companies portray their eco-friendly initiatives. It's crucial to consider how companies are adapting their strategies in response to increased scrutiny and evolving expectations from stakeholders. With the rise of digital technologies and data analytics, businesses are now more capable of monitoring and reporting their environmental impact. However, this technological advancement also means that companies must be more vigilant in ensuring that their sustainability efforts are not just symbolic but are backed by substantive actions. As we transition to discussing proactive steps for companies, it's essential to recognize that this evolving landscape requires a multifaceted approach to sustainability, combining technological innovation with robust governance and transparent communication.

To effectively prevent greenwashing and ensure genuine ESG compliance, companies should prioritize a comprehensive and multifaceted approach and take some of following 10 proactive steps to ensure transparency and integrity:

- 1) Strengthen corporate governance mechanisms: Adidas and DWS should enhance its ESG reporting mechanisms to ensure they are accurate, comprehensive, transparent, and aligned with global standards. This could involve adopting more stringent internal auditing processes and third-party verification to ensure the accuracy of ESG claims. Implementing third-party audits and adopting international ESG reporting standards like the Global Reporting Initiative (GRI), Climate-related Financial Disclosures (TCFD) or/and ESRS can help ensure that disclosures accurately reflect practices. Pei-yi Yu et al. (2020) suggest that the two firm-level governance factors are most effective at attenuating firms' misleading disclosure relating to ESG dimensions.
- 2) Value chain and life cycle assessment: To prevent greenwashing, companies in the fashion industry such as Adidas and H&M should engage in life cycle assessments (LCAs) to accurately measure the environmental impact of their products, ensuring that sustainability claims are backed by independently verifiable data. Additionally, these assessments should encompass the entire value chain, from raw material sourcing to end-of-life disposal, to provide a comprehensive understanding of the product's environmental footprint. Incorporating LCAs not only enhances transparency and credibility in environmental reporting but also helps companies identify areas for improvement and drive innovation towards more sustainable practices. This holistic approach is crucial in moving beyond superficial claims and achieving real, measurable sustainability in the fashion industry.

- 3) Compliance and ethical programs: In cases such as Volkswagen and BP robust compliance programs and ethical corporate governance are essential. Regular internal audits and adherence to environmental regulations can prevent such deceptive practices (OECD, 2023).
- 4) Whistleblower protection: Strengthening protections for whistleblowers who report regulatory violations can encourage more individuals to come forward with information about non-compliance as in the case of DWS.
- 5) Enhance ESG Integration: DWS and BP could further integrate ESG criteria into all investment decision-making processes. This means not just considering ESG factors as an add-on but embedding them into the core investment analysis and portfolio construction. Clear and honest communication with investors about ESG strategies, including limitations and challenges, can build trust and credibility.
- 6) Employee Training and Awareness: Regular training and education programs for employees about the importance of ESG issues and ethical practices can foster a culture of responsibility and integrity within almost every organization.
- 7) Stakeholder Engagement: Engaging with stakeholders, including investors, clients, and sustainability experts, can provide valuable feedback and insights. This engagement can also help in cases such as BP, Volkswagen and DWS stay abreast of evolving ESG standards and expectations.
- 8) Use honest marketing campaigns and precise language: Balanced and honest marketing, reflecting the true nature of a company's investment in sustainability, is key. All companies (esp. ones that build their competitiveness on a strong brand such as Coca-Cola) but especially companies coming from industries with long history of deception and misinformation such as fashion and energy brands should clearly define sustainability terms and explain the specific environmental benefits of products, avoiding vague or generalized claims.
- 9) Provide evidence for claims: Support sustainability claims with evidence, such as third-party certifications or detailed information about materials and production processes as in Volkswagen and BP's case.
- 10) Regular Review and Adaptation of ESG Strategies: The ESG landscape is rapidly evolving. Regularly reviewing and updating ESG strategies and policies will help DWS stay relevant and effective in its sustainability efforts.

In conclusion, adopting these steps will not only mitigate the risks associated with greenwashing but also position companies as leaders in responsible business practices. By committing to authentic and transparent ESG practices, companies can build trust with stakeholders and contribute positively to sustainable development goals. The European Union's 'Green Claims' directive, introduced in March 2023, represents a strategic move towards a sustainable and competitive economy, in line with the EU's ambition to achieve a zero-impact economy by 2050. This directive addresses the prevalent issue of greenwashing by setting stringent rules for substantiating and communicating environmental claims about products in consumer markets. It mandates that claims be based on scientific evidence, cover the entire lifecycle of a product, and be transparently communicated. The directive applies to both voluntary environmental claims and labeling schemes, with particular emphasis on ensuring that these claims are not only credible but also relevant and scientifically robust. Furthermore, the directive's requirements extend to how environmental labels are managed, demanding transparency in their objectives, compliance monitoring, and decision-making processes. This initiative is part of the EU's broader goal, as outlined in the European Green Deal, to transform its economy into one that is sustainable, circular, and environmentally responsible.

By enforcing these measures, the EU aims to protect consumers from misleading information and promote genuine sustainable practices among businesses, thus steering the economy towards sustainable growth and environmental integrity. As we wrap up discussion on proactive measures against corporate greenwashing, next chapter brings our journey to a close, underscoring the urgent need for genuine sustainability in an era of heightened consumer awareness.

## 6. CONCLUSION

The significant increase in the use of ecolabels globally, as evidenced by the Ecolabel Index tracking 456 ecolabels across 199 countries and 25 industry sectors, reflects the rise of green consumers who are increasingly demanding products that align with their environmental values. In Europe alone, there are 231 active ecolabels, indicating a strong consumer interest in sustainable purchasing options (Ecolabel, 2023). This trend is further underscored within the European Union, where a mapping of 100 private green energy labels has been undertaken (European Commission, 2022), highlighting the growing market opportunity that companies are exploring to cater to eco-conscious consumers. However, this surge in ecolabels and green consumerism also presents the risk of greenwashing, as companies might exploit this trend by making unsubstantiated or misleading environmental claims. As we acknowledge the dual challenges posed by the rise of green consumers and the surge of ecolabels, it becomes imperative to not only continue rigorous examinations of corporate sustainability claims but also to explore emerging frontiers in green technology and policy enforcement. Future research should focus on longitudinal studies to track the evolution of consumer awareness and its influence on corporate transparency. Additionally, investigation into the efficacy of regulatory frameworks in different cultural and economic contexts could provide valuable insights for global standards in sustainability reporting. This transition towards sustainable consumerism, reflected in the global increase of ecolabels, signals a pivotal shift in market dynamics, warranting a critical analysis of corporate practices. As we proceed, we will dissect the facade of greenwashing to understand its impact on corporate integrity. This change reflects a deeper commitment among consumers towards environmentally responsible products, pushing companies to align their practices with these evolving preferences. However, this positive trend is counterbalanced by the risk of greenwashing, where companies, driven by the desire to capitalize on this eco-conscious shift, may resort to making unsubstantiated or misleading environmental claims. The challenge for businesses, therefore, lies in navigating this complex landscape: leveraging the opportunities presented by the growing demand for sustainable products while maintaining integrity and transparency in their environmental commitments. As the market continues to evolve, the onus is on companies to adopt genuine sustainable practices and avoid the pitfalls of deceptive marketing, ensuring they contribute meaningfully to the global agenda of environmental responsibility and sustainability.

## LITERATURE:

1. Bansal, P., & Roth, K. (2000). Why Companies Go Green: A Model of Ecological Responsiveness. *Academy of Management Journal*, 43(4), 717-736. DOI: 10.2307/1556363.
2. Becker-Olsen, K., & Potucek, S. (2013). Greenwashing. In: Idowu, S. O., Capaldi, N., Zu, L., Gupta, A. D. (eds.) *Encyclopedia of Corporate Social Responsibility* (1<sup>st</sup> edition), Berlin and Heidelberg: Springer. DOI: 10.1007/978-3-642-28036-8\_104.
3. Bellucci, M., & Manetti, G. (2018). *Stakeholder Engagement and Sustainability Reporting*, London: Routledge. DOI: 10.4324/9781351243957.

4. Bowen, F., & Aragon-Correa, J. A. (2014). Greenwashing in Corporate Environmentalism Research and Practice: The Importance of What We Say and Do. *Organization & Environment*, 27(2), 107-112. DOI: 10.1177/1086026614537078.
5. Bowen F. (2014). *After greenwashing: Symbolic corporate environmentalism and society*. Cambridge: Cambridge University Press.
6. Cantwell, G., Nolan, M., & Corser, M. (2019). More than Half of Consumers Would Pay More for Sustainable Products Designed to Be Reused or Recycled, Accenture Survey Finds, Accenture. Retrieved on 22.11.2023. from <https://newsroom.accenture.com/news/2019/more-than-half-of-consumers-would-pay-more-for-sustainable-products-designed-to-be-reused-or-recycled-accenture-survey-finds>.
7. Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *Journal of Business Ethics*, 114, 489–500. DOI: 10.1007/s10551-012-1360-0.
8. Chen, C.-C., Khan, A., Hongsuchon, T., Ruangkanjanases, A., Chen, Y.-T., Sivarak, O., & Chen, S.-C. (2021). The Role of Corporate Social Responsibility and Corporate Image in Times of Crisis: The Mediating Role of Customer Trust. *International Journal of Environmental Research and Public Health*, 18(16), 8275. DOI: 10.3390/ijerph18168275.
9. Dzhengiz, T., Haukkala, T., & Sahimaa, O. (2023). (Un)Sustainable transitions towards fast and ultra-fast fashion. *Fashion and Textiles*, 10, 19-52. DOI: 10.1186/s40691-023-00337-9.
10. de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & da Luz Soares, G. B. (2020). Concepts and forms of greenwashing: a systematic review. *Environmental Sciences Europe*, 32(19), 1-12. DOI: 10.1186/s12302-020-0300-3.
11. Diez-Cañamero, B., Bishara, T., Otegi-Olaso, J. R., Minguez, R., & Fernández, J. M. (2020). Measurement of Corporate Social Responsibility: A Review of Corporate Sustainability Indexes, Rankings and Ratings. *Sustainability*, 12(5), 2153. DOI: 10.3390/su12052153.
12. Earthsight (2022). Flatpacked Förests - IKEA's illegal timber problem and the flawed green label behind it. Earthsight. Retrieved on 14.12.2023. from <https://www.earthsight.org.uk/flatpackedforests-en>
13. Eccles, R. G., & Klimenko, S. (2019). The investor revolution. *Harvard Business Review*, 97(3), 106-116.
14. Eccles, R. G. (2023). 'A Whistleblower's Tale' As Told By Desiree Fixler. Forbes. Retrieved on 28.12.2023. from <https://www.forbes.com/sites/bobeccles/2023/01/17/a-whistleblowers-tale-as-told-by-desiree-fixler/>.
15. Ecolabel Index (2023). Retrieved on 8.12.2023. from <https://www.ecolabelindex.com/ecolabels/?st=region=europe>.
16. EFRAG (2023). The first set of ESRS - the journey from PTF to delegated act. Retrieved on 18.12.2023. from <https://www.efrag.org/lab6>.
17. European Commission (2022). COMMISSION STAFF WORKING DOCUMENT IMPACT ASSESSMENT REPORT Accompanying the document Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and better information, SWD/2022/85 final. Retrieved on 22.11.2023. from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022SC0085>.
18. European Parliament (2019). Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector PE/87/2019/REV/1. Retrieved on 8.12.2023. from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R2088>.



19. European Parliament (2020). Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088. PE/20/2020/INIT. Retrieved on 8.12.2023. from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852>.
20. European Parliament (2022). Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting. PE/35/2022/REV/1. Retrieved on 8.12.2023. from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464>.
21. ESMA (2023). Progress Report on Greenwashing - Response to the European Commission's request for input on "greenwashing risks and the supervision of sustainable finance policies". Retrieved on 22.11.2023. from [https://www.esma.europa.eu/sites/default/files/2023-06/ESMA30-1668416927-2498\\_Progress\\_Report\\_ESMA\\_response\\_to\\_COM\\_RfI\\_on\\_greenwashing\\_risks.pdf](https://www.esma.europa.eu/sites/default/files/2023-06/ESMA30-1668416927-2498_Progress_Report_ESMA_response_to_COM_RfI_on_greenwashing_risks.pdf).
22. Ferris, T., Lawlor, J. & Ketterer, E. (2023). Guidance for 'sustainable' claims after dismissal of H&M 'greenwashing' class action. Reuters. Retrieved on 8.12.2023. from <https://www.reuters.com/legal/legalindustry/guidance-sustainable-claims-after-dismissal-hm-greenwashing-class-action-2023-06-02/>.
23. Fosu, E., Yi, K., & Asiedu, D. (2024). The effect of CSR on corporate social performance: Mediating role of corporate image, green innovation and moderating role of corporate identity. *Corporate Social Responsibility and Environmental Management*, 31(1), 69–88. DOI: 10.1002/csr.2553.
24. Glavas, D., Grolleau, G., & Mzoughi, N. (2023). Greening the greenwashers – How to push greenwashers towards more sustainable trajectories. *Journal of Cleaner Production*, 382, 135301, DOI: 10.1016/j.jclepro.2022.135301.
25. Hawranek, D. (2015). Dutzende Manager in VW-Skandal verwickelt, Spiegel Wirtschaft. Retrieved on 22.12.2023. from <https://www.spiegel.de/wirtschaft/unternehmen/volkswagen-dutzende-manager-in-vw-skandal-verwickelt-a-1057741.html>.
26. Harvey, F. (2020). Timber from unsustainable logging allegedly being sold in EU as ethical. The Guardian. Retrieved on 12.12.2023. from <https://www.theguardian.com/environment/2020/jun/23/timber-unsustainable-logging-allegedly-sold-eu-ethical>.
27. Hirsheimer, B. (2021). Search for Sustainable Goods Grows by 71% As 'Eco-Wakening' Grips the Globe, WWF. Retrieved on 22.11.2023. from <https://www.worldwildlife.org/press-releases/search-for-sustainable-goods-grows-by-71-as-eco-wakening-grips-the-globe>.
28. Laasch, O., & Conaway, R. N. (2015). *Principles of responsible management: global sustainability, responsibility, ethics*. Mason: Cengage.
29. Le, T. T. (2023). Corporate social responsibility and SMEs' performance: mediating role of corporate image, corporate reputation and customer loyalty. *International Journal of Emerging Markets*, 18(10), 4565-4590. DOI: 10.1108/IJOEM-07-2021-1164.
30. Laville, S. (2019). Coca-Cola admits it produces 3m tonnes of plastic packaging a year. The Guardian. Retrieved on 15.12.2023. from <https://www.theguardian.com/business/2019/mar/14/coca-cola-admits-it-produces-3m-tonnes-of-plastic-packaging-a-year>.
31. Lim, (2023). Redefining Business in the Modern Era: The B Corp Movement and the Quest for Authentic Sustainability, Medium. Retrieved on 25.12.2023. from <https://bthechange.com/redefining-business-in-the-modern-era-the-b-corp-movement-and-the-quest-for-authentic-925c5981fc38>.

32. Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate Environmental Disclosure under Threat of Audit. *Journal of Economics and Management Strategy*, 20(1), 3-41. DOI: 10.1111/j.1530-9134.2010.00282.x.
33. Lyon, T. P., & Montgomery, A. W. (2015). The means and end of greenwash. *Organization and Environment*, 28(2), 223–249. DOI: 10.1177/1086026615575332.
34. Manly, J., Zhou, N., Unnikrishnan, S., von Koeller, E., Taylor, L., Cornock, W., Maxwell, H., Roura, D., & Breuer, O. (2023). Consumer Companies Must Innovate to Drive Impact on Climate, BCG. Retrieved 30.12.2023. from <https://www.bcg.com/publications/2023/consumer-companies-need-innovative-climate-change-solutions-to-drive-impact>.
35. Mandina, S. P., Maravire, C., & Masere, V. S. (2014). Effectiveness of Corporate Social Responsibility in Enhancing Company Image. *European Journal of Business and Management*. 6(5), 46-61.
36. Markota Vukić, N., Omazić, M. A., & Aleksić, A. (2019). Corporate Social Responsibility Strategy and Reporting: Overview of Practice in Selected European Countries, *Interdisciplinary description of complex systems*, 17 (2-B), 355-367. DOI: 10.7906/indecs.17.2.11.
37. Mitchell, R., Agle, B., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management Review*, 22(4), 853-886. DOI: 10.2307/259247.
38. Mu, H. & Lee, Y. (2023). Greenwashing in Corporate Social Responsibility: A Dual-Faceted Analysis of Its Impact on Employee Trust and Identification, *Sustainability*, 15(22), 15693. DOI: 10.3390/su152215693.
39. OECD (2023). OECD Guidelines for Multinational Enterprises. Retrieved 30.12.2023. from <https://mneguidelines.oecd.org/mneguidelines/>.
40. Orange, E., & Cohen, A. M. (2010). From eco-friendly to eco-intelligent. *The Futurist*, 44(5), 28–32.
41. Pei-yi Yu, E., Van Luu, B., & Huirong Chen, C. (2020). Greenwashing in environmental, social and governance disclosures. *Research in International Business and Finance*, 52, 101192. DOI: 10.1016/j.ribaf.2020.101192.
42. Pérez, A., & Rodríguez del Bosque, I. (2013). Measuring CSR Image: Three Studies to Develop and to Validate a Reliable Measurement Tool. *Journal of Business Ethics*, 118, 265–286. DOI: 10.1007/s10551-012-1588-8.
43. Pfajfar, G., Shoham, A., Małecka, A., & Zalaznik, M. (2022). Value of corporate social responsibility for multiple stakeholders and social impact – Relationship marketing perspective. *Journal of Business Research*, 143, 46-61. DOI: 10.1016/j.jbusres.2022.01.051.
44. Pieters, L., Cascone, J., Rogers, S., & Pankratz, D. (2023). Green products come of age: Expectations of sustainable products are rising, but consumers are likely to reward brands that deliver, Deloitte Insights. Retrieved 30.11.2023. from <https://www2.deloitte.com/xen/en/insights/industry/retail-distribution/consumer-behavior-trends-state-of-the-consumer-tracker/sustainable-products-customer-expectations.html>.
45. Sanghi, K., Bharadwai, A., Taylor, L., Turquier, L., & Zaveri, I. (2022). Consumers Are the Key to Taking Green Mainstream, BCG. Retrieved 23.11.2023. from <https://www.bcg.com/publications/2022/consumers-are-the-key-to-taking-sustainable-products-mainstream>.
46. Sachek, R. (2023). The Story Behind Volkswagen's Infamous Dieselgate Scandal, SlashGear. Retrieved 30.11.2023. from <https://www.slashgear.com/1357004/volkswagen-dieselgate-scandal-explained/>.

47. Shepardson, D. (2020). U.S. consumers received \$9.8 billion in Volkswagen diesel settlements, Reuters. Retrieved 8.12.2023. from <https://www.reuters.com/article/idUSKCN24S2ET>.
48. Timmins, B. (2022). Innocent drinks ads banned over environmental claim, BBC. Retrieved 15.12.2023. from <https://www.bbc.com/news/business-60481080>
49. Wirba, A.V. (2023). Corporate Social Responsibility (CSR): The Role of Government in promoting CSR. *Journal of Knowledge Economy*. Retrieved 30.12.2023. from <https://doi.org/10.1007/s13132-023-01185-0>.

# SUSTAINABLE SELF-EMPLOYMENT: REGIONAL SPECIFICITIES AND THEIR IMPACT IN LESS DEVELOPED DISTRICTS OF SLOVAKIA

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## **ABSTRACT**

*In less developed districts with higher unemployment rates and a lack of heterogeneity of work, self-employment can have an impact on reducing unemployment and developing entrepreneurship. In countries such as Slovakia, there are not many studies looking at regional specificities and their impact on self-employment. For this reason, the research focuses on the sustainability of self-employment among self-employed workers who started self-employment from 2012 to 2016. In the research, we follow three years since the start of self-employment in twelve less developed districts of Slovakia. We analyse the sustainability of self-employment overall and in selected sectors. The research aims to find out whether the specifications at the district and regional level at the time of starting self-employment and in the sectors of the national economy have an impact on the sustainability of starting self-employment of persons based in less developed districts of Slovakia. We used linear regression for the research. Research results indicate that the sustainability of self-employment in the secondary sector is higher than in the primary sector. Self-employers located in municipalities below 2,000 inhabitants have a sustainability of self-employment higher by about 2 months than self-employers located in municipalities above 2,000 inhabitants. In monitoring the sustainability of self-employment in the primary sector, the variables size of the municipality where the self-employer is located, the registered unemployment rate and the population at the district level are statistically significant. In the secondary and tertiary sectors, only the size of the municipality where the self-employer is located has an impact on the sustainability of self-employment. The results show an association between the sustainability of self-employment in the short term (up to three years after the start of self-employment) and the size of the municipality where the self-employer is located.*

**Keywords:** *less developed districts, sustainability, self-employment*

## **1. INTRODUCTION**

There are regions with different economic conditions in the national economy (Buček et al., 2010). Higher unemployment rates, lack of entrepreneurial activities and others characterize less developed regions. To reduce regional disparities, it is possible to use instruments aimed at increasing the competitiveness of regions (MIRRI SRb, 2023). The competitiveness of regions is influenced by more efficient firms, which can create a suitable environment for the local market and local firms (Boschma, 2004). Therefore, in disadvantaged regions, promoting entrepreneurship is a driving force for economic development (Huggins and Williams, 2011). Small firms are important for promoting economic growth (Deller and McConnon, 2009). Therefore, self-employment is also important for the sustainability of economic growth (Halicioglu and Yolac, 2015). Higher measures of self-employment have a positive impact on employment rates (Keeler and Stephens, 2023). Entrepreneurial activity may differ across less developed regions and developed regions. In rural regions, entrepreneurial activity is lower than in urban regions (Müller, 2016). Therefore, self-employment may be one option to reduce unemployment rates at the national level (Halicioglu and Yolac, 2015) as well as at the regional level.

In this study, we focus on self-employers who started self-employment in 2012-2016 based in a less developed district in Slovakia. The research concentrates on the sustainability of self-employment within three years of starting self-employment. The research aims to observe the impact of regional characteristics at the time of starting self-employment and sectoral activity in the national economy, excluding the quaternary sector, on the sustainability of self-employment within three years of the start of self-employment. In the study, we use regional characteristics at the district and local level such as the registered unemployment rate, the population of the district, and the size of the municipality, where the self-employer is based. To answer the objective, we constructed the following research question: What impact do regional characteristics and the type of sector in the national economy at the time of starting self-employment have on the sustainability of self-employment within three years of starting self-employment in less developed districts in Slovakia? In the second part, the research focuses on examining the theoretical background related to the sustainability of self-employment and regional characteristics. The third part is concerned with the description of data collection, description of variables and methodologies. The fourth part focuses on the results of the paper. In the fifth part, the thesis highlights the most important results. In the last part, the research paper summarizes the main findings, describes the limitations of the thesis, and discusses future research.

## **2. THEORETICAL BACKGROUND**

Many studies are focusing on tracking self-employment at the national or regional level. In the research by Faggio and Silva, the authors concentrate on examining the link between self-employment and aspects of entrepreneurship in comparison to the urban and rural labour market in the UK (Faggio and Silva, 2014). Another research paper examines the career sustainability of self-employment by looking at a variety of factors (van den Groenendaal et al., 2022). In the US, research focuses on industrial diversity and regional growth in less developed regions (Keeler and Stephens, 2023). Other research explains the heterogeneity of self-employers through longitudinal career tracking (Bay and Koster, 2022) or by evaluating the impact of self-employment and employment on the growth of job creation (Tsvetkova et al., 2018). Several studies have looked at tracking selected variables and their impact at the regional level (Bay and Koster, 2022; Filippopoulos and Fotopoulos, 2023; Cueto et al., 2015). Similar inhabitants live in the same location, hence similar entrepreneurs congregate close to each other (Bay and Koster, 2022). The clustering of self-employers may act on the size of the representation of self-employers with the same line of business in the regional market. In less developed regions of the UK, self-employers dominate the construction, retail, accommodation and food, and service industries (Faggio and Silva, 2014). In the regions of US, they are in agriculture, manufacturing, transportation, warehousing, professional and business services, and other services (Keeler and Stephens, 2023). The survival rate of self-employment up to three years varies across industries. According to OECD research, the sustainability of companies is higher in sectors where there is a higher number of public companies (public benefit enterprises) in the European Union. Almost all European Union countries have lower survival rates in construction, accommodation and construction (OECD, 2015). In Bay and Koster's research, higher sustainability of self-employers was observed in agriculture, trade and financial services (Bay and Koster, 2022). In less developed regions, those firms that engage in manufacturing, industry and other services have higher profits (Keeler and Stephens, 2023). There are fewer opportunities for alternative employment in rural regions, which is why self-employment is a better alternative in the labour market than being unemployed (Faggio and Silva, 2014). In less developed regions, there is a higher interest in self-employment after the loss of paid employment (Tsvetkova et al., 2018). Self-employment rates are higher in rural regions but at a time of deteriorating labour market conditions.

The reason for this is the lack of other employment alternatives and the choice of self-employment as a last-work option (Faggio and Silva, 2014). There is also less economic diversity in some regions, leading to the exploitation of the gap in the labor market for start-ups (Keeler and Stephens, 2023). There is higher sustainability and stability in self-employment in rural regions as opposed to urban regions (Bay and Koster, 2022). Research by Bay and Koster suggests that regional factors influence self-employers (Bay and Koster, 2022). One factor may be the location of self-employment and the size of the regional market. In most cases, the location of the business and the location of the home are in the same region (Faggio and Silva, 2014). Small businesses play an important role in employment and population growth, but in different sectors (Deller, 2010). Market size has a positive effect in the early stages of self-employment (Andersson and Koster, 2011). Small businesses in agriculture, construction, mining, and manufacturing have a negative impact on population growth (Deller and McConnon, 2009). In regions, classified as less developed, the unemployment rate is at a higher level (MIRRI SRb, 2023). Employment rates can have a negative impact on business start-ups but not statistically significant (Andersson and Koster, 2011). However, increased unemployment rates may increase self-employment. This is due to involuntary job loss (Maeger, 1992). Other research suggests that only in seven OECD countries can we observe a positive effect of increased unemployment on promoting self-employment development (Halicioglu and Yolac, 2015). At the regional level, the results may be similar. If unemployment increases at the regional level, the sustainability of self-employment decrease (Cueto et al., 2015). The high rate of unemployment discourages new self-employed people from starting up (Filippopoulos and Fotopoulos, 2023). At the same time, an increase in unemployment in one region may result in an increase in self-employment in other regions (Cueto et al., 2015).

### **3. DATA AND METHODOLOGY**

The research aims to monitor the impact of regional characteristics at the time of starting self-employment and the type of economic activity by sector in the national economy on the sustainability of self-employment. The selected regional characteristics are at the district and municipality level when starting self-employment between 2012 and 2016 and in less developed districts in Slovakia. The observed sustainability period is recorded from the date of starting self-employment annually up to three years. Therefore, the monitored period of sustainability of self-employment is between 2013 and 2019. The research uses the database of the finstat.sk internet portal. The database selects self-employed persons, self-employed entrepreneurs and self-employed farmers. Subsequently, information was selected only on those who started self-employment between 1.1.2012 and 31.12.2016 and are based in a less developed district in Slovakia. The total sample studied is 14,411 self-employed workers. From the available data, the following information about self-employers was extracted: the date of the start of self-employment, the possible date of the cessation of self-employment, the classification of economic activity according to NACE, and the location of the self-employment at the municipality and district level. Data on self-employed persons who did not have information on NACE classification of economic activities, address of registered office, have suspended self-employment or have citizenship other than Slovak were removed from the database. The selection of self-employers by location in a less developed district is based on the list of the least developed districts in Slovakia. The research focused on less developed districts that were on the list of least developed districts at least once in 2015 and 2016. According to the list of less developed districts based on Act No. 336/2015 Coll. on the support of the least developed districts (MIRRI SRa,2023), the research focuses on 12 districts in the Slovak Republic.

name of the sectoral variable by classification in the national economy	abb.	variable description	NACE sections assigned	number and percentage in the study sample
Primary sector	primary	The variable consists of NACE categories which are consistent with the self-assessed primary sector industry classification of the national economy. It is a binary variable.	A, B	927 (6,43%)
Secondary sector	secondary	The variable contains the NACE categories that correspond to the sector of the secondary sector of the national economy according to the self-assessment. It is a binary variable.	C,E,F	6858 (47,59%)
Tertiary sector	tertiary	The variable contains NACE categories that are consistent with the self-assessed tertiary sector of the national economy. It is a binary variable..	G,H,I,J, K,L,M, N,P,Q,R	5662 (39,29%)
Other	oth	The variable includes NACE section S. It is a binary variable.	S	964 (6,69%)

*Table 1: NACE code distribution of self-employed persons into sectors of the national economy and the variable other.*

*(Source: Own processing)*

Subsequently, the analysis also addresses the field of economic activity carried out. Each self-employer surveyed has a five-digit numerical code in a subclass of NACE Rev 2. We have matched the individual codes to the larger NACE sections. Based on self-selection, each NACE section was assigned a sector in the national economy without a quartile sector. In one case, the sector in the national economy could not be assigned clearly. This is NACE section S. A variable called other was created for this group. Self-employers in NACE sectors D,O,T and U are not found in the research. The reason for this is the non-representation of these self-employers in the analysis sample (*Table 1*). In addition to sectors in the national economy, we observe the sustainability of self-employment with selected regional characteristics. The research also focuses on regional characteristics such as market size at the local and district levels and registered unemployment rates in districts. Research papers have used quantitative methods. The most common method used in quantitative research is GMM estimator (Andersson and Koster, 2011), geographically weighted regression (Deller, 2010), ordinary least squares (OLS) (Deller, 2010; Tsvetkova et al., 2018; Wyrwich, 2014). Some authors use multinomial logit model (Bay and Koster, 2022), quantile regression (Andersson and Koster, 2011) or Carlino-Mills model (Deller and McConnon, 2009). Other qualitative research has been conducted in the form of semi-structured interviews to identify the career sustainability impacts of self-employment in Belgium (van den Groenendaal et al, 2022). The research work uses linear regression with the dependent variable  $ent_i$  and other regional and sectoral independent variables. The research is divided into two parts. In the first part, we focus on tracking the sustainability of self-employment overall (*all*) with sectoral dummy variables  $\gamma$  and regional independent variables  $\beta$ . The sector dummy independent variables ( $\gamma_s$ ) include secondary, tertiary and other sectors. The aim is to compare the sustainability of the primary sector with the other sectors and the other variable. In the second part, we examine the sustainability of self-employment in primary, secondary, third sectors and other. The dependent variable is unchanged but focuses only on the sustainability of self-employment in each sector. In this second part, the variable  $\gamma$  is not present in the linear regression equation.

$$ent = X\beta + \gamma + e$$

$$ent_i = \beta_0 + \beta_1 up2000_m + \beta_2 unemp_d + \beta_3 inha_d + \gamma_s + e_i$$

The dependent variable  $ent_i$  reflects the individual ( $i$ ) sustainability of self-employment within three years of the start of self-employment. This is due to the difference in the dates of the start of self-employment and the eventual dates of the end of self-employment. The monitoring period for self-employers remains unchanged at three years. The values of the dependent variable ( $ent_i$ ) reflect the length of sustainability of self-employment. If the self-employer ended self-employment within the first year of establishment, the dependent variable takes the value 0. If the self-employer ceased between the first and second year after the start of self-employment, the dependent variable takes the value 1. If self-employment ceases between the second and third year, the dependent variable takes the value 2. If the self-employer continued to be self-employed after the third year of self-employment, the dependent variable takes the value 3.

abb.	Variable name	variable description	territorial unit	expression in units
up2000	Size of municipality where the self-employer is based	The population in the municipalities in the year of the start of self-employment is divided into categories up to 2000 inhabitants and over 2000 inhabitants (including 2000 inhabitants) If the municipality has less than 2000 inhabitants in a given year of the start of self-employment, the binary variable takes the value 0. If the municipality has 2000 inhabitants or more, the binary variable takes the value 1.	municipalities	numbers (population)
unemp	unemploymentper	The registered unemployment rate in the month and year (1/2012-12/2016) when the self-employer started the business, expressed in %.	district level	percent (%)
inha	inhabitantsdistricts	Population at district level in the year of starting self-employment in 2012-2016.	district level	numbers (population)

*Table 2 Regional independent variables  
(Source: Own processing)*

The independent variables focusing on regional characteristics ( $\beta$ ) at the time of the start of self-employment are at the level of municipalities ( $m$ ) and districts ( $d$ ). The independent variable size of the municipality, where the self-employer is located is a binary variable. We divided municipalities into two categories, below 2000 inhabitants and above 2000 inhabitants. The size of the municipality where the self-employer is located can show us how the size of the local market affects the sustainability of self-employment. The research also looks at the impact of population size in the district on the sustainability of self-employment through the variable inhabitantsdistricts. Another independent variable is the registered unemployment rate. By tracking the unemployment rate, we can analyze the impact of the unemployment rate in the month of self-employment establishment on the sustainability of self-employment in the next three years. Data at the local and district level were used in this research from the Statistical Office of the Slovak Republic and the Office of Labour and Social Affairs and Family of the Slovak Republic.

#### 4. RESEARCH RESULTS

The overall level of self-employment sustainability has been declining throughout the period under review. After the first year of self-employment, the sustainability rate was 87.14%. In the second year, self-employment sustainability fell to 77.23% and in the third year it was 68.66%.



VARIABLES	(1) ALL	(2) Primary	(3) Secondary	(4) Tertiary	(5) Other
up2000	-0.145*** (0.0181)	-0.182** (0.0729)	-0.147*** (0.0252)	-0.147*** (0.0294)	-0.0999 (0.0812)
unemploymentper	-0.00123 (0.00219)	0.0179** (0.00748)	-0.00540 (0.00337)	0.00129 (0.00324)	-0.0127 (0.00943)
inhabitantsdistrict	-5.83e-08 (4.09e-07)	3.40e-06* (1.81e-06)	-8.88e-07 (5.89e-07)	2.47e-07 (6.39e-07)	7.68e-07 (1.62e-06)
secondary	0.0805** (0.0379)				
tertiary	-0.0634 (0.0386)				
oth	-0.231*** (0.0537)				
Constant	2.447*** (0.0689)	1.782*** (0.204)	2.681*** (0.0868)	2.303*** (0.0903)	2.398*** (0.242)
Observations	14,411	927	6,858	5,662	964
R-squared	0.012	0.013	0.006	0.004	0.004

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 3: Results of linear regression  
(Source: Own processing)*

In the first column (of Table 3) we monitor the overall sustainability of self-employment, in columns two to five we monitor the sustainability of self-employment in the primary, secondary and tertiary sectors as well as for the variable other. In overall sustainability, the variable focusing on the size of the municipality (up2000) at the time of starting self-employment is negatively statistically significant. The sustainability of self-employers located in municipalities above 2000 inhabitants is approximately 2 months lower than that of self-employers located in municipalities below 2000 inhabitants. Compared to the primary sector, the sustainability of self-employment is higher in the secondary sector. The variable other is negatively statistically significant. We conclude that the sustainability of self-employment in other activities is lower as compared to the primary sector. In the primary sector, we observe negative statistical significance for the variable up2000. Self-employers in the primary sector who are located in a municipality below 2000 inhabitants have a higher rate of sustainability in self-employment by more than 2 months compared to self-employers who are located in a municipality above 2000 inhabitants. The unemployment rate is positively statistically significant for self-employers in the primary sector. A higher unemployment rate at the time of starting self-employment has a positive impact on the sustainability of self-employment in the primary sector. We can observe a very small positive statistical significance for the district population (inha) variable. From the result, we conclude that the change in population is so small that it does not have a significant impact on the sustainability of self-employment in the primary sector. In the secondary and tertiary sectors, we can observe negative statistical significance for the variable up2000. In the secondary and tertiary sectors, the sustainability of self-employment is higher for municipalities with less than 2000 inhabitants by about 2 months compared to municipalities with more than 2000 inhabitants.

## 5. DISUSSION

The study focuses on the sustainability of self-employment in less developed districts in Slovakia. In the research, we follow the sustainability of self-employment within three years after the start of self-employment in the period 2012-2016. To answer the research objective, we have developed the following research question: What impact do regional characteristics

and the type of sector in the national economy at the time of starting self-employment have on the sustainability of self-employment within three years of starting self-employment in less developed districts in Slovakia? Most research work focuses on tracking self-employment at the regional level (Bay and Koster, 2022; Filippopoulos and Fotopoulos, 2023; Cueto et al., 2015). In this paper, we focus on smaller territorial units, districts and municipalities. In the sample studied, the highest representation of self-employers who carried out economic activities at the district level was in the areas of industrial production, construction and retail trade. In other research, at the district level, the highest representation of self-employers is in construction, retail, accommodation, food and services (Faggio and Silva, 2014). Compared to the primary sector, the sustainability of self-employment was higher in the secondary sector. These are self-employers involved in industrial production, water supply, impact water and waste treatment, and construction. However, the sustainability of self-employment is lower in the tertiary sector compared to the primary sector. According to research by Faggio and Silva, most entrepreneurs operate in an area that is close to where they live (Faggio and Silva, 2014). For this reason, we focused on the size of the municipality where the self-employer is located and the size of the population at the district level. The variable focusing on district population at the district level is positively statistically significant only in the primary sector. According to Andersson and Koster, market size has a positive effect on entrepreneurs' activities in the beginning of self-employment (Andersson and Koster, 2011). However, from the results of the research paper, we can observe negative statistical significance of the variable up2000 overall, in the primary, secondary and tertiary sectors. In the research results, we observe that an increase in the unemployment rate at the time of starting self-employment has a positive impact on the future sustainability of self-employment only in the primary sector. Most research has focused on the unemployment rate and its impact on the number of self-employed. In other research, there is a decline in self-employment at the regional level due to the increase in the unemployment rate (Filippopoulos and Fotopoulos, 2023; Cueto et al., 2015).

## **6. CONCLUSION**

The research paper focuses on tracking sustainability within three years of starting self-employment in less developed districts in Slovakia. The aim was to monitor the sustainability of self-employment in three sectors of the national economy (also for the variable other) as well as to research the sustainability of self-employment overall. Through the use of regional independent variables at the time of starting self-employment, we observe the impact on the sustainability of self-employment within three years of starting a self-employment business. We also focus on comparing the sustainability of self-employment in the primary sector with the secondary sector, the tertiary sector and the other variable. The research includes tracking the sustainability of self-employment across sectors, using regional variables at the district and local level. The research focuses on self-employment start-ups between 2012 and 2016, based in less developed districts in Slovakia. The sustainability of self-employment is slightly higher in the secondary sector than in the primary sector. In less developed districts, the sustainability of self-employment in construction, manufacturing, water supply and waste treatment is higher than in agriculture and extractive industries. However, sustainability in agriculture is higher than sustainability in other activities. Other activities can be classified according to NACE as activities in membership organizations, repair of computers and personal household goods and other personal services (Website SK NACE, 2023). From the results, we conclude that the realization of self-employment in the secondary sector yields higher sustainability rates in less developed districts in Slovakia. The size of the municipality where the self-employer is based has an impact on the sustainability of self-employment. In municipalities with smaller populations, the sustainability of self-employment is about 1 to 2 months higher than in municipalities with more than 2,000 inhabitants.

In larger municipalities located in less developed districts, there is more competitiveness, which can lead to exit from self-employment. At the same time, in larger municipalities and smaller towns, there are more permanent employment opportunities without the need for longer travel commutes. The unemployment rate at the district level at the time of starting self-employment is statistically significant only in the primary sector. Self-employers in the primary sector who started their self-employment at a time of high unemployment have higher sustainability in self-employment. These are self-employers in agriculture and extractive industries. Population growth in the district has only a small positive impact on the sustainability of self-employment in the primary sector. The low population growth has no impact on the increase in competitiveness of self-employers. A limitation of the research is tracking the sustainability of self-employment using only district and local factors. At the same time, the research focuses on the sustainability of self-employment within three years of starting self-employment using variables at the time of starting self-employment. In a long period, the results of the research work may be different. The research focuses on the sustainability of self-employment across sectors as well as overall using only three independent variables at the district and local levels. By complementing the individual factors of entrepreneurs, future research can observe the impact of regional and individual factors on the sustainability of self-employment. The contribution of the study is to track the sustainability of self-employment in times of economic growth in less developed districts for beginning self-employers through selected district and local level factors at the time of starting self-employment.

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#### LITERATURE:

1. Act No. 336/2015 Z.z. o podpore najmenej rozvinutých okresov a o zmene a doplnení niektorých zákonov. (2015). Retrieved 2.12.2023 from <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2015/336/>
2. Andersson, M., Koster, S. (2011). *Sources of persistence in regional start-up--rates evidence from Sweden*. Journal of Economic Geography, 11(1), 179–201.
3. Boschma, R.A. (2004). *Competitiveness of Regions from an Evolutionary Perspective*. Regional Studies, 38(9), 1001-1014.
4. Bay, F., Koster, S. (2022). *Self-employment career patterns in the Netherlands: exploring individual and regional differences*. The Annals of Regional Science 71 (1), 601–625. Retrieved 19.12.2023 from [https://www.researchgate.net/publication/360718350\\_Self-employment\\_career\\_patterns\\_in\\_the\\_Netherlands\\_exploring\\_individual\\_and\\_regional\\_differences](https://www.researchgate.net/publication/360718350_Self-employment_career_patterns_in_the_Netherlands_exploring_individual_and_regional_differences)
5. Buček, M., Rehák, Š., Tvrdoň, J. (2010). *Regionálna ekonómia a politika* (1st edition). Slovensko: Iure Edition, spol. s.r.o. ISBN 978-80-8078-362-4
6. Central Office of Labour, Social Affairs and Family. (2023). *Statistic. List of least developed districts*. Retrieved 2.12.2023 from [https://www.upsvr.gov.sk/statistiky/zoznam-najmenej-rozvinutych-okresov.html?page\\_id=561733](https://www.upsvr.gov.sk/statistiky/zoznam-najmenej-rozvinutych-okresov.html?page_id=561733)
7. Central Office of Labour, Social Affairs and Family. (2023). *Unemployment - monthly statistics*. Retrieved 2.12.2023 from [https://www.upsvr.gov.sk/statistiky/nezamestnanost-mesacne-statistiky.html?page\\_id=1254](https://www.upsvr.gov.sk/statistiky/nezamestnanost-mesacne-statistiky.html?page_id=1254)
8. Cueto, B., Mayor, M., Suárez, P. (2015). *Entrepreneurship and unemployment in Spain: a regional analysis*. Applied Economics Letters 22(15), 1230–1235.

9. DATAcube. (2023). *Size Groups of Municipalities - Municipalities. Size Groups of Municipalities - Municipalities. Population and migration. Demographic and social statistics*. Retrieved 1.12.2023 from [https://datacube.statistics.sk/#!/view/sk/vbd\\_dem/om7022rr/v\\_om7022rr\\_00\\_00\\_00\\_sk](https://datacube.statistics.sk/#!/view/sk/vbd_dem/om7022rr/v_om7022rr_00_00_00_sk)
10. Deller, S.C. (2010). *Spatial variations in the Role of Microenterprises in Economic Growth*. *The Review of Regional Studies*, 40(1), 71-97. Retrieved 16.12.2023 from <https://doi.org/10.52324/001c.8161>
11. Deller, S.C., McConnon, J. (2009). *Microenterprises and Economic Growth: A Panel Study of the US States 1977–1997*. *Applied Economics Letters*, 16(13), 1307–1312.
12. Faggio, G., Silva, O. (2014). *Self-employment and entrepreneurship in urban and rural labour markets*. In *Journal of Urban Economics*, 84, 67-85. Retrieved 16.12.2023 from [https://www.sciencedirect.com/science/article/pii/S0094119014000746?ref=pdf\\_download&fr=RR-2&rr=81e392b22db4a3bd](https://www.sciencedirect.com/science/article/pii/S0094119014000746?ref=pdf_download&fr=RR-2&rr=81e392b22db4a3bd)
13. Filippopoulos, N., Fotopoulos, G. (2023). *Employment protection and regional self-employment rates in an economic downturn: a multilevel analysis*. *The Annals of Regional Science*. Retrieved 15.12.2023 from <https://doi.org/10.1007/s00168-023-01214-5>
14. Halicioglu, F., Yolac, S. (2015). *Testing the Impact of Unemployment on Self-Employment: Evidence from OECD Countries*. *World Conference on Technology, Innovation and Entrepreneurship, Procedia - Social and Behavioral Sciences* 195/2015, 10 – 17.
15. Huggins, R., Williams, N. (2011). *Entrepreneurship and regional competitiveness: The role and progression of policy*. *Entrepreneurship & Regional Development: An International Journal*, 23(9-10), 907-932.
16. Keeler, Z.T., Stephens, H.M. (2023). *What matters for lagging regions? The role of self-employment and industrial diversity in distressed areas*. *Growth Change*. 54(6). Retrieved 15.12.2023 from [https://www.researchgate.net/publication/372581807\\_What\\_matters\\_for\\_lagging\\_regions\\_The\\_role\\_of\\_self-employment\\_and\\_industrial\\_diversity\\_in\\_distressed\\_areas](https://www.researchgate.net/publication/372581807_What_matters_for_lagging_regions_The_role_of_self-employment_and_industrial_diversity_in_distressed_areas)
17. Müller, S. (2016). *A progress review of entrepreneurship and regional development: What are the remaining gaps?*. *European Planning Studies* 24(6). 1133–1158.
18. MIRRI SRa. (2023). *The Least Developed Regions*. Ministry of Investments Regional Development and Informatization of the Slovak Republic. Regional development. Retrieved 12.12.2023 from <https://mirri.gov.sk/en/sections/regional-development/the-least-developed-regions/>
19. MIRRI SRb. (2023). *Podpora najmenej rozvinutých okresov*. Retrieved 15.12.2023 from <https://www.nro.vicepremier.gov.sk/podpora-najmenej-rozvinutych-okresov/index.html>
20. OECD, European Commission, (2015). *Policy Brief on Sustaining. Self-employment Entrepreneurial Activities in Europe*. Luxembourg: Publications Office of the European Union, Retrieved 16.12.2023 from <https://web-archiv.oecd.org/2015-06-10/363618-Sustaining-BE-14-002-EN-N.pdf>
21. Rosenberg, M. (14.10.2015). *Sectors of the Economy: Primary, Secondary, Tertiary, Quaternary, and Quinary*. *About.com: About Education, Geography, Economic Geography*. Retrieved 16.12.2023 from <https://web.archive.org/web/20161119173743/http://geography.about.com/od/urbaneconomicgeography/a/sectorseconomy.htm>

22. STATdat. (2023). *Population by gender - SR, regions, counties, districts, city, countryside (per year)*. Retrieved 1.12.2023 from [http://statdat.statistics.sk/cognosext/cgi-bin/cognos.cgi?b\\_action=cognosViewer&ui.action=run&ui.object=storeID\(%22i362DCE4D88EC4E13A9EE8526B286D18B%22\)&ui.name=Po%20obyvate%20beov%20pod%20pohlavie%20-%20SR%20oblasti%20kraje%20okresy%20mesto%20vidiek%20\(ro%20dne\)%205bom7102rr%5d&run.outputFormat=&run.prompt=true&cv.header=false&ui.backURL=%2fcognosext%2fcps4%2fportlet%2fcommon%2fclose.html](http://statdat.statistics.sk/cognosext/cgi-bin/cognos.cgi?b_action=cognosViewer&ui.action=run&ui.object=storeID(%22i362DCE4D88EC4E13A9EE8526B286D18B%22)&ui.name=Po%20obyvate%20beov%20pod%20pohlavie%20-%20SR%20oblasti%20kraje%20okresy%20mesto%20vidiek%20(ro%20dne)%205bom7102rr%5d&run.outputFormat=&run.prompt=true&cv.header=false&ui.backURL=%2fcognosext%2fcps4%2fportlet%2fcommon%2fclose.html)
23. Tsvetkova, A., Partridge, M., Betz, M. (2018). *Self-employment effects on regional growth: a bigger bang for a buck?*. *Small Business Economics* Forthcoming (1) 2019/52.27–45. Retrieved 16.12.2023 from <https://doi.org/10.1007/s11187-018-9988-5>
24. van den Groenendaal, S.M.E., et al., (2022). *A qualitative exploration of solo self-employed workers' career sustainability*. *Journal of Vocational Behavior* 134 (3):103692. Retrieved 15.12.2023 from <https://www.sciencedirect.com/science/article/pii/S0001879122000033>
25. Website SK NACE. (2023). *SK NACE*. NACE kódy. Retrieved 2.12.2023 from <http://www.nace.sk/>
26. Wyrwich, M. (2014). *Ready, set, go! Why are some regions entrepreneurial jump starters?*. *Ann Region Sci* 53(2). 487–513. Retrieved 15.12.2023 from <https://link.springer.com/article/10.1007/s00168-014-0629-x>

# WHAT MAKES HUMAN RESOURCE PROFESSIONALS USE ARTIFICIAL INTELLIGENCE FOR REDESIGNING JOBS: A UTAUT2 STUDY

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## ABSTRACT

*As artificial intelligence (AI) found new applications in human resource (HR) practices in recent years due to its increasing accessibility, HR professionals question to which extent and where can this technology help them become more efficient and productive. Even though AI is not something new to HR functions like recruitment and selection, performance management, or training and development, not much is known about the use of this technology for efficiently redesigning jobs for the modern age. As a result, this study's objective is to assess the factors that shape the behavioural intentions of employees in HR departments to utilize AI explicitly for job redesign. The authors employ a multiple linear regression method, based on the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) theoretical model and data from a sample of 107 HR professionals. The findings from the study can potentially have practical implications for policymakers, who are still focused on developing suitable AI regulation, as well as HR managers and business leaders in the organizational context. In this sense, the findings can help them craft strategies for using AI to redesign existing jobs effectively and ethically as well as point out the main facilitating conditions and factors that can ultimately change behaviours. After a thorough query of the Scopus database, it was concluded that this would be one of the first studies that delve into the application of AI for job redesign, which represents an additional motivation for the authors to conduct the research.*

**Keywords:** *Artificial intelligence, Human resource management, Job redesign, UTAUT2*

## 1. INTRODUCTION

In recent years, the integration of artificial intelligence (AI) into various facets of organizational practices has witnessed unprecedented growth, notably within the realm of human resource management (HRM) as a crucial operation that nurtures employee growth and development (Gulliford & Dixon, 2019). The accessibility of AI technologies has spurred a surge of interest among HR professionals, prompting them to critically examine the extent to which AI can enhance efficiency and productivity. Yet, some surveys still point out negative sentiments toward using AI in the workplace and lower acceptance rates of this technology in some of the world's biggest economies (Merenkov et al., 2021). This raises the question if everyone can see the benefits of using AI in the workplace or if the risks are far greater and outweigh the positives. Additionally, while AI has been widely employed in HR functions such as recruitment, selection, performance management, and training (Chowdhury et al., 2023), there remains a significant knowledge gap concerning its application in the efficient redesign of jobs for the demands of the modern age. By the term job redesign, we understand the process of reviewing job tasks and responsibilities so that the employees are potentially regrouped and reallocated and their jobs are changed in an effort to maximize the quality output (Tims et al.,

2022). This HR function can often impact the enhancement of employee productivity and satisfaction (Siengthai & Pila-Ngarm, 2016). Notably, after an exploration of the Scopus database, it was discerned that there are very few studies investigating the application of AI specifically for job redesign within the HR domain. This served as an additional impetus for the authors to undertake this research endeavour. Addressing this gap, this study's objective is to delve into the factors that influence the behavioural intentions of HR professionals towards the real-world use of AI for job redesign. Based on this objective, we propose two research questions (RQ) that will help us achieve this objective:

- RQ1: Which factors act as antecedents and influence HR professional's behavioural intentions for using AI for redesigning jobs?
- RQ2: How can AI be implemented in the job redesign activities of the HR departments?

Focused on the assessment of these factors, the research employs a multiple linear regression method, anchored in the theoretical framework of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) (Tamilmani et al., 2021). Drawing insights from a sample of 107 HR professionals, predominantly from North Macedonia, the study aims to unravel the intricate dynamics shaping the integration of AI into job redesign practices. The implications of this research extend beyond the academic sphere, carrying practical significance for policymakers engaged in the ongoing development of AI regulations prompted by the EU AI Act and similar ones that pioneer in this field (Schuett, 2023). Furthermore, the findings are poised to offer valuable insights for HR managers and business leaders seeking to strategically leverage AI in the redesign of existing job structures. Thus, the study outlines a literature review of AI-mediated job redesign and the UTAUT2 theoretical framework, followed by an explanation of the used methodology. Afterward, the findings and results from the multiple regression model are explained and discussed.

## 2. THEORETICAL BACKGROUND

In a traditional sense, job redesign's objective is to help the HR workforce develop effective and efficient jobs based on existing ones to maximize performance and reduce the amount of repetitive and monotonous job aspects (Knight & Parker, 2021). Newer trends view job redesign as job crafting that can occur at individual, team, and social levels where larger portions of stakeholders are involved in creating the jobs of today and tomorrow (Tims et al., 2022). This leaves space for including technological advancements like AI to mediate this job redesign process. As such, AI can suggest flexible working arrangements, taking out some repetitive and easy-to-automate tasks from the job descriptions, learning plans, and similar (Eftimov & Kitanovikj, 2023). AI-based software can identify certain employees who are suitable for new tasks or projects with the help of deep learning, semantic matching, and chatbots (Xu & Li, 2020). Undeniably, AI has the potential to completely transform the job design and redesign processes for HR professionals, which is why this study wanted to determine what would make HR professionals use this technology for this purpose. The research is grounded in the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) theoretical model, which is an extension of UTAUT 1 as one of the pillar frameworks for determining antecedents to technological adoption (Tamilmani et al., 2021). The new theoretical model considers four of the constructs from the original one and adds three additional ones in the form of hedonic motivation, price value, and habit and experience (Chang, 2012). For this study, we opted to discard the social influence construct as it was previously done by other researchers whose sample is composed of highly educated people who are not swayed and easily persuaded by public opinion or pressure from society (Chatterjee & Bhattacharjee 2020).

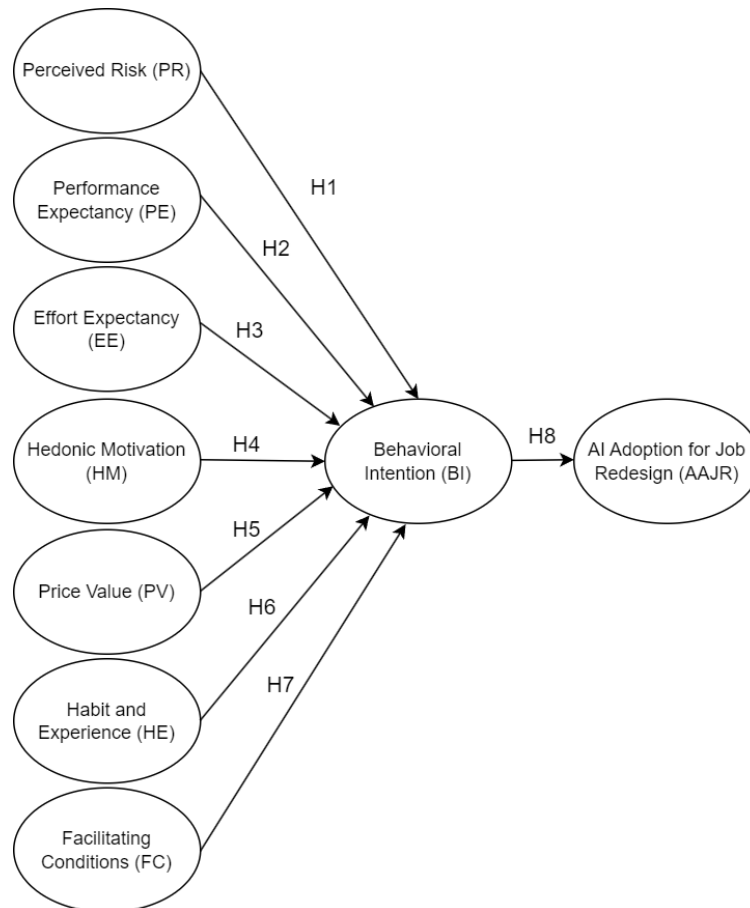


Figure 1: A theoretical model for AI use for job redesign grounded in UTAUT2  
(Source: Authors' construction)

Considering this, the model defines the following constructs: 1) perceived risk (PR), meaning the anticipated risk or potential negative aspects of using the technology, 2) performance expectancy (PE) as the expected results after the successful technology usage or AI in our case, 3) effort expectancy (EE) or the quantity of effort one requires to invest for mastering the technology, 4) hedonic motivation (HM), meaning the level of enjoyment and motivation an employee has when using AI, 5) price value (PV) – the value for the money when using AI for job redesign, 6) habit and experience (HE), which means if the employees have preestablished routines in which they use AI or some past experiences with similar technology, and 7) facilitating conditions, which can be described as factors that support or hamper the utilization of technology (Venkatesh et al., 2003; Tamilmani et al., 2021). Per the established theoretical framework, we believe that these constructs can determine the intentions towards behaviour that actively uses AI for job redesign as a crucial modern HR function. As a result of the literature review and the application of the UTAUT2 model, we propose the following hypotheses:

- *Hypothesis 1:* Perceived risk (PR) positively affects behavioural intentions (BI) for using AI for job redesign.
- *Hypothesis 2:* Performance expectancy (PE) positively affects behavioural intentions (BI) for using AI for job redesign.
- *Hypothesis 3:* Effort expectancy (EE) positively affects behavioural intentions (BI) for using AI for job redesign.
- *Hypothesis 4:* Hedonic motivation (HM) positively affects behavioural intentions (BI) for using AI for job redesign.



- *Hypothesis 5:* Price value (PV) positively affects behavioural intentions (BI) for using AI for job redesign.
- *Hypothesis 6:* Habit and experience (HE) positively affect behavioural intentions (BI) for using AI for job redesign.
- *Hypothesis 7:* Facilitating conditions (FC) positively affect behavioural intentions (BI) for using AI for job redesign.
- *Hypothesis 8:* Behavioural intentions (BI) positively affect behavioural intentions (BI) for using AI for job redesign.

### 3. METHODOLOGY

To empirically investigate the causes of HR professionals' behavioural intentions to use AI for redesigning jobs, we employed a quantitative research technique based on the UTAUT2 model, which is an extension of the widely applied first UTAUT model (Chang, 2012). Purposive sampling was used, using HR experts and business executives from the Republic of North Macedonia as the target demographic. First, the questionnaire was tested by five experts in the field after which the final version was distributed online to the authors' HR contacts database as well as to a database of HR professionals who are members of the Macedonian Human Resource Association (MHRA). The questionnaire included 33 questions, five of which pertained to demographic variables and the rest to the dimensions of the UTAUT2 model for identifying the key antecedents to AI adoption in job redesign. Each dimension was provided with three statements that respondents rated on a five-point Likert scale, where one meant the respondent strongly disagreed with the statement and five that they strongly agreed with it. Respondents were informed of the questionnaire's anonymity and confidentiality of the answers. Due to the specificity of the topic, they were also given a description of the study and its purpose, as well as a definition of job redesign and brief sample case studies of how AI is employed in this HR function. Subsequently, this resulted in a sample of 107 people who completed the questionnaire. Some of the job positions that were most frequently mentioned by respondents included HR assistant, HR specialist, HR manager, HR generalist, recruiter, talent acquisition specialist, and HR professional. After the data collection process, the questionnaire data was then subjected to multiple linear regression analysis using the SPSS statistical software. In terms of demographics, the majority of respondents identified as female (81%), with a smaller proportion identifying as male (16%) and 3% refusing to divulge their gender. Moreover, most respondents were aged 25 to 44 and worked in firms with more than 50 people.

### 4. RESULTS AND DISCUSSION

#### 4.1. Reliability and construct validity assessment

To confirm the factors, we assessed the construct validity through an exploratory factor analysis using a principal component analysis with vari-max rotation. The minimum factor loading criteria was established to be 0.5. Further, all commonalities were above 0.5. Additionally, Bartlett's Test of Sphericity and a Kaiser-Meyer-Olkin (KMO) Measure were conducted to measure the importance of correlations among the components of the correlation matrix and evaluate the fittingness of the data for factor analysis. In this sense, Bartlett's Test of Sphericity proved that the results were significant,  $\chi^2 (n=107) = 1745.333$  ( $p < 0.001$ ). This indicates a suitability for factor analysis. Since the values of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy should be above 0.800 to be appropriate (Hair et al., 2010), the result from the test was 0.819. Again, this demonstrates that it is suitable for further analysis. Two of the statements measuring performance expectancy were removed due to inability to load as was one statement for measuring hedonic motivation and habit and experience. The factor loadings are given in Table 1.

Items	Factor								
	1	2	3	4	5	6	7	8	9
<b>Perceived Risk (PR)</b>									
PR1	.820								
PR2	.561								
PR3	.651								
<b>Performance Expectancy (PE)</b>									
PE1		.695							
<b>Effort Expectancy (EE)</b>									
EE1			.825						
EE2			.851						
EE3			.623						
<b>Hedonic Motivation (HM)</b>									
HM1				.714					
HM2				.627					
<b>Price Value (PV)</b>									
PV1					.716				
PV2					.679				
PV3					.783				
<b>Habit and Experience (HE)</b>									
HE1						.739			
HE2						.742			
<b>Facilitating Conditions (FC)</b>									
FC1							.785		
FC2							.653		
FC3							.762		
<b>Behavioural Intentions (BI)</b>									
BI1								.739	
BI2								.714	
BI3								.814	
<b>AI Adoption for Job Redesign (AAJR)</b>									
AAJR1									.683
AAJR2									.641
AAJR3									.699

Table 1: Results of exploratory factor analysis, factor loadings  
(Source: Authors' calculations)

Cronbach's alpha coefficient was additionally calculated, and it shows 0.895, confirming the internal reliability of the scales. This result is above the estimated accepted threshold value of 0.7 for Cronbach's alpha coefficient in the established literature (Hair et al., 2010).

#### 4.2. Results of the multiple linear regression method

To analyse the hypotheses, we employed a multiple linear regression method at 95% confidence intervals. As a result, the analysis shows a good model fit and a statistically significant model (Table 2). Further, the R Square is 0.639, the Adjusted R Square is 0.614, and the R Square Change is 0.639. In this sense, the R square and Adjusted R Square clarify that the perceived risk, performance expectancy, effort expectancy, hedonic motivation, price value, habit and experience, and facilitating conditions, as integral constructs of the UTAUT2 model attribute 63.9% and 61.4% variations in HR professionals' intentions to apply AI for redesigning jobs respectively. Additionally, the Durbin-Watson test was conducted, signifying no autocorrelation in the residuals from the performed multiple linear regression (Durbin & Watson, 1971).

<b>R Square</b>	<b>Adjusted R Square</b>	<b>p-value</b>	<b>Durbin-Watson</b>
.639	.614	.000	2.082

*Table 2: Model summary  
(Source: Authors' calculations)*

Notably, the proposed constructs meet the suggested values for tolerance and VIF (Hair et al., 2010), which is evident in Table 3. Following the multiple linear regression, the results indicate that performance expectancy, effort expectancy, hedonic motivation, habit and experience, and facilitating conditions positively affect HR professionals' behavioural intentions for using AI for job redesign purposes. This leads to the confirmation of H2, H3, H4, H6, and H7, whereas H1 and H5 are rejected.

	<b>Standardized Coefficients</b>	<b>Sig.</b>	<b>Collinearity Statistics</b>	
			<b>Tolerance</b>	<b>VIF</b>
(Constant)		.455		
Perceived Risk (PR)	-.069	.029	.833	1.201
Performance Expectancy (PE)	.077	.030	.655	1.526
Effort Expectancy (EE)	.029	.063	.853	1.172
Hedonic Motivation (HM)	.165	.034	.619	1.614
Price Value (PV)	-.029	.085	.698	1.432
Habit and Experience (HE)	.591	.000	.547	1.828
Facilitating Conditions (FC)	.133	.047	.710	1.409

*Table 3: Coefficients of the multiple linear regression model  
(Source: Authors' calculations)*

Based on the standardized beta coefficients, the habit and experience (0.591) have the most significant positive effect on HR professionals' behaviour, followed by hedonic motivation (0.165) and facilitating conditions (0.133) respectively. Subsequently, the research results confirm H8, too, as it was found that behavioural intentions positively affect the actual AI adoption for redesigning jobs ( $\beta = 0.670$ ;  $t = 9.241$ ;  $P < 0.01$ ). This goes in line with other studies analysing the use of AI at the workplace that stress the importance of supporting facilitating conditions in the working environment as crucial for motivating employees to implement this technology in their work (Grover et al., 2022). Other studies have demonstrated that effort expectancy positively impacts behavioural intentions for using AI while highlighting the insignificant impact of performance expectancy (Chatterjee & Bhattacharjee, 2020). With this in mind, AI-supported job redesign can be a useful tool in HR professional's arsenal for combating the effects of the future of work and custom-tailoring jobs to the best of the employees' capacities, skills, interests, and objectives. AI's machine learning and natural language processing techniques can improve job matching by scanning job descriptions, resumes, and similar HR data (Roy et al., 2020). Using these findings, HR managers can focus on the aspects that can influence their employees' intentions for using this type of technology like facilitating conditions and developing habits and experiences, while neglecting minor aspects that don't affect the behaviour like the perceived risk and price value. These two constructs are more likely affected by the rising sentiment that AI is more affordable and poses little risk in its present form, which is more easily controlled.

## 5. CONCLUSION

This article aimed to assess the factors that influence the intentions of employees in HR departments to use AI, as a pioneering, almost ubiquitous technology nowadays, for job redesign. We made an effort to investigate this topic by performing a multiple linear regression analysis after conducting an exploratory factor analysis.

The analysis was grounded in the UTAUT2 theoretical framework, as a well-established model for assessing the implementation of technology in various contexts including the workplace and HR-related aspects, based on questionnaire data from 107 employees in HR departments in Macedonian companies. It was found that performance expectancy, effort expectancy, hedonic motivation, habit and experience, and facilitating conditions positively impact their behavioural intentions for using AI for job redesign. On the other hand, perceived risk and price value didn't impact their intentions, most likely because of the rising affordability and better control of some AI-integrated software including Chat GPT. This study still comes with some constraints acting as paths for future research. For one, additional analytical methods can be performed in the future like structural equation modelling based on larger samples. The findings can be tested in other research contexts and scaled up on a cross-country and even regional level. Also, the UTAUT2 model can be further used for assessing the intentions of HR professionals for using AI in different domains of their work such as performance management, measuring employee engagement, and similar. Regardless, besides the scientific community, the study presents implications for policymakers who can address the ethical and legal compliance of the use of AI in the workplace with regulation. HR professionals, HR managers, and business leaders as representatives from the business sector can use the findings and recommendations for strategy formulation and planning AI implementation projects in their respective organizations.

#### LITERATURE:

1. Chang, A. (2012). UTAUT and UTAUT 2: A review and agenda for future research. *The Winners*, 13(2), 10-114.
2. Chatterjee, S., & Bhattacharjee, K. K. (2020). Adoption of artificial intelligence in higher education: A quantitative analysis using structural equation modelling. *Education and Information Technologies*, 25, 3443-3463.
3. Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human Resource Management Review*, 33(1), 100899.
4. Durbin, J., & Watson, G. S. (1971). Testing for serial correlation in least squares regression. III. *Biometrika*, 58(1), 1-19.
5. Eftimov, L., & Kitanovikj, B. (2023). Unlocking the Path to AI Adoption: Antecedents to Behavioral Intentions in Utilizing AI for Effective Job (Re)Design. *Journal of Human Resource Management – HR Advances and Developments*, 26(2), 123-134.
6. Grover, P., Kar, A. K., & Dwivedi, Y. K. (2022). Understanding artificial intelligence adoption in operations management: insights from the review of academic literature and social media discussions. *Annals of Operations Research*, 308(1-2), 177-213.
7. Gulliford, F., & Dixon, A. P. (2019). AI: the HR revolution. *Strategic HR Review*, 18(2), 52-55.
8. Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis*, Maxwell Macmillan International Editions, New York, USA.
9. Knight, C., & Parker, S. K. (2021). How work redesign interventions affect performance: An evidence-based model from a systematic review. *Human relations*, 74(1), 69-104.
10. Merenkov, A. V., Campa, R., & Dronishinets, N. P. (2021). Public opinion on artificial intelligence development. *KnE Social Sciences*, 565-574.
11. Roy, P. K., Chowdhary, S. S., & Bhatia, R. (2020). A Machine Learning approach for automation of Resume Recommendation system. *Procedia Computer Science*, 167, 2318-2327.
12. Schuett, J. (2023). Defining the scope of AI regulations. *Law, Innovation and Technology*, 15(1), 60-82.

13. Siengthai, S., & Pila-Ngarm, P. (2016, August). The interaction effect of job redesign and job satisfaction on employee performance. In *Evidence-based HRM: a Global Forum for Empirical Scholarship* (Vol. 4, No. 2, pp. 162-180). Emerald Group Publishing Limited.
14. Tamilmani, K., Rana, N. P., Wamba, S. F., & Dwivedi, R. (2021). The extended Unified Theory of Acceptance and Use of Technology (UTAUT2): A systematic literature review and theory evaluation. *International Journal of Information Management*, 57, 102269.
15. Tims, M., Twemlow, M., & Fong, C. Y. M. (2022). A state-of-the-art overview of job-crafting research: current trends and future research directions. *Career Development International*, 27(1), 54-78.
16. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
17. Xu, J., & Li, G. (2020). The Job Crafting of Employees in the Context of Artificial Intelligence. *2020 International Conference on Economics, Education and Social Research (ICEESR 2020)*, 592-596.

# THE ROLE OF EXAMINATIONS OF TOURIST SATISFACTION IN PLANNING THE DEVELOPMENT OF A TOURIST DESTINATION: AN EMPIRICAL STUDY OF DESTINATION NOVIGRAD

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## **ABSTRACT**

*In coastal areas, tourism plays a crucial role in the economy. Croatia's tourism industry recorded its highest number of tourist arrivals and overnight stays in 2019. However, the pressure of tourism on destinations emphasizes the need for sustainable management. Novigrad, a popular tourist destination in Istria County, was the subject of a research study aimed at assessing tourist satisfaction and providing valuable insights to managers for maintaining quality and planning development. The study surveyed beach users on Karpinjan beach from June to August 2019. A study was conducted as part of the Interreg Mediterranean MITOMED+ project, where surveys were distributed to respondents in six different languages. The study collected 304 questionnaires, where the respondents were asked to evaluate their satisfaction with ten different aspects of the destination and their general satisfaction with the destination and its tourist offerings. The survey results indicate that tourists are generally satisfied with the destination Novigrad and its offerings as well as almost all aspects of the destination. The assessment of tourist satisfaction provides valuable information that can aid in planning the future development of the destination and determining the type of tourism product that will be created in the future. Gathering data through tourist satisfaction surveys can be beneficial for improving destination management planning.*

**Keywords:** *destination management, destination offer, tourists' satisfaction, tourism, destination Novigrad*

## **1. INTRODUCTION**

Tourism in Novigrad, as a popular tourist destination in Istria County, achieved record numbers of tourist arrivals and overnight stays in 2019. According to the 2019 official data from eVisitor, the number of tourist arrivals was 230,294, and the number of overnight stays was 1,331,889. The average length of stay of tourists was 5.8 days. The largest number of tourist arrivals and overnight stays was recorded in August and July. The highest number of arrivals and overnight stays were recorded from tourists coming from Slovenia (391,059 overnight stays and 66,231 arrivals), Germany (340,444 overnight stays and 47,989 arrivals), and Austria (226,044 overnight stays and 48,762 arrivals). However, this increase in the number of tourists has put greater pressure on the destination and natural resources. Due to the unprecedented consequences of the coronavirus on the tourism sector, sustainable tourism has become even more important. To aid decision-makers and destination managers, it is useful to monitor the satisfaction levels of both tourists and residents with different aspects of the destination. During the recovery period from the pandemic, it's crucial to analyze the changes in tourism trends, tourists' awareness, preferences, and expectations. By examining their satisfaction levels with different aspects of the destination, it will be easier to identify areas that require improvement. This research was conducted for three consecutive years, and in this paper the results from 2019 and 2017 were compared to identify improvement areas. The research aimed to determine the level of tourist satisfaction with destination aspects in Novigrad to help destination managers in further planning the development of tourist destinations.

## 2. LITERATURE REVIEW

An extensive number of authors in previous research focus on investigating satisfaction levels with different attributes of tourist destinations (Alegre and Garau, 2010; Danaher and Arweiler, 1996; Golob et al., 2014; Kozak, 2003; Kozak and Rimmington, 2000; Mušanović, 2020; Pawitra and Tan, 2003; Yoon and Uysal, 2005; Yu and Goulden, 2006). According to research conducted in Croatia, tourists expressed a high or very high level of satisfaction with the elements of the tourist offer in Istria County (TOMAS, 2019). The same results were verified in the studies conducted by various authors (Golob et al., 2014; Mušanović, 2020). Golob et al. (2014) examined the level of tourist satisfaction with attributes in the destination Umag, which is geographically located close to the destination Novigrad. Attributes were divided according to categories: space, climate, environment; population and employees; safety; organization of the destination; contents and overall tourist offer. It was found that tourists were highly satisfied with the offer, but there is always room for improvement despite the high level of satisfaction. Also, Mušanović (2020) found that tourists on the west coast of Istria in 2016 and 2017 expressed a very high or high degree of satisfaction with the elements of the tourist offer. It is important to note that tourist satisfaction factors differ between peak and off-season, and improving these attributes can enhance the destination's competitiveness (Soldić Frleta and Smolčić Jurdana, 2018). Magaš et al. (2018) emphasize the importance of analyzing a tourist destination from all aspects to create a competitive destination product that will meet tourists' needs. Moreover, the authors point out that it is necessary to monitor the satisfaction of not only tourists and guests, but also residents and employees in tourism, and the information obtained should be used in the decision-making process to increase the quality and competitiveness of the destination. Stakeholders' involvement in the development process contributes to the quality of the tourist experience and the level of satisfaction (Magaš et al., 2018). Destination managers must prioritize the quality of life of both tourists and locals, as tourism significantly impacts them (Fyall and Garrod, 2020). This is an essential aspect that shouldn't be ignored. Tourists' perspectives need to be an important part of the creation of strategies for managing destinations but should not be the sole focus (Pearce and Schänzel, 2013). In addition, the holistic approach is necessary for efficient destination management (Fyall and Garrod, 2020). Pizam (1978) claimed analyzing the various dimensions of tourist satisfaction could help managers identify the factors that influence tourists' overall satisfaction and dissatisfaction. Furthermore, it's crucial for decision-makers to ensure that positive aspects are maintained and negative aspects are improved (Alegre and Garau, 2010) which can ultimately impact tourists' satisfaction (Gnanapala, 2015). Monitoring tourist satisfaction is crucial for successful destination development planning (Wang, 2016). Moreover, tourist satisfaction leads to destination loyalty (Gnanapala, 2015) and quality, value and satisfaction directly influence behavioural intentions (Cronin et al., 2000). Bernini and Cagnone (2012) recommend monitoring tourist satisfaction over time and creating strategies to meet their changing needs, while considering different types of tourists.

## 3. METHODOLOGY

The research was conducted as part of the MITOMED+ project (Models of Integrated Tourism in the MEDiterranean Plus) for the first time in 2017, then in 2018 and 2019 in three different destinations (Novigrad, Poreč and Rabac) in Istria County. The aim was to evaluate tourists' satisfaction with various aspects of the destination and track changes over time across different tourist samples. The surveys were taken on the beaches in the destinations. This paper has analyzed results obtained in 2019 and conducted on the Karpinjan beach in Novigrad from June to August. Hired interviewers with previous experience conducted the survey. Surveys were offered in six languages: German, English, Italian, Croatian, Slovenian and Czech. A total of 304 surveys were collected.

The survey questions were based on the ETIS (European Tourism Indicators System) 2016 survey for visitors, with additional questions based on previous research (Alegre and Garau, 2010; Kozak, 2003; Yoon and Uysal, 2005; Soldić Frleta, 2018). The first part of the survey included questions about means of transportation to the destination and in the destination, the way tourists got information about the destination and the main reasons for choosing the destination. The second part was related to evaluating aspects of the destinations. A 5-point Likert scale was used to measure satisfaction with aspects in destination. Respondents rated their satisfaction on a scale of 1 (completely dissatisfied) to 5 (completely satisfied). The data were analyzed in the SPSS program (22), and Principal Component Analysis (PCA), t-test and One-way ANOVA were performed. The obtained results served as information to local managers for plans for tourism development and destination sustainability. Furthermore, the study also examined whether the satisfaction indicator can support local managers in destination management. It is crucial to carefully examine the results of evaluations in order to identify areas that require improvement. By analyzing the aspects that consistently receive lower scores, managers can take appropriate measures to enhance them and increase the level of satisfaction among tourists.

#### 4. RESULTS

The final sample of respondents showed that 60.20% of them were women. The majority of the respondents fell under the age category of 35 to 54 years old, with 50.66% of the total. As for the residence type, 79.21% of the respondents were tourists who preferred to stay in private accommodation, which accounted for 67.46% of the total. The findings have been summarized in Table 1.

	Share (%)	Number
Gender (n = 304)		
female	60.20	183
male	39.14	119
I don't want to answer	0.66	2
Age (n = 304)		
15 - 24	10.20	31
25 - 34	12.50	38
35 - 44	26.32	80
45 - 54	24.34	74
55 - 64	17.76	54
≥ 65	8.88	27
Type of residence (n = 303)		
resident	0.33	1
house/apartment owner	14.19	43
tourist	79.21	240
weekend visitor	1.32	4
excursion visitor	4.95	15
Type of accommodation (n = 295)		
hotel	10.85	32
private accommodation	67.46	199
campsites	2.03	6
private house/apartment	16.95	50
sea tourism harbor/marina	1.02	3
hostel	1.69	5

*Table 1: Characteristics of the sample  
(Source: Field research from July to September 2019)*



Respondents from 17 countries participated in the survey. The majority of respondents were from Slovenia (36.51%) and Germany (22.04%) followed by Italy (11.51%) and Austria (11.18%).

Country	Share (%)	Number
Slovenia	36.51	111
Germany	22.04	67
Italy	11.51	35
Austria	11.18	34
Croatia	6.58	20
Czech Republic	2.96	9
Netherlands	2.30	7
UK	1.64	5
Bosnia and Herzegovina	1.32	4
Other countries	3.95	12

*Table 2: Country of the origin of the respondents (n = 304)  
(Source: Field research from July to September 2019)*

The majority (94,41%) of respondents stated they arrived at the destination Novigrad by car (personal, friend's, or business), while other modes of transport were selected in small proportions. Regarding the mode of transport to the destination, the majority of the respondents indicated that they will go on foot, i.e. they will not use transport (69.31%); or that they will use a car (52.96%) or a bicycle (24.09%). It should be emphasized that on this question the respondents could choose more than one answer. Other possible options received a significantly low number of selections, with a small percentage. The majority of the respondents had already visited the specified destination (52.51%), while the rest most often received information about the destination from friends or relatives (33.44%) or via the Internet (26.76%). A smaller percentage of respondents obtained the information from tourist information centers (2.01%), tourist brochures/leaflets (3.34%) or social networks (2.68%). For the majority of respondents, the main purpose of visiting the destination Novigrad - 98.02%, refers to holiday, free time and recreation. Respondents were offered to choose multiple answers, and the next most common reason relates to visiting friends and family (4.62%), followed by shopping (2.31%), health and medical care (0.66%), business and professional trip (0.33%) or education and training (0.33%) or something else (1.32%). The primary reasons respondents chose to visit Novigrad were based on seven key features: beach (69.77%), nature and landscape (52.49%), accessibility (49.83%), peace and quiet (49.67%), clean sea (35.22%), hospitality of the host (28.57%) and accommodation quality (27.91%). The respondents were allowed to select multiple answers, and all other results are listed in the Table 3.

*Table following on the next page*

Features	Share (%)	Number
Beach	69.77	210
Nature and landscape	52.49	158
Accessibility	49.83	150
Peace and quiet	49.67	149
Clean sea	35.22	106
Hospitality of the host	28.57	86
Accommodation quality	27.91	84
Gastronomic offer	19.93	60
Entertainment and recreation	9.67	29
Sport	8.97	27
Cultural richness	6.31	19
Something else	5.98	18
Destination popularity	5.65	17
Special event	1.33	4

*Table 3: The main features that made the respondents choose to visit the destination Novigrad (n = 301)*

*(Source: Field research from July to September 2019)*

The majority of respondents, 79.27%, based on 275 collected answers, think that sufficient investment is being made in destination initiatives aimed at sustainability. According to a survey conducted in Novigrad in 2017, 73.71% of tourists believed that sufficient investment was made in sustainability initiatives at the destination (Bršćić et al., 2020). The results in 2019 were even higher and this suggests that tourists recognize the efforts made by destination managers to invest in sustainable activities. In the survey, participants were asked if they had traveled with someone who had a disability or limited mobility. Out of the 295 respondents, 5.76% answered yes. They further indicated whether they agreed with the statement “This destination takes into account the special needs of visitors with disabilities in all areas of activity – accommodation, public transport, tourist attractions.” and the average score was 3.25 (SD=0.71) based on 77 collected responses, which means that respondents neither agree nor disagree with the stated statement. In 2019, the average rating was slightly lower than in 2017, indicating a need for improvement. Destination managers can use this information to work towards raising the satisfaction level of tourists regarding the above issue. Respondents were satisfied with almost all aspects of the destination, except for cultural events (average=3.46, SD=1.09) and nightlife (average=3.40, SD=1.21), for which they were neutral. They were most satisfied with accommodation quality (average=4.29, SD=0.81), destination cleanliness (average=4.25, SD=0.80), and local cuisine (average=4.16, SD=0.85). Likewise, the respondents expressed overall satisfaction with the destination (average=4.20, SD=0.77) and the tourist offer of the destination (average=4.06, SD=0.79). Respondents' levels of satisfaction with other aspects are shown in the Table 4.

*Table following on the next page*

Aspects	Relative frequency (%)					Aggregate score (out of 5)	
	completely dissatisfied	dissatisfied	neutral	satisfied	completely satisfied	average	SD
Accommodation quality	1.05	2.44	8.71	42.16	45.64	4.29	0.81
Destination cleanliness	0.68	3.39	8.47	45.08	42.37	4.25	0.80
Overall satisfaction with the destination	0.68	4.07	5.08	54.58	35.59	4.20	0.77
Local cuisine	1.74	1.39	14.29	43.90	38.68	4.16	0.85
Overall satisfaction with the tourist offer	1.04	3.46	12.11	55.36	28.03	4.06	0.79
Information availability at the destination	1.45	5.45	20.36	43.64	27.64	3.86	1.02
Sports activities	0.73	2.20	26.37	42.86	25.27	3.82	1.03
Tourist attractions	0.37	5.17	20.30	53.87	18.82	3.81	0.91
Facilities for children or the elderly	1.12	2.25	24.72	40.07	27.34	3.77	1.18
Reasonable prices	5.57	9.41	28.57	41.46	14.98	3.51	1.04
Cultural events	1.84	6.62	32.72	43.01	12.13	3.46	1.09
Nightlife	2.61	7.84	29.10	41.79	13.43	3.40	1.21

*Table 4: Tourist satisfaction with destination aspects in Novigrad (Source: Field research from July to September 2019)*

An independent samples t-test was conducted to determine whether there were differences in satisfaction with aspects of the destination between men and women. Based on the obtained results, it is concluded that men and women do not statistically significantly differ in satisfaction with the mentioned aspects in the destination Novigrad. The research showed that the level of satisfaction with the aspect “information available at the destination” is higher in women ( $M = 3.98$ ,  $SD = 1.003$ ) than in men ( $M = 3.68$ ,  $SD = 1.031$ ), with the indicators of the t-test ( $273$ ) = - 2.403,  $p < 0.05$ ). A one-way analysis of variance (ANOVA) was performed to detect the relationship between the independent variables: age (six levels: 15 - 24, 25 - 34, 35 - 44, 45 - 54, 55 - 64,  $\geq 65$ ), type of residence (five options: resident, house/apartment owner, tourist, weekend visitor, excursion visitor) and type of accommodation (six options: hotel, private accommodation, campsites, private house/apartment, sea tourism harbor/marina, hostel) in the destination with dependent variables aspects in the destination. The level of significance of coefficients is at the level of 0.05. Based on the results, the independent variable age has a statistically significant influence on two aspects: nightlife ( $F(5,262) = 2.309$ ,  $p = 0.045$ ) and facilities for children or the elderly ( $F(5,261) = 2.810$ ,  $p = 0.017$ ). It was found that the variable type of accommodation in the destination has a statistically significant influence on the dependent variables - aspects local cuisine ( $F(5,274) = 2.271$ ,  $p = 0.048$ ) and overall satisfaction with the tourist offer of Novigrad ( $F(5,276) = 2.563$ ,  $p = 0.028$ ). Also, ANOVA showed that the type of residence at the destination has no significant influence on the dependent variables. Principal Component Analysis (PCA) was carried out with 12 variables, aspects in destination to extract new components from the final factorial design. Compared to the 2017 questionnaire, respondents in 2019 evaluated an additional aspect of the destination - the overall satisfaction with tourist offers. Three principal components ( $KMO=0.858$ , Bartlett's Test  $\chi^2$  sig. 0.000, satisfactory reliabilities, Cronbach alpha  $> 0.851$ ) with eigenvalues greater than 1, were extracted explaining 62.27% of the total variance. The first emerged component grouped the following attributes: sports activities, nightlife, facilities for the children or the elderly, tourist attractions and cultural events.

In the research of 2017, the results were slightly different because this component with the same attributes emerged as the second component and was described as destination offers noting that the Cronbach alpha reliability value was low at 0.526. (Bršćić et al., 2020). The strengths of correlation among variables in 2019 were stronger with Cronbach alpha reliability value at 0.796 and it can be described as a destination offers. The second component that emerged consisted of attributes of local cuisine and reasonable prices. These two variables were grouped in 2017 as part of the component described as destination quality (Bršćić et al., 2020). In this case, the emerged component can be described as destination value. The third component is made of attributes: accommodation quality, information available at the destination, destination cleanliness, overall satisfaction with the destination and overall satisfaction with the tourist offer. This component emerged as the first component in 2017, but with a note that the attribute overall satisfaction with the tourist offer was added to the questionnaire in 2019, and the attribute information available at the destination in 2017 could not be explained in the frame of extracted component and was excluded from the PCA (Bršćić et al., 2020). Still, this component can be described as destination quality.

Pattern Matrix <sup>a</sup>			
Value	Component		
	1	2	3
Sports activities	.838		
Nightlife	.813		
Facilities for the children or the elderly	.612		
Tourist attractions	.602		
Cultural events	.562		
Reasonable prices		.906	
Local cuisine		.903	
Accommodation quality			1.016
Information available at the destination			.606
Destination cleanliness			.567
Overall satisfaction with the destination			.524
Overall satisfaction with the tourist offers			.454
Factor statistics			
Eigenvalue	4.843	1.610	1.019
Variance %	40.356	13.420	8.492
Cumulative variance %	40.356	53.776	62.268
Cronbach alpha	0.796	0.751	0.838
Mean	3.649	3.846	4.149
Extraction Method: Principal Component Analysis.			
Rotation Method: Promax with Kaiser Normalization. <sup>a</sup>			
a. Rotation converged in 6 iterations.			

Table 5: Principal Component Analysis, tourist satisfaction with aspects in the destination in 2019

(Source: Field research from July to September 2019)

## 5. CONCLUSION

The following is a summary of survey results obtained from tourists who visited Novigrad. Most of the respondents arrived at the destination by car and planned to use it for transportation during their stay. The majority of them had visited Novigrad before and their main reasons for visiting were holidays, free time and recreation.

These results were similar to those obtained from a previous survey conducted in 2017 presented in the paper of the authors Bršćić et al. (2020) but with a different sample of respondents. The tourists were most attracted to beaches, nature and landscape, accessibility, peace and quiet, clean sea, the hospitality of the host and accommodation quality in the listed order. Similar results were obtained in 2017, only the order was as follows: beach, clean sea, nature, peace and quiet, accessibility, accommodation quality and hospitality of the host (Bršćić et al., 2020). Tourists were satisfied with almost all aspects of the destination, except for the aspects of nightlife and cultural events, for which they expressed a neutral opinion. This was different from the results obtained in the 2017 survey where the respondents were also satisfied with these two aspects, although they had the lowest average ratings (Bršćić et al., 2020). The aspects that received the highest ratings were accommodation quality, destination cleanliness, overall satisfaction with the destination, local cuisine and overall satisfaction with the tourist offers. Similar results were obtained in 2017 and presented by Bršćić et al. (2020), only the order of the evaluation aspects was as follows: destination cleanliness, accommodation quality, overall satisfaction with the destination and local cuisine. The overall satisfaction with the tourist offers aspect was added to the survey in 2019. In the same previous research conducted in 2017 in three different destinations (Poreč, Novigrad and Rabac) was confirmed by the PCA analysis that the components of destination quality and destination offer can be used as two key variables in the assessment of tourist satisfaction with the destination (Bršćić et al., 2018 .; Šugar et al., 2019 and Bršćić et al., 2020). The analysis conducted in this paper using PCA produced results that are similar with the research conducted in 2017. The two extracted components can be described as in past research as a destination quality and a destination offers. The third new extracted component can be described as a destination value. The information provided above could be beneficial for managers who intend to create questionnaires for future research. It is important to ensure that tourism is developed sustainably when planning for further tourism growth. The satisfaction survey can assist destination managers in effective planning for further development and in improving the quality of the tourist offer, to ultimately maintain the destination's competitiveness. As concluded by Šugar et al. (2019) measuring tourist satisfaction is important for destination branding. Furthermore, satisfaction survey at the destination level is essential for planning activities that align with the strategic goals of future development (Bršćić et al., 2018). For future research, it would be beneficial to research the same sample of tourists two years in a row to determine if the level of satisfaction with aspects of tourist destination Novigrad has changed.

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#### **LITERATURE:**

1. Alegre, J. and Garau, J. (2010). *Tourist satisfaction and dissatisfaction*. Annals of Tourism Research, 37(1), 52-73.
2. Bernini, C. and Cagnone, S. (2014). *Analysing tourist satisfaction at a mature and multi-product destination*. Current Issues in Tourism, 17(1), 1-20.
3. Bršćić, K., Šugar, T. and Ružić, D. (2018). *Tourists`perceptions of destinations – Empirical study of destination Poreč*. Interdisciplinary Management Research XIV, Opatija, 18-20 May 2018, ISSN 1847-0408, 97-111.
4. Bršćić, K., Šugar, T. amd Ružić, D. (2020). *Importance of measuring tourist satisfaction with a destination – Empirical study of destination Novigrad*. Interdisciplinary Management Research XVI, Opatija, 24-26 September 2020., ISSN 1847-0408, 220-234.

5. Cronin Jr, J. J., Brady, M. K. and Hult, G. T. M. (2000). *Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments*. Journal of Retailing, 76(2), 193-218.
6. Danaher, P. J. and Arweiler, N. (1996). *Customer satisfaction in the tourist industry: A case study of visitors to New Zealand*. Journal of Travel Research, 34(1), 89–93.
7. Fyall, A. and Garrod, B. (2020). *Destination management: a perspective article*. Tourism Review, Vol. 75 No. 1, pp. 165-169.
8. Gnanapala, W. A. (2015). *Tourists perception and satisfaction: Implications for destination management*. American Journal of Marketing Research, 1(1), 7-19.
9. Golob, M., Sirotić, T. and Golob, M. (2014). *Istraživanje kvalitete i razine zadovoljstva turista turističkom ponudom*. Zbornik veleučilišta u Rijeci, 2(1), 27-40.
10. Kozak, M. (2003). *Measuring tourist satisfaction with multiple destination attributes*. Tourism Analysis, 7, 229–269.
11. Kozak, M. and Rimmington, M. (2000). *Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination*. Journal of Travel Research, 38(3), 260–269.
12. Magaš, D., Vodeb, K. and Zadel, Z. (2018). *Menadžment turističke organizacije i destinacije*. Fakultet za menadžment u turizmu i ugostiteljstvu.
13. Marušić, Z., et al. (2020). *Stavovi i potrošnja turista u Hrvatskoj: TOMAS Hrvatska 2019*. [online]. Zagreb: Institut za turizam. Retrieved 08.01.2024 from: <https://urn.nsk.hr/urn:nbn:hr:263:134988>
14. Mušanović, J. (2020). *Modeliranje utjecaja ugleda turističke destinacije prisutnog u društvenim medijima na zadovoljstvo turista*. Zbornik Veleučilišta u Rijeci, 8(1), 77-101.
15. Pawitra, T. A. and Tan, K. C. (2003). *Tourist satisfaction in Singapore – A perspective from indonesian tourists*. Managing Service Quality, 13(5), 399–411.
16. Pearce, D. G. and Schänzel, H. A. (2013). *Destination management: The tourists' perspective*. Journal of Destination Marketing & Management, 2(3), 137-145.
17. Pizam, A., Neumann, Y. and Reichel, A. (1978). *Dimensions of tourist satisfaction with a destination area*. Annals of Tourism Research, 5(3), 314-322.
18. Soldić Frleta, D. (2018). *Shifts in Tourists' Attitudes Towards the Destination Offering*. Tourism and Hospitality Management, 24(2), p. 257-270.
20. Soldić Frleta, D. and Smolčić Jurdana, D. (2018). *Seasonal variation in urban tourist satisfaction*. Tourism Review, 73(3), 344-358. doi: 10.1108/TR-09-2017-0148.
21. Šugar, T., Brščić, K. and Ružić, D. (2019). *Tourist satisfaction as a tool in destination planning – Empirical study of destination Rabac*. Interdisciplinary Management Research XV, Opatija, 16-18 May 2019, ISSN 1847-0408, 308-326.
22. Wang, Y. (2016). *More important than ever: Measuring tourist satisfaction*. Queensland, Australia: Griffith Institute for Tourism, Griffith University.
23. Yoon, Y. and Uysal, M. (2005). *An examination of the effects of motivation and satisfaction on destination loyalty: A structural model*. Tourism Management, 26(1), 45–56.
24. Yu, L. and Goulden, M. (2006). *A comparative analysis of international tourists' satisfaction in Mongolia*. Tourism Management, 27(6), 1331-1342.

# IMPACT OF ELECTRIC VEHICLE MARKET GROWTH ON AUTOMOTIVE INDUSTRY TRANSFORMATION: TRENDS, POTENTIALS, AND CHALLENGES ANALYSIS

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## **ABSTRACT**

*This paper aims to explore the impact of the growth of the electric vehicle market on the transformation of the automotive industry. The study will analyze key trends, potentials, and challenges arising from the expansion of the electric vehicle market in a global context. Through the collection and analysis of pertinent statistical data, the study will investigate the dynamics of increased electric vehicle sales and their impact on traditional automotive manufacturers. Additionally, it will examine automotive companies' investments in electric technology and the infrastructure changes required to support this burgeoning sector. Emphasis will be placed on identifying the significant potentials offered by the growth of the electric vehicle market, such as emissions reduction, technological advancement, and shifts in consumer behavior. Challenges encompass issues related to charging infrastructure, economic sustainability, and adaptation for traditional manufacturers to meet evolving market demands. The study will conclude with an analysis of the current trends in the car market across different segments of the vehicle industry. It will also provide insights into future market projections. The linear regression model forecasts that the current trends are likely to continue into the future. SUV sales are expected to remain strong, while traditional segments like medium and small cars may continue to face challenges. This paper will explore the multifaceted changes driven by the growth of the electric vehicle market and its influence on the automotive industry. The study will highlight potential benefits like emissions reduction and technological advancements, while also addressing challenges such as charging infrastructure, economic sustainability, and adaptation for traditional manufacturers. The study will conclude with an analysis of the current trends in the car market across different segments and provide insights into future market projections.*

**Keywords:** *automotive industry, challenges, electric vehicles, potentials, trends*

## **1. INTRODUCTION**

This paper delves into the increasing impact of the electric vehicle market on the automotive industry transformation, exploring trends, potentials, and challenges on a global scale. The study utilizes statistical data to investigate the rise in electric vehicle sales and their effects on traditional automakers, including investments in electric technology and necessary infrastructure changes. This research investigates the evolving dynamics of the automotive industry, specifically focusing on the interplay between Electric Vehicles (EVs) and Internal Combustion Engine Vehicles (ICEVs). By analysing historical and predicted sales trends up to the year 2033, the study aims to uncover insights into the transformative shifts within the market. This exploration is prompted by the evident trend of growing EV acceptance and the corresponding decline in ICEV sales, signalling a potential critical juncture in the automotive landscape. The study aims to examine the dynamics of the automotive industry, with a specific focus on the sales trends of Sport Utility Vehicles (SUVs), small and medium cars, as well as luxury and large cars. Utilizing linear regression analysis, the research seeks to predict the future trajectory of these vehicle segments.

Factors such as market dynamics, evolving consumer preferences, and external influences, including economic conditions and emerging technologies, will be considered to provide a comprehensive understanding of the automotive market landscape.

## **2. RESEARCH METHODOLOGY**

The analysis involved using polynomial regression models to scrutinize historical automotive sales data, with a focus on electric vehicles (EVs) and internal combustion engine vehicles (ICEVs). The exceptionally high R-squared value from the polynomial regression model for total sales indicated precision. Initially, polynomial regression models provided a nuanced examination of historical EV sales trends. A combined sales chart facilitated a comparative assessment of trends between EVs and ICEVs. Extrapolation of polynomial fit models predicted future outcomes, offering insights into potential automotive market trajectories. For historical sales data, no specific statistical models were used; the approach relied on plotting graphs based on actual data. For future forecasting, a simple linear regression model was applied to each vehicle segment, assuming a linear relationship between time and sales. These statistical methods aimed to offer a data-driven understanding of automotive industry trends, underscoring the importance of leveraging such tools for informed decision-making and forecasting.

## **3. RESEARCH ON TRANSFORMATION OF THE AUTOMOTIVE INDUSTRY**

In the exploration of the transformation of the automotive industry, Chapter 3 unfolds with a theoretical examination, offering insights into the Electric Vehicle (EV) and Internal Combustion Engine Vehicle (ICEV) market through theoretical perspectives. Following this theoretical foundation, the chapter transitions to empirical research, beginning with an analysis of EV sales spanning from 2016 to 2023 and forecasting future trends. Subsequently, the focus shifts to a parallel examination of internal combustion engine vehicle sales within the same timeframe. A comparative assessment of EV and ICEV sales trends, both historical and future projections, is meticulously scrutinized. The chapter culminates with a detailed analysis of trends segmented by various categories within the automotive industry. This comprehensive approach aims to provide a multifaceted understanding of the ongoing transformation within the automotive sector.

### **3.1. Theoretical Perspectives on the Electric Vehicle (EV) and Internal Combustion Engine Vehicle (ICEV) Market**

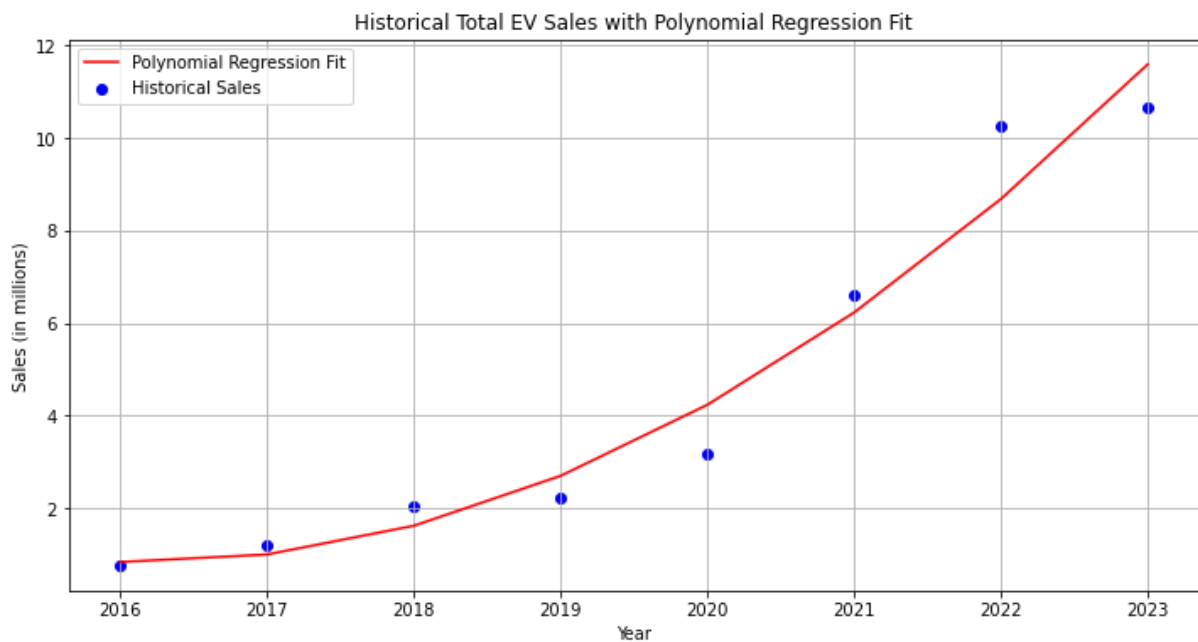
Electric vehicles (EVs) have the potential to contribute to the decarbonization of transportation and the emergence of low-carbon cities due to the benefits of energy-efficient technology and low pollution. Thus, it has become one of the development trends of interest in the automotive industry (Zhao et al., 2015; Amini et al., 2017). Battery electric vehicles (BEV), hybrid electric vehicles (HEV), plug-in hybrid electric vehicles (PHEV), and fuel cell electric vehicles (FCEV) are gaining popularity in the transportation sector. There is a growing consensus that these vehicles will replace conventional, internal combustion engine (ICEV) vehicles in the near future (Ntombela et al., 2023). The automotive market is a dynamic and complex ecosystem shaped by various factors influencing consumer preferences, technological advancements, and environmental considerations. One crucial paradigm shift within this market is the emergence of Electric Vehicles (EVs) alongside the traditional Internal Combustion Engine Vehicles (ICEVs). This division reflects a broader trend towards sustainable and eco-friendly transportation solutions. The segmentation between EVs and ICEVs delineates a critical distinction in the automotive landscape. EVs, powered by electricity stored in batteries, have gained momentum due to their lower environmental impact and reduced dependence on fossil fuels.



On the other hand, ICEVs, fuelled by traditional combustion engines, have been the mainstay of the automotive industry for decades. Consumer preferences play a pivotal role in shaping the dynamics of the automotive market. SUVs, with their versatile appeal and robust design, have witnessed a surge in popularity, contributing to shifting market trends. Meanwhile, medium and small cars have experienced a decline, possibly influenced by the rising demand for SUVs. Technological advancements, particularly in the electric vehicle segment, have accelerated the transformation of the automotive market. Innovations in battery technology, range improvement, and the development of efficient charging infrastructure have bolstered the growth of EVs. The ongoing integration of smart and autonomous features further adds complexity and diversity to the market. Numerous recent innovations have been achieved with the goal of enhancing electric vehicles and the parts that go into them, particularly in the areas of managing energy, battery, design and optimization, and autonomous driving (Abro et al, 2023).

### 3.2. Electric vehicle sales from 2016. to 2023. and future trends

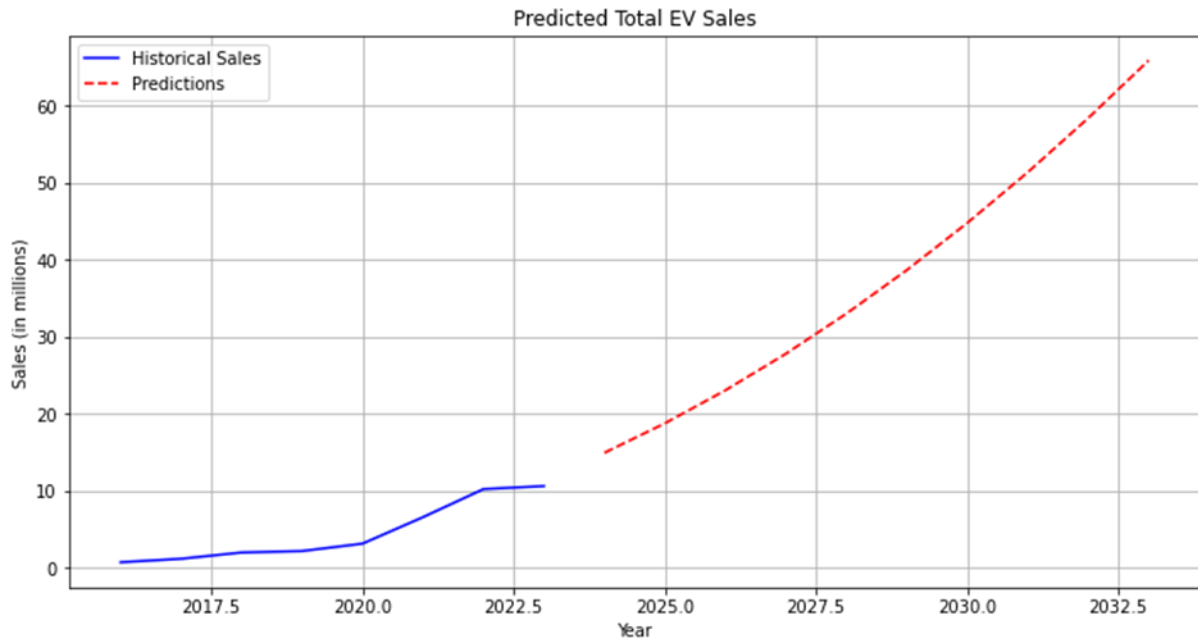
In this chapter, we will explore historical total electric vehicle sales from 2016 to 2023, indicating a trend of increasing sales over the years. The data for this research has been sourced from Statista Electric Vehicles Worldwide Statistics (2024).



*Graph 1: Historical Total EV Sales with Polynomial Regression Fit*

*(Source: Created by the author based on data from Statista Electric vehicles worldwide statistics (2024))*

Graph 1 shows the historical total electric vehicle sales from 2016 to 2023. The graph indicates that the sales have been increasing over the years, with a polynomial regression fit line predicting a continuous growth in sales. The blue dots labelled "Historical Sales" represent actual sales data from 2016 to 2020, while the red curve labelled "Polynomial Regression Fit" predicts the trend of increasing sales, extending into future years up to 2023. The graph provides a visual representation of the growth of the electric vehicle market and its impact on the automotive industry. Graph 2 shows the predicted total sales of electric vehicles for future years based on the polynomial regression model.



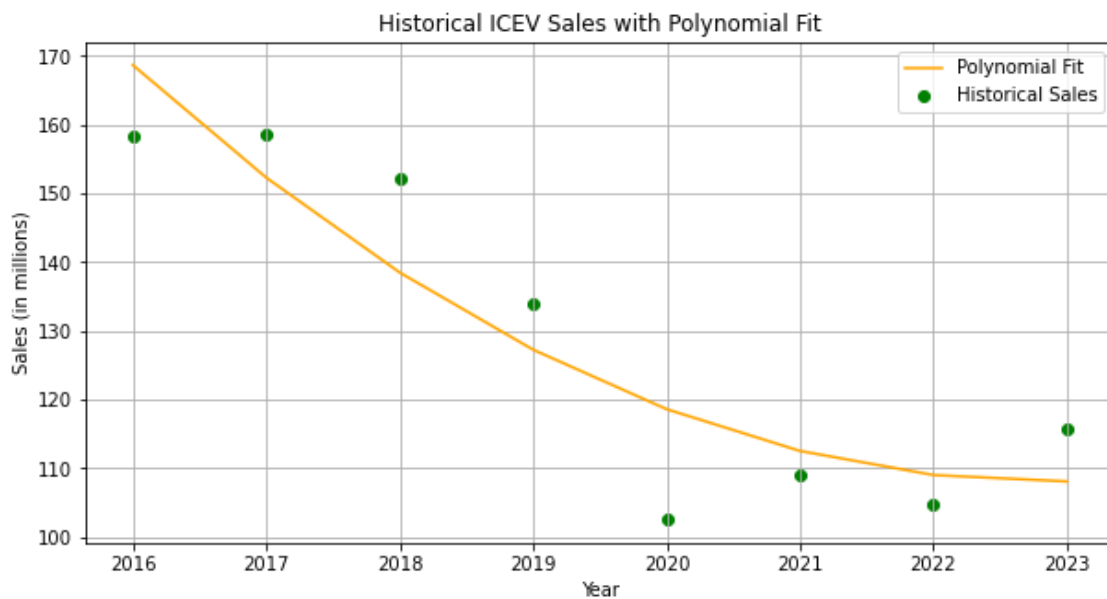
*Graph 2: Predicted total EV sales till 2033.*

*(Source: Created by the author based on data from Statista Electric vehicles worldwide statistics (2024))*

Graph 2 illustrates the forecasted aggregate sales of electric vehicles for future periods, derived from the polynomial regression model. The blue line, denoted as "Historical Sales," depicts a gradual uptick in sales from approximately 2017 until around 2025. Conversely, the dashed red line, labelled as "Predictions," forecasts a substantial surge in sales starting around 2025, projected to approach nearly 60 million by approximately 2032.

### 3.3. Internal combustion engine vehicle sales from 2016. to 2023. and future trends

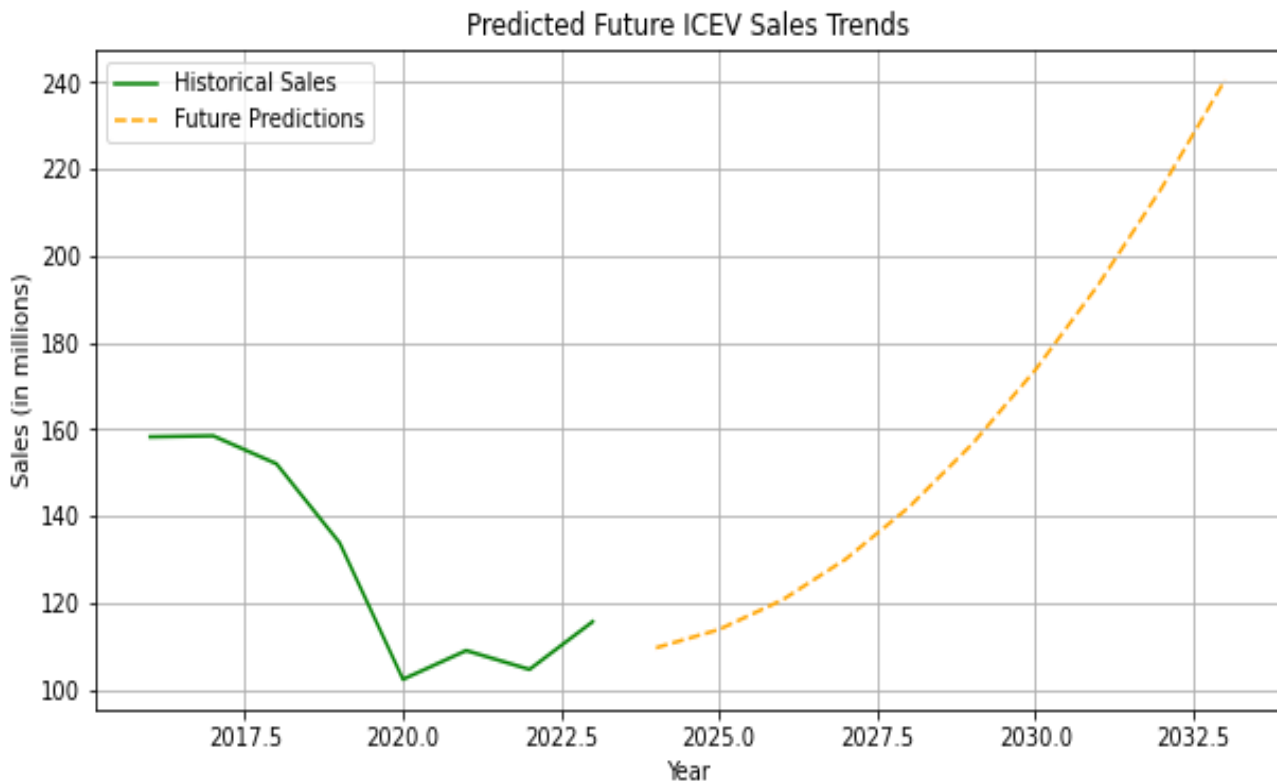
Utilizing polynomial regression model, it is examined the internal combustion engine vehicle (ICEV) sales data from 2016. to 2023. and produced the ensuing Graph 3.



*Graph 3: Historical ICEV sales with Polynomial Regression Fit*

*(Source: Created by the author based on data from Statista Electric vehicles worldwide statistics (2024))*

Graph 3 shows the predicted sales of internal combustion engine vehicles (ICEVs) from 2016 to 2023 based on the polynomial regression model. The graph indicates that the sales have been decreasing over the years, with a polynomial regression fit line predicting a continuous decline in sales. Graph 4 illustrates the predicted future trends in internal combustion engine vehicle (ICEV) sales from 2024 to 2033 based on the polynomial model.



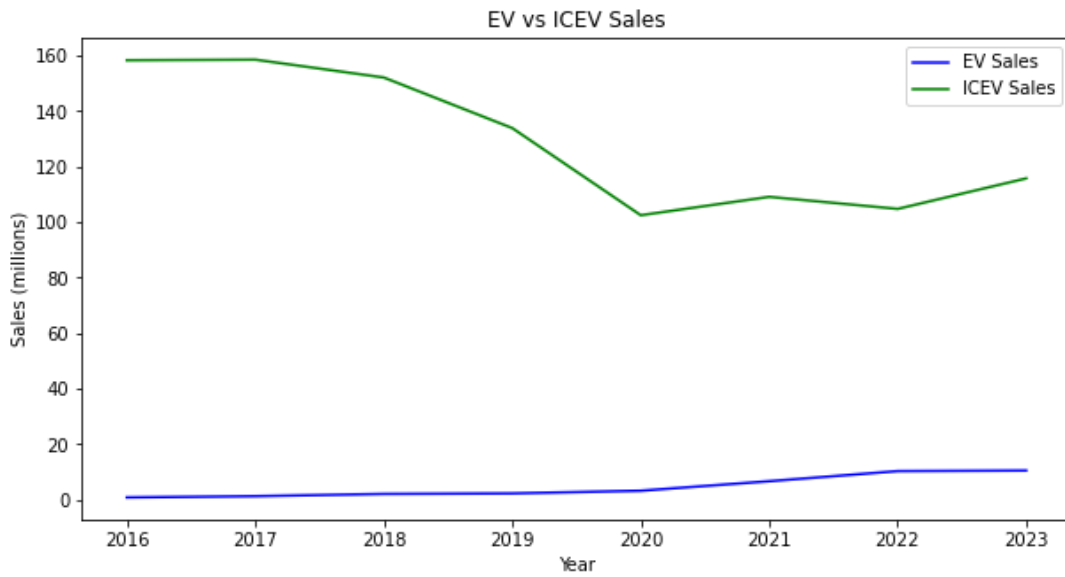
*Graph 4: Predicted future ICEV sale trends.*

*(Source: Created by the author based on data from Statista Electric vehicles worldwide statistics (2024))*

Graph 4 displays the predicted future sales trends of internal combustion engine vehicles (ICEVs) from 2024. to 2033. based on the polynomial regression model. The dashed yellow line labelled “Future Predictions” shows a steady upward trend, indicating an expectation of rising sales over the decade. The key things we can observe from these graphs are EV sales have been growing rapidly, while ICEV sales have been declining overall. The polynomial fits capture these opposing historical trends well. The predicted future trends show EV sales continuing to grow exponentially, potentially overtaking ICEV sales in the 2030s based on the polynomial extrapolation. ICEV sales are predicted to stabilize and recover slightly in the future after the initial decline, but likely at much lower volumes than their peak.

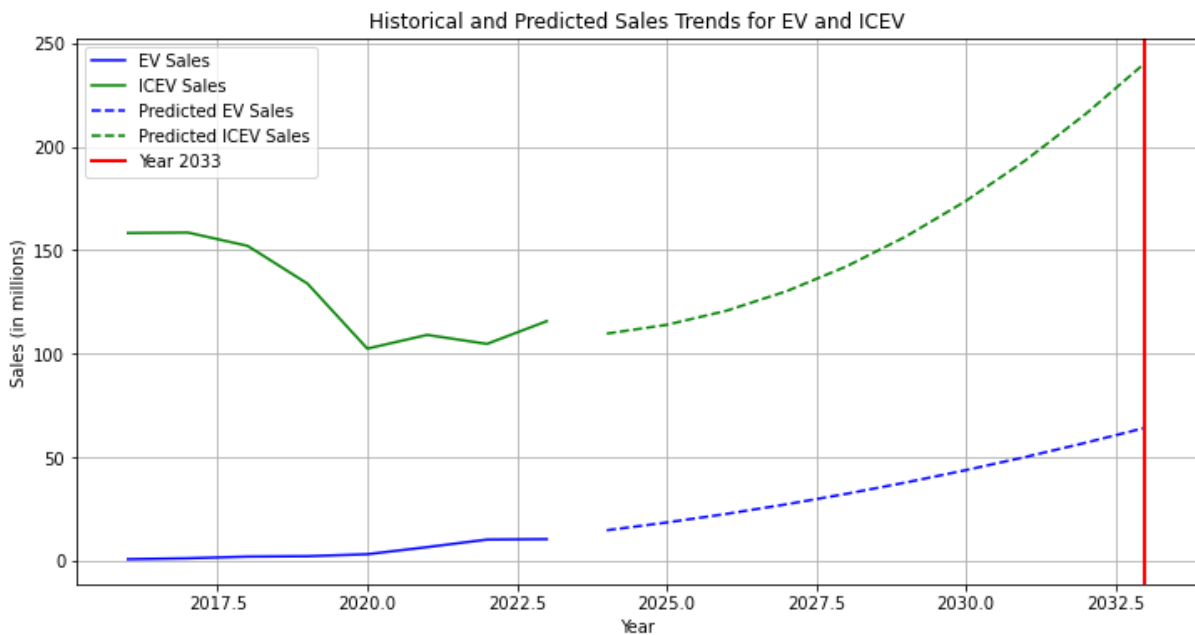
### **3.4. Comparison of EV and ICEV sales from 2016. to 2023. and future trends**

This section compares the sales of electric vehicles (EV) and internal combustion engine vehicles (ICEV) from 2016 to 2023 and predicts future trends. According to the International Energy Agency, global electric vehicle sales in 2019 reached 2.1 million vehicles, which was an increase of 6% from 2018 sales (IEA Electric car sales, 2024). The agency also predicts a significant increase in electric vehicle sales after 2025, while the sales of ICEVs have been decreasing over the years (IEA Electric car sales, 2024).



*Graph 5: Comparison of EV and ICEV sales from 2016. until 2023.  
(Source: Created by the author based on data from Statista Electric vehicles worldwide statistics (2024))*

It is shown on Graph 5 that while ICEV sales have grown steadily over the 2016 to 2023 period, EV sales have grown exponentially over the same shortened period. This trend over a shorter 7-year period illustrates the even more rapid adoption of electric vehicles, likely driven by improving technology and falling prices, making them competitive with traditional internal combustion engine vehicles. This rapid EV adoption over just 7 years underscores improving technology and declining prices, making EVs competitive with traditional internal combustion engine vehicles. Graph 6 illustrates the combined historical and predicted sales trends for electric vehicles (EVs) and internal combustion engine vehicles (ICEVs) up to the year 2033.



*Graph 6: Comparison of EV and ICEV sales from 2016. until 2023. and future trends until 2033.  
(Source: Created by the author based on data from Statista Electric vehicles worldwide statistics (2024))*

The trend suggests that EV sales will continue to grow rapidly, while ICEV sales will decline and then stabilize. By 2033, the prediction indicates that EV sales will be approaching the sales volume of ICEVs, suggesting a significant shift in the automotive market towards electric vehicles. It is possible to draw conclusions about the market for electric vehicles (EVs) and internal combustion engine vehicles (ICEVs) now and in the future, based on the preceding graphs.

Current Market (Up to 2023):

- **EV Sales:** The solid blue line indicates that sales of EVs have been increasing up to the year 2023. This suggests a growing market acceptance and possibly improvements in EV technology, infrastructure, and government incentives.
- **ICEV Sales:** The solid green line shows that ICEV sales have experienced some fluctuations but generally indicate a decline leading up to 2023. This could be due to a variety of factors including environmental concerns, regulatory pressures, and the rising popularity of EVs.

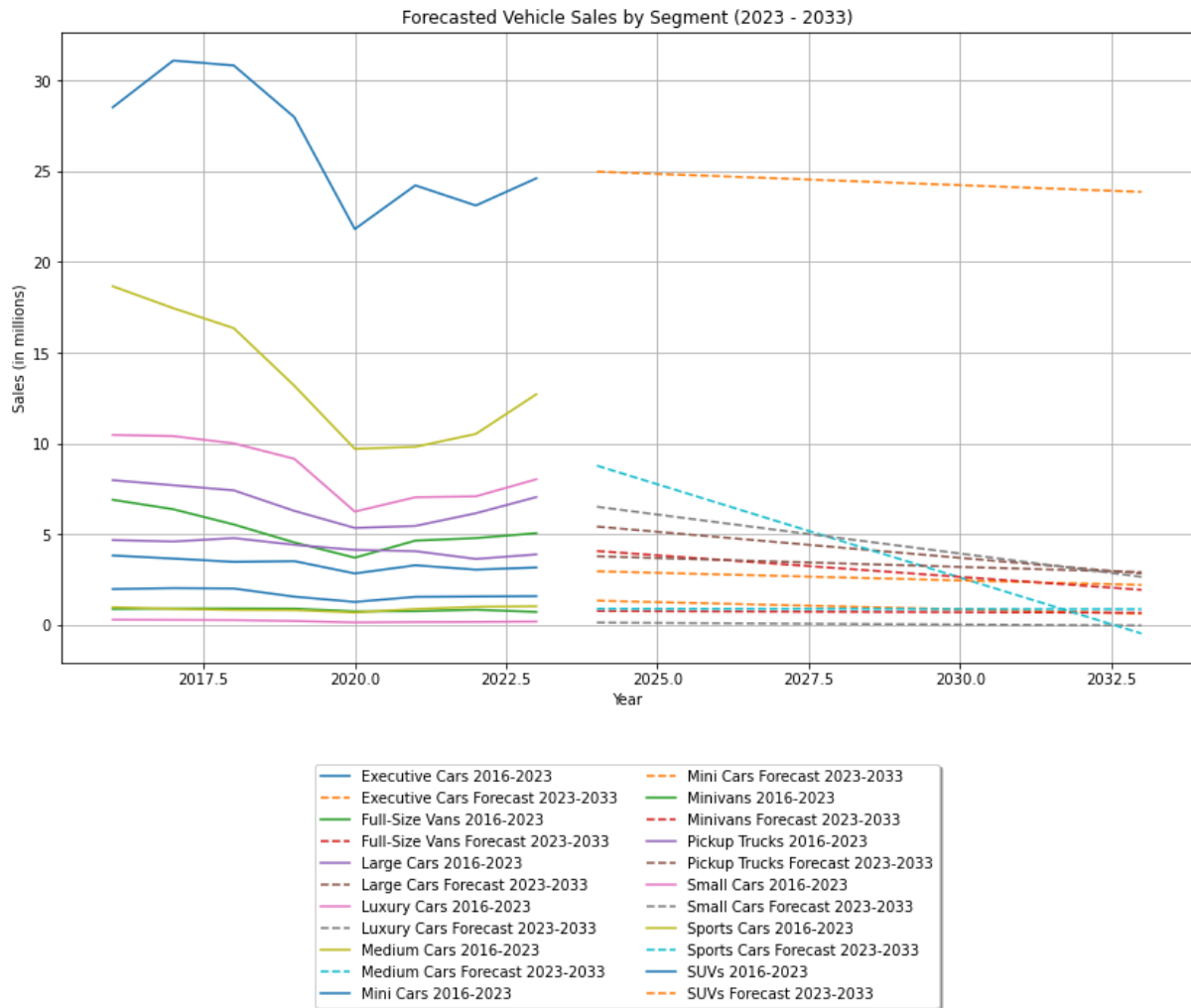
Future Market (2024 to 2033):

- **EV Sales:** The dashed blue line predicts a continued rapid growth in EV sales. By 2033, the trend suggests that EV sales will approach the sales volume of ICEVs. This could be driven by continued advancements in EV technology, better battery life, lower costs, and increased consumer awareness of environmental issues.
- **ICEV Sales:** The dashed green line forecasts a decline in ICEV sales followed by a stabilization. This indicates that while ICEVs may still have a significant market share, their growth is being overtaken by the rise of EVs. The stabilization might suggest a residual demand for ICEVs, possibly in markets where EV infrastructure is less developed or in vehicle segments where EVs are not yet competitive.
- **Overall Conclusion:** The automotive market is undergoing a significant shift towards electric vehicles. The current trend up to 2023 and the predictions up to 2033 suggest that EVs will continue to gain market share at the expense of ICEVs. Factors such as technological advancements, environmental policies, and changes in consumer preferences are likely to further accelerate this transition. However, ICEVs are expected to maintain a presence in the market, at least in the short to medium term, until EVs can fully meet the diverse needs of consumers globally. These conclusions are based on the data and trends presented in the graph. It's important to note that predictions are subject to change based on a multitude of factors, including technological breakthroughs, policy changes, and global economic conditions.

### **3.5. Trend analysis by segment of automotive industry**

The historical data on car sales across market segments have been analysed and forecasted the trend for each segment from 2023 until 2033. This will be accomplished by implementing a simple linear regression model for each individual segment, ultimately providing a comprehensive trend forecast chart for all segments from the year 2023.

*Graph following on the next page*



Graph 7: Historical sales data from 2016 to 2023 and forecasted trend chart for vehicle sales by segment for the years 2023 to 2033.

(Source: Created by the author based on data from Statista Passenger cars worldwide statistics (2024))

A simple linear regression model was used for each vehicle segment to predict future trends. Graph 7 reveals current market trends: SUVs exhibit robust growth, gaining popularity, while medium and small cars decline, possibly due to the shift towards SUVs. Luxury and large cars also witness reduced sales, suggesting a potential shift in consumer preferences towards practical or economical options. Regarding future market projections, the linear regression model anticipates the persistence of current trends. SUV sales are expected to remain robust, while medium and small car segments may encounter challenges. However, it's crucial to acknowledge that linear regression assumes unchanged past trends, which may not always align with market dynamics, technological advancements, and evolving consumer preferences.

#### 4. CONCLUSION

This paper analyses the impact of the electric vehicle market growth on the transformation of the automotive industry, exploring global trends, potentials, and challenges. Utilizing statistical data, the study scrutinizes the increase in electric vehicle sales and their effects on traditional automakers, encompassing investments in electric technology and necessary infrastructure changes. The potential benefits, such as emissions reduction and technological advancements, are highlighted, along with addressing challenges like charging infrastructure, economic

sustainability, and adaptation for traditional manufacturers. The paper aims to provide insights into the multifaceted changes driven by the growth of the electric vehicle market and its influence on the automotive industry. The study concludes that SUVs are thriving, resulting in declines for small and medium cars, as well as luxury and large cars, signalling a shift towards practical choices. While linear regression predicts sustained SUV dominance and challenges for smaller cars, it overlooks market dynamics and evolving preferences. Caution is required with the basic linear model, given the complexity of the industry, influenced by economic conditions, regulations, and emerging technologies. Unforeseen events like COVID-19 can disrupt predictions. In summary, the growth of the electric vehicle market significantly impacts the transformation of the automotive industry. The study emphasizes potential benefits, such as emissions reduction and technological advancements, while addressing challenges like charging infrastructure, economic sustainability, and adaptation for traditional manufacturers. Additionally, the study notes the thriving SUV market, leading to declines in other car segments, with caution advised regarding the limitations of linear regression in predicting industry dynamics influenced by various factors.

#### **LITERATURE:**

1. IEA Electric car sales (2024), 2016-2023 – Charts – Data & Statistics Available at <https://www.iea.org/data-and-statistics/charts/electric-car-sales-2016-2023> (Accessed on 14.1.2024)
2. Statista Electric vehicles worldwide statistics (2024) Available at: <https://www.statista.com/outlook/mmo/electric-vehicles/worldwide#unit-sales> (accessed on 11.1.2024.)
3. Statista Passenger cars worldwide statistics (2024) Available at: <https://www.statista.com/outlook/mmo/passenger-cars/worldwide> (accessed on 13.1.2024.)
4. Zhao, X., Doering, O. C., Tyner, W. E. (2015) “The economic competitiveness and emissions of battery electric vehicles in China,” *Applied Energy*, vol. 156, pp. 666–675,.
5. Amini, M. H., Moghaddam, M. P. and Karabasoglu, O. (2017) “Simultaneous allocation of electric vehicles’ parking lots and distributed renewable resources in smart power distribution networks,” *Sustainable Cities and Society*, vol. 28, pp. 332–342
6. Ntombela, M.; Musasa, K.; Moloi, K. (2023) A Comprehensive Review for Battery Electric Vehicles (BEV) Drive Circuits Technology, Operations, and Challenges. *World Electr. Veh. J.* 2023, 14, 195. Available at <https://doi.org/10.3390/wevj14070195> ( Accessed on 17.1.2024.)
7. Abro, G. E. M.; Zulkifli, S. A. B. M.; Kumar, K., El Ouanjli, N., Asirvadam, V.S., Mossa, M. A. (2023) Comprehensive Review of Recent Advancements in Battery Technology, Propulsion, Power Interfaces, and Vehicle Network Systems for Intelligent Autonomous and Connected Electric Vehicles. *Energies* 2023, 16, 2925. Available at <https://doi.org/10.3390/en16062925> (Accessed on 18.1.2024.)

# ACCESSIBLE TOURISM OPPORTUNITIES FOR PEOPLE WITH DISABILITIES FROM THE AREA OF THE REPUBLIC OF CROATIA

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## ABSTRACT

*When developing tourism offer, there is a particular focus on catering to individuals with disabilities, as they represent a potential market for tourism services. While implementing tourism services, this particular tourist segment faces constraints. Persons with disabilities have the potential to contribute to the growth of the tourism market for destinations and businesses. However, it is crucial to ensure that the tourism product is accessible and adapted to their needs. The significance of this market segment is evident in the variety of tourism options available and the level of competitiveness among destinations and accommodation establishments in the global tourism industry. Destination accessibility ensures equal opportunities for individuals with disabilities to engage in tourism, fostering dignity and promoting awareness and education regarding accessibility concerns. From the standpoint of individuals with disabilities as tourists, they foresee potential barriers and requirements that may arise while traveling. Specific obstacles can either result in the decision to give up on traveling or enhance the drive and contentment associated with the trip. This study aims to investigate the perspectives of individuals with disabilities regarding limitations encountered while traveling. The participants in the study are individuals with disabilities residing in the Republic of Croatia. The benefits of this study reside in offering valuable insights to tourism creators in addressing constraints and comprehending requirements, thereby ensuring equitable tourism opportunities for individuals with disabilities. Integrating individuals with disabilities into the tourism sector yields favorable social consequences and plays a crucial role in fostering economic expansion and advancing the tourism industry.*

**Keywords:** *individuals with disabilities, inclusive tourism, opportunities for travel, tourism offer*

## 1. INTRODUCTION

People with disabilities have an equal right to the opportunity for independent travel, accessible facilities, trained personnel, reliable information, and inclusive marketing (UNWTO, 2015). Accessibility is defined as the capability for individuals with disabilities to have access equal to others in terms of the physical environment, transportation, information and communication technologies, as well as all other content and services. (European Commission, 2010). Accessible tourism, also known as tourism without barriers, aims to ensure independence, equality, and dignity for individuals with disabilities or those requiring access. This is achieved by offering universally designed products, services, and environments (Luiza, 2010; Darcy, Dickson, 2009). The popularity of accessible tourism is on the rise, as more tourist destinations, hotels, and restaurants are promoting their openness to individuals with disabilities. This includes providing accessible architecture, elevators, ramps, and similar accommodations. Unfortunately, the perceived accessibility is frequently deceptive, and the matter of modifying hotels or tourist sites to suit the specific requirements of individuals with disabilities necessitates a change in attitudes towards disability and a more comprehensive comprehension



of the expectations of this particular tourist demographic. (Cockburn-Wooten, McIntosh, 2020). Tourist offer that is available to individuals with different types of disabilities are rarely tailored to their specific needs (Zaluska, Kwiatkowska-Ciotucha, Grześkowiak, 2022). It is essential to create specialized tourism offerings based on original and innovative tourism products, often involving the commercialization of natural, cultural-historical, and other resources (Šerić, Peronja, Marušić, 2020). The purpose of accessible tourism relates to tourism service providers who can meet the needs of a range of consumers requiring access, including persons with disabilities (McKercher, Darcy, 2018). The primary appeal of market segmentation lies in its ability to enable the tourism industry to gain a competitive advantage and efficiently allocate marketing resources to attract and retain profitable tourist segments. As a result, both researchers and practitioners are increasingly recognizing the strategic importance of offering customized goods and services to different segments in what is becoming an increasingly sophisticated travel market (Burnett, Baker, 2001). Darcy, Cameron and Pegg (2010) argue that a more contemporary and complex understanding of the accessible destination experience is necessary for the successful satisfaction of the accessible tourism market by tourism operators. Businesses have to remove institutional and environmental obstacles in society to implement accessible tourism. This includes ensuring accessibility in the physical environment, transportation, and other facilities and services (Buhalis, Darcy, Ambrose 2012; Poria, Reichel, Brandt, 2011). A study was conducted to determine the implementation of the concept of accessible tourism in museums (Wiastuti, Adiati, Lestari, 2018)). The categorization of accessible tourism into five criteria, namely information, transportation, common requirements, universal design, and accessibility, reveals that no museum has achieved full implementation of accessible tourism. Instead, they have only made partial progress in this regard. Although museums offer affordable ticket prices for individuals with disabilities, they lack comprehensive information and suitable visitor paths. Additionally, one museum does not have a ramp at the main entrance as an alternative to stairs. It is worth noting that the museum can be reached by various modes of transportation, but walking is not recommended (Wiastuti, Adiati, Lestari, 2018). The crucial role is also apparent in travel agencies, which frequently face criticism for their insufficiently trained personnel who lack the necessary knowledge and awareness to offer appropriate services for individuals with disabilities. Multiple factors contribute to this situation: a deficiency in comprehension among individuals concerning the requirements of this specific market segment, insufficiency in disseminating information, and a reluctance to cater to the demands of these tourists. Travel guides often overlook the accessibility of destinations and the convenience of transportation or the availability of appropriate facilities (Ozogul, Baran, 2016; Buhalis, Darcy, 2010). Cases have occurred in which travel agencies have stated that specific locations are accessible to people with disabilities. However, upon reaching these destinations, tourists have discovered that the guide's perception of the situation differs from their expectations (Buhalis, Darcy, 2010). Individuals with disabilities exhibit significant loyalty when they find a travel agency that meets their expectations. However, research suggests that this particular group of tourists relies less on travel agencies for booking trips, as they are more efficient in gathering the required information (Packer, Mckercher, Yau, 2007). The experiences of respondents who had disabilities revealed that the information available on the internet regarding the accessibility of a place is frequently imprecise or lacking in detail. This information tends to assume that accessibility only applies to individuals who use wheelchairs. Certain individuals opt to avoid exclusively visiting popular and easily accessible locations, thereby restricting the range of destinations they are able to explore (Darcy, McKercher, Schweinsberg, 2020; Cockburn-Wooten, McIntosh, 2020). Individuals with disabilities are required to dedicate a significant amount of time and exert additional effort in conducting thorough research on their intended travel destination in order to mitigate any potential negative experiences (Cockburn-Wooten,

McIntosh, 2020). Darcy (2010) conducted a study that revealed deficiencies in the documentation and marketing of information regarding accessible accommodation. The study presented findings that determined the relative significance of criteria for selecting rooms by developing a scale to measure hotel accessibility. The results suggested that while sociodemographic variables provided some insight into the selection criteria, the most significant explanation for the selection criteria and information preferences were dimensions of disability and the level of support needs. The recommended method for presenting information about accessible accommodation involved utilizing a blend of written descriptions and digital images (Darcy, 2010). The main purpose of the research conducted by Burnett and Baker (2001) was to explore various aspects of the relationship between disability and destination decision criteria. The results indicate that individuals with more severe disabilities prefer quieter destinations that provide them with independence and easier access, and it was shown that the decision criterion related to the environment was more valued as the severity of disability increased. If this tourist segment recognizes tourist destinations and hotels that meet their needs, they are more likely to travel more frequently and demonstrate loyalty to such destinations (Burnett, Baker, 2001). It is anticipated that tourism services for people with disabilities will no longer be considered a niche, and the offerings will further adapt to individuals with disabilities. Consequently, the number of tourist destinations capable of providing specialized tourism products is expected to increase (Ozogul, Baran, 2016). In certain locations, the tourist amenities encounter a limited capacity to completely adjust their services due to the insufficiency of infrastructure and accessibility to tourist attractions. Respondents have indicated their desire to modify and reduce the excursion route in order to avoid stairs and other obstacles (Marušić, 2020).

## **2. REVIEW of UP TO DATE RESEARCH RELATED TO TRAVEL CONSTRAINTS FOR PEOPLE WITH DISABILITIES**

It is necessary to gain a deeper comprehension of the underlying reasons behind travel among individuals with disabilities, as well as the obstacles they encounter during their journeys (Bauer, 2018). Individuals with disabilities are primarily motivated to travel due to the positive effects it has on their sense of freedom, self-confidence, and ability to overcome doubts about their capabilities (Bauer, 2018). Within the tourism industry, individuals with disabilities are present in all market segments. Within this group, tourists with disabilities constitute a higher percentage of individuals with restricted financial resources and a lower percentage of individuals who are seeking high-end, thrilling, and nature-oriented experiences (Buhalis, Darcy, 2010). Accessible tourism facilitates convenient access to tourist areas, amenities, and provisions, enabling individuals with disabilities to utilize them autonomously. The main objective of accessible tourism is to redirect attention from disability-specific features and instead prioritize the diverse societal requirements by adjusting the conditions to the geographical (social and physical) environment (Kołodziejczak, 2019). Accessibility is a vital requirement in the tourism industry, indicating that the product must be easily obtainable. Nevertheless, there are situations in which tourism organizations or destinations ensure the accessibility of certain areas, but this accessibility is compromised when other important areas remain inaccessible. Hotel rooms specifically modified for individuals with disabilities may be situated on the second floor without a dedicated elevator, presenting a difficulty for these individuals (Packer et al., 2007; Cockburn-Wooten, McIntosh, 2020). In order to understand the needs of tourists with special requirements, a tourism offering should first determine how these individuals are categorized within a specific group. Then, using segmentation, the offering should analyze their travel preferences and identify the most efficient communication channel to use (McKercher, Darcy, 2018).

Multiple studies on individuals with disabilities demonstrate a notable influence on their requirements for tourism and preferences for accommodations (Burnett, Baker, 2001; Poria, Reichel, Brandt, 2011). Categorizing individuals with disabilities based on the extent of their impairment is a valuable procedure, as those with more profound disabilities have distinct travel patterns and motivations. Accommodation facilities should prioritize the construction of ramps, allocation of special parking spaces, creation of rooms specifically designed for individuals with disabilities, and integration of advanced technology (Burnett, Baker, 2001). Key factors that influence accommodation choices include the proximity of the accommodation to public transportation that connects to the city center, the availability of additional services like Wi-Fi or breakfast, whether these services are included in the price, and the overall cost (Załoska, Kwiatkowska-Ciotucha, Grześkowiak, 2022). When considering accommodation options, recommendations for hotels in terms of providing services for persons with disabilities are oriented towards enhancing services for individuals with disabilities through staff education on various needs of persons with disabilities. (Poria, Reichel, Brandt, 2010). It is essential to provide education and training that increase awareness and facilitate opportunities for service providers to engage with individuals who have diverse accessibility needs. According to McKercher and Darcy (2018), Tippett and How (2020), and Tyler (2017), these efforts are crucial in improving service providers' capacity to meet the needs of individuals with different accessibility requirements. The primary barriers that individuals with disabilities encounter when traveling encompass financial, social, psychological, organizational, equipment, architectural barriers, along with inadequate staffing and limited tourism options (Kaganek et al., 2017). The study conducted by Kaganek et al. (2017) found that individuals who faced barriers due to financial reasons were characterized by a younger age, a mild physical disability, residing in urban areas with a population exceeding 10,000, and living with their family. Men with severe disabilities who were raised in families without a history of participating in tourism and currently live independently or in nursing homes exhibit evident social barriers. Furthermore, it is highlighted that individuals with higher levels of education among people with disabilities experience psychological challenges when engaging in tourism. On the other hand, individuals with severe disabilities residing in rural areas without family face more pronounced organizational barriers. Disabled individuals residing with their families emphasize the absence of tourism services tailored to individuals with disabilities as a hindrance to engaging in tourism activities. A significant limitation while traveling is the availability of consistent transportation options (Bascom, Christensen, 2017). The primary obstacle and source of dissatisfaction reported by respondents seeking to participate in tourism activities and visit destinations is the limited adaptability of transportation systems (Tippett, How, 2020). A large amount of research and literature strongly supports the idea of taking into account consumer expectations regarding accessibility, particularly given the wide range of expectations that vary based on individual needs (Ahmad, 2015). Based on Tyler's research (2017, p. 64), studies on museum accessibility show a notable difference in the reactions of people with visual impairments compared to those with mobility limitations. He concluded that certain individuals refrain from visiting particular destinations identified in the British study due to their discomfort, as museums are no longer easily reachable, and their capacity to derive pleasure from them is diminished. According to Cockburn-Wooten and McIntosh (2020) participants in a New Zealand study expressed a desire to visit a nearby beach that is about a 45-minute drive away. However, individuals without private transportation faced difficulties accessing the beach due to the absence of weekend bus services and infrequent public transportation, necessitating a visit at a different time. Załoska, Kwiatkowska-Ciotucha and Grześkowiak (2022) conducted international comparative research on the travel experiences of individuals with sensory impairments. The study, conducted in 2022, identified multiple obstacles to travel that impose significant limitations on individuals with sensory difficulties.

In the study mentioned, the factor that had the greatest positive impact on travel was the availability of customized offers from travel agencies specifically designed for this segment. This was followed by an increase in financial resources and access to information about attractions that are adapted for this segment. Furthermore, respondents emphasized that accessibility to facilities, experiencing local cuisine, and visiting museums and monuments are among the most significant aspects of travel. This research emphasizes the necessity of providing training to service personnel in order to effectively cater to the specific requirements of individuals with diverse disabilities. Researching individuals with disabilities and the barriers they encounter helps in creating tools that aid in mobility, such as mental maps, navigation systems, and supplements to the tourism information system that provide data on the accessibility of spaces, objects, and tourism services. Therefore, the availability of tourism services for individuals with disabilities is influenced by various factors, including the physical conditions of tourist facilities and paths, the information provided in tourist guides, brochures, and websites, the adaptation of facilities and the surrounding environment, and the quality of professional services (Kołodziejczak, 2019). Zajadacz (2014) observes that accessibility encompasses the aspects of location (the ability to reach a place), information (clarity, comprehensibility, and currency), social interactions (communicativeness), and the ease of obtaining the desired activity in terms of cost and level of difficulty. The findings also suggest that individuals who have visual impairments, blindness, and hearing impairments should be offered alternative methods of accessing information. Hence, it is recommended to incorporate details regarding the availability of amenities and services in all tourist publications. This is because contemporary tourism cannot operate efficiently in a competitive setting and cater to the varied and evolving demands of tourists without the utilization of advanced, integrated, worldwide information systems. Creators of tourism offerings exert influence over the positive image and reputation by ensuring favorable conditions. Nevertheless, rural areas and winery visits, which hold importance for individuals with disabilities, continue to lack sufficient representation in the realm of accessible tourism (Jević et al., 2019). Travel experiences that are positive for individuals with disabilities enhance their self-confidence and serve as a motivation for them to travel more frequently (Yau, McKercher, Packer, 2004).

### **3. METHODOLOGY**

Over the past twenty years, there has been a rise in the number of people with disabilities, making up around 10% of the world's population on average. Moreover, a notable factor that contributes to the changing characteristics of people with disabilities is the percentage of elderly individuals. With the growth of the elderly population, there is a corresponding rise in the proportion of individuals with disabilities. Currently, approximately 650 million individuals globally possess some type of disability. According to Darcy, Cameron, and Pegg (2010) there is an expectation that the number will experience a substantial increase in the future. The population of Croatia, as per the most recent census data from 2021, stands at 3,871,833. The 2022 Report on Persons with Disabilities in the Republic of Croatia states that there is a total of 624,019 individuals with disabilities. The study included individuals with disabilities who were categorized based on the degree of disability as outlined in the Regulation on Vocational Rehabilitation and Centers for Vocational Rehabilitation of Persons with Disabilities. The degrees of disability are defined as follows:

- Degree 0: There are no obstacles or difficulties in regards to work, or if there are any, they are insignificant and evaluated to be up to and including 4%.
- Degree 1: Minor impediments and challenges pertaining to work, evaluated between 5% and 24%.
- Degree 2: Work-related challenges and difficulties are assessed to be moderate or significant, ranging from 25% to 49%.

- Degree 3: Significantly challenging and serious obstacles and difficulties in regards to work, evaluated between 50% and 95%.
- Level 4: Successfully overcome work-related obstacles and challenges, achieving a rating of 96% to 100%.

As part of the research, participants were given the opportunity to select their specific disability from a range of options including visual impairment, hearing impairment, deafblindness, impairment of speech-voice, locomotor system impairment, impairment of the central nervous system, impairment of the peripheral nervous and muscular system, impairment of the spine and spinal injuries, impairment of other organs and organ systems, other physical impairments, intellectual impairments, mental impairments, autistic spectrum disorders, and multiple impairments. The survey was generated utilizing Google Forms and distributed through email to organizations representing individuals with disabilities in Croatia. The survey invitation was additionally distributed on the websites of the above associations. A grand total of 56 fully completed anonymous surveys were gathered. The study was carried out in Croatia between December 18, 2023, and January 18, 2024. In their study, Gassiot, Prats, and Coromina (2018) created a measurement instrument, or scale, to evaluate the challenges or limitations encountered by Spanish tourists with disabilities while traveling. The objective of the study was to pinpoint obstacles that hinder Spanish tourists with disabilities, specifically in terms of the accessibility of tourist destinations, services, and information. The measurement of variables in this study is consistent with Darcy's (2004) framework. Nevertheless, a drawback of the conducted research is the inadequate number of respondents.

#### **4. RESEARCH RESULTS AND DISCUSSION**

The analysis of the survey was conducted among people with disabilities. As a result of the conducted research, 56 respondents responded. Table 1 shows the characteristics of the research sample.

*Table following on the next page*

Sex	Male	Count	19	
		Column N %	33.9%	
	Female	Count	37	
		Column N %	66.1%	
Age	Column N %		100.0%	
		Mean	2.6	
Your last education degree	No primary school	Count	0	
		Column N %	0.0%	
		Primary school	Count	2
			Column N %	3.6%
		High school	Count	29
			Column N %	51.8%
		Bachelor degree	Count	4
			Column N %	7.1%
Master degree	Count	18		
	Column N %	32.1%		
What is your monthly household income	Doctorate degree	Count	3	
		Column N %	5.4%	
		Up to 500 Euro	Count	6
			Column N %	10.7%
		501-1000 Euro	Count	16
			Column N %	28.6%
		1001.1500 Euro	Count	13
			Column N %	23.2%
		1501-2000 Euro	Count	11
			Column N %	19.6%
2001-2500 Euro	Count	1		
	Column N %	1.8%		
Please state are you	2500 Euro and more	Count	3	
		Column N %	5.4%	
		I don't want to answer this question	Count	6
			Column N %	10.7%
		Employed	Count	28
			Column N %	50.0%
Level of disability (based on Guidelines for professional rehabilitation and centres for professional rehabilitation of disabled people)	Unemployed	Count	5	
		Column N %	8.9%	
	Retired	Count	17	
		Column N %	30.4%	
	Self-employed	Count	1	
		Column N %	1.8%	
	I receive financial aid for unemployed people with disabilities	Count	5	
		Column N %	8.9%	
	Degree 0	Count	5	
		Column N %	8.9%	
	Degree 1	Count	2	
		Column N %	3.6%	
	Degree 2	Count	2	
		Column N %	3.6%	
	Degree 3	Count	20	
		Column N %	35.7%	
Degree 4	Count	27		
	Column N %	48.2%		

*Table 1: Characteristics of the research sample (n=56)  
(Source: author calculation)*

The table shows that the survey was conducted with a participation rate of 66.1% males and 33.9% females. The study categorizes different age groups into specific generations: individuals between the ages of 18 and 30 are classified as Generation Y or Millennials, those aged 31 to 45 are classified as Generation X, individuals aged 46 to 65 are classified as Baby Boomers, and those aged 66 and above are classified as the Silent Generation. The study found that the Baby Boomers had the highest level of participation, making up 46.4% of the total. Generation X had the second highest participation rate at 26.8%, followed by Generation Y at 14.3%. The Silent Generation had the lowest participation rate, closely trailing behind at 12.5%. In terms of education, the majority of respondents, accounting for 51.8% of the participants, have successfully completed secondary education, which exceeds half of the total number of participants. In addition, 32.1% of the participants have obtained a graduate degree, while 7.1% have obtained an undergraduate degree. All participants have fulfilled the requirement of mandatory foundational education, with two participants having solely completed primary school, and 5.4% having successfully completed advanced studies beyond the undergraduate level. Approximately 50% of the participants are currently employed, whereas 30.4% have retired. 8.9% of the respondents are unemployed, while another 8.9% receive financial assistance specifically for unemployed individuals with disabilities. There is a single self-employed person in the sample. Regarding household income, the majority of respondents (28.6%) reported monthly incomes between €501 and €1000, while a notable portion of respondents (10.7%) opted not to reveal their income. 23.2% of respondents report monthly incomes ranging from €1001 to €1500, while 19.6% have household monthly incomes between €1501 and €2000. Out of the total number of individuals surveyed, only one person (1.8%) has a monthly household income ranging from €2001 to €2500. On the other hand, three individuals (5.4%) have reported monthly household incomes of €2500 or higher. The study findings indicate that Level 4, which represents the highest degree of disability, accounts for the largest proportion (48.2%) of individuals in the sample. This suggests a substantial number of individuals with more severe disabilities. Subsequently, Level 3 is indicated, accounting for 35.7% of the participants. Levels 0 (8.9%), 1 (3.6%), and 2 (3.6%) constitute a relatively smaller proportion of the overall population. Various types of disabilities are reported, with the most common being Locomotor system impairment (20.0%), followed by Visual impairment (14.5%) and Other physical impairments (16.4%). Some types of disabilities, such as mental impairments and Deafblindness, have zero representation in the sample. The table provides insights into the demographic, socio-economic, and disability-related characteristics of the surveyed population. The research was carried out in the Republic of Croatia, with the city of Split having the highest number of participants (15 respondents), followed by Zagreb with 13 respondents. Slavonski Brod had 4 respondents, while Makarska, Omiš, Osijek, Rijeka, and Trogir each had two respondents. Furthermore, there was one participant from each of the following locations: Bjelovar, Kaštela, Koprivnica, Požega, Samobor, Slatine, Solin, Srednji Lipovac, Sveti Ivan Zelina, Velika Gorica, Pula, and Čakovec. Over the past five years, half of the participants surveyed engaged in travel within Croatia as well as internationally, whereas 41.1% traveled exclusively within Croatia and 7.1% exclusively abroad. One individual was the sole person who declared that they did not engage in any form of travel. When queried about their frequency of travel in Croatia, 53.6% of participants reported visiting multiple times per year, 23.2% reported visiting once per year, and 8.9% reported visiting once per month. The majority of international travelers, comprising 30.4% of respondents, travel once a year. This is followed by 21.4% of respondents who travel multiple times a year, and 19.6% who travel once every five years. Additionally, 12.5% of respondents travel once every three years. The remaining options, such as once a month, never, once every two years as circumstances allow, and never in the past 15 years, each had only one participant. An examination of travel during the recent time period reveals a wide range of activities among the participants.

50% of the respondents reported having traveled within the past 3 months, while 19.6% traveled within the past 6 months. Minor proportions encompass extended durations of travel: 12.5% within the past year, 3.6% within the past two years, and 7.1% within the past five years. In addition, 7.1% of the participants have abstained from traveling for a period exceeding five years. The data presented here demonstrate the wide range of travel experiences among the individuals who participated in the survey. The examination of the answers to the query regarding the most recent journey and the individuals who accompanied them demonstrates the wide range of experiences among the participants. The majority of respondents typically traveled with their family (35.7%), while a significant portion traveled with their spouse or partner (26.8%). Lesser proportions consist of individuals who travel independently (12.5%), in the company of friends (10.7%), or with the assistance of an aide or companion (3.6%). Respondents also reported the presence of different companions, such as their extended family, support providers and their families, business colleagues, and participation in team-building activities and associations for the blind. Each of these companions accounted for 1.8% of the total. Analysis of the main motivations for travel among respondents reveals a diversity of reasons driving travel. The most common motivation is the desire to explore new cultures and customs, with 25% of respondents indicating this as their primary motivation. Other significant motivations include staying outside their permanent place of residence (10.7%), relaxation (17.9%), spending time with family and friends (17.9%), exploring new unknown destinations (14.3%), and business meetings and work-related travel (10.7%). Health reasons represent a smaller percentage (1.8%), while one person (1.8%) did not specify a motivation for traveling. An analysis of the methods of obtaining information about destinations and travel among respondents reveals that the majority of respondents (64.3%) use the internet as their primary source of information, reading and following available information about the destination. Other significant forms of information include visiting websites related to specific attractions and activities (17.9%), sending inquiries to travel agencies (5.4%), participating in organized trips with associations or where they are led (5.4%), and sending inquiries to specific attractions and service providers in tourism (3.6%). A smaller percentage of respondents (1.8%) stated that they do not gather information before traveling and use brochures and magazines. The method of planning travel among respondents indicates a diversity of approaches to organizing trips. The majority of respondents (62.5%) prefer independently planning their trips, while a smaller percentage (5.4%) uses the services of a travel agency. A significant number of respondents (26.8%) combine these two options, sometimes using the services of travel agencies and sometimes planning trips independently. There are also individuals who plan trips with caregivers and family (3.6%). Only one respondent (1.8%) stated that they do not plan trips. By investigating the preferred mode of transportation during travel, survey results show that the majority of respondents (66.1%) prefer a personal car or van as their main means of transportation. The airplane is the second most commonly chosen mode of transportation, with 12.5% of respondents preferring it. The bus shares the same percentage of preference (12.5%). A smaller number of respondents prefer the train (5.4%), while the option of more diverse means of transportation is less represented, each with a percentage of 1.8%. These data indicate the dominant role of personal cars or vans in transportation preferences during travel, while airplanes, buses, and trains are also significant forms of transportation. The choice of preferred accommodation during travel reveals that 44.6% of respondents choose hotel accommodation. On the other hand, private accommodation, including apartments, also occupies the same share of 44.6%. A smaller number of respondents prefer holiday homes (5.4%), hostels (3.6%), while camping is less represented (1.8%). These data indicate diverse preferences related to accommodation, with hotels and private accommodation being extremely popular among surveyed individuals, while other options are less frequently chosen.



The choice of preferred activities during travel shows that the majority of respondents (60.7%) engage in independent exploration of the destination. Leisure and wellness are also significant, with 10.7% of respondents supporting these activities. Organized trips and tours with guides are also significant, with a percentage of 26.8%. A smaller number of respondents (1.8%) prefer spending time with family as their main activity during travel.

	N	Range	Sum	Mean	Std. Deviation
Accessibility and availability of the destination	56	4.0	238.0	4.250	.9582
The accessibility of tourist attractions	56	4.0	224.0	4.000	.9723
Accessibility and adaptation of accommodation facilities	56	4.0	231.0	4.125	1.0798
Accessibility and adaptation of transportation vehicles	56	4.0	221.0	3.946	1.1349
Accessibility and adaptation of additional tourist content (excursions, activities, and attractions)	56	4.0	214.0	3.821	1.1772
Accessibility and availability of information about the destination	56	3.0	238.0	4.250	.7447
Valid N	56				

*Table 2: Different accessibility features important when choosing destination  
(Source: author calculation)*

Table two illustrates the importance of accessibility when choosing a destination for individual elements: destination accessibility and availability, Accessibility of tourist attractions, Adaptation of accommodation facilities, Adaptation of additional tourist content, and Accessibility of destination information, according to the Likert scale from 1 to 5, where 1 indicates that it is not important to them, and 5 indicates that it is extremely important. Destination availability and information received the highest average score of 4.25, indicating the most important features that respondents value, while the moderate importance when choosing a tourist destination, with the lowest average score of 3.82, is the adaptation of additional tourist content.

	N	Range	Sum	Mean	Std. Deviation
The information available through the internet and other communication channels is often not clear or accessible	56	4.0	181.0	3.232	1.2209
Inadaptability of additional tourist activities such as excursions and events	56	4.0	217.0	3.875	1.0102
Insufficient adaptability of public transportation for people with disabilities	56	4.0	217.0	3.875	1.0798
Resources such as public restrooms for people with disabilities, accessible restaurants, and cafes are not well-represented in the destination	56	4.0	203.0	3.625	1.0542
In the case of accommodation facilities, the facilities are generally not adapted for people with disabilities	56	4.0	208.0	3.714	1.0218
In most cases, attractions at the destination are not accessible	56	4.0	196.0	3.500	1.0090
Valid N (listwise)	56				

*Table 3: Different accessibility features in the destination  
(Source: author calculation)*

Based on Table 3, participants assessed the primary factors for selecting a destination based on its suitability for their particular disability. The statement that received the highest average rating is the assertion that public transportation is inadequately tailored to accommodate individuals with disabilities, with an average rating of 3.88. The participants also assessed the supplementary tourist amenities, such as excursions and activities, as inadequately tailored, receiving an average rating of 3.88. The statement that receives the lowest average rating, suggesting the highest level of dissatisfaction, pertains to the lack of understandability and accessibility of information found on the internet and other platforms, with an average rating of 3.232. Participants provided an average rating for accommodation facilities, indicating that most of the facilities are not adequately tailored for individuals with disabilities (average rating: 3.714). The average ratings indicate a lack of consensus regarding the claim that attractions at the destination are frequently unsuitable for individuals with disabilities, and that resources such as accessible public toilets, restaurants, and cafes are inadequately available in the visited destinations.

	N	Range	Sum	Mean	Std. Deviation
Poor awareness of travel possibilities	56	4.0	199.0	3.554	1.1587
Lack of suitable accommodation	56	4.0	212.0	3.786	1.0039
Insufficient information about the accessibility of the destination	56	4.0	216.0	3.857	.9230
I don't have anyone to go with	56	4.0	180.0	3.214	1.3976
Too much time is spent on planning the trip	56	4.0	156.0	2.786	1.1235
The cost of travel is high	56	4.0	214.0	3.821	1.0288
Fear of the unknown	56	4.0	183.0	3.268	1.1199
Valid N	56				

*Table 4: Barriers and obstacles connected with planning travel  
(Source: author calculation)*

When examining the barriers to travel planning and departure, it is noteworthy that respondents have a low level of concern about the unfamiliar, with an average rating of 3.27. Conversely, the statement that they have insufficient information about the accessibility of the destination receives the highest average rating of 3.86. Upon evaluating each of the previous statements, it can be concluded that the respondents' perceptions are roughly equivalent. Respondents in the open-ended question cited destinations that exemplify accessibility and adaptation. Switzerland, Sweden, Iran, Brussels, Izola, Rome, Istanbul, Mexico, Madrid, Međugorje, Ljubljana, and London were mentioned internationally. In Croatia, respondents cited Zagreb, the Makarska Riviera, Varaždin, the Kvarner Riviera, Istria, Crikvenica, Novalja, and the islands of Brač and Vis, which are notable for their well-suited apartments. Nevertheless, three participants indicated that Croatia lacks adequately tailored destinations, without specifying any specific location. The previous inquiry requested valuable suggestions for enhancing the present state of travel accessibility for individuals with disabilities. The predominant recommendations encompassed viewpoints on pricing, advocating for more substantial concessions for individuals with disabilities, more economical pricing, the necessity for enhanced dissemination of information regarding the adaptability of specific venues, heightened accessibility of transportation, and the proposal for travel agencies to provide specialized brochures/programs containing information about destinations that offer adapted accommodations and other amenities for individuals with disabilities.

## 5. CONCLUSION

Tourism is a pleasant activity, but it can present limitations, frustration, and dissatisfaction for individuals with disabilities. This niche form of tourism has been somewhat overlooked, but it is progressively attracting the interest of researchers and stakeholders engaged in developing the tourism offer of destinations. If the tourism industry puts in enough effort to promote destinations and accommodations that meet the needs of tourists and are positioned correctly, this form of tourism can be a lucrative segment. The absence of products and services tailored to individuals with disabilities presents a potential advantage for specific travel agencies to thrive in the tourism industry. Accessibility for individuals with disabilities encompasses the capacity to utilize the physical environment, transportation, technology, communication and information systems, as well as other amenities and services, on an equitable basis. The advancement of these segments plays a crucial role in enhancing and maximizing the use of accessible tourism. Research has indicated that the initial emphasis was placed on matters pertaining to demand, tourism offerings, and travel organization, subsequently followed by an examination of leisure activities. The respondents identified a significant barrier in the lack of information regarding the accessibility of destinations, and accommodations were not adequately adapted according to the respondents' assessments. Additionally, the participants highlighted the need for more substantial discounts for people with disabilities and called for greater availability of accessible transportation. Simultaneously, tourist agencies should provide specific brochures containing information about adapted accommodations and facilities. This research underscores the necessity for enhancing the accessibility, information provision, and adaptation of destinations to facilitate a better travel experience for individuals with disabilities.

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## LITERATURE:

1. Ahmad, M. (2015). Independent-mobility rights and the state of public transport accessibility for disabled people: Evidence from southern Punjab in Pakistan. *Administration & Society*, 47(2), 197-213.
2. Bascom, G. W., & Christensen, K. M. (2017). The impacts of limited transportation access on persons with disabilities' social participation. *Journal of Transport & Health*, 7, 227-234.
3. Bauer, I. (2018). When travel is a challenge: Travel medicine and the 'dis-abled' traveller, *Travel Medicine and Infectious Disease*, 22, 66-72
4. Buhalis, D., & Darcy, S. (Eds.). (2010). *Accessible tourism: Concepts and issues*.
5. Buhalis, D., Darcy, S., & Ambrose, I. (Eds.). (2012). *Best practice in accessible tourism: Inclusion, disability, ageing population and tourism* (Vol. 53). Channel View Publications.
6. Burnett, J. J., & Baker, H. B. (2001). Assessing the travel-related behaviors of the mobility-disabled consumer. *Journal of Travel Research*, 40(1), 4-11.
7. Cockburn-Wootten, C., & McIntosh, A. (2020). Improving the accessibility of the tourism industry in New Zealand. *Sustainability*, 12(24), 10478.
8. Darcy, S. (2010). Inherent complexity: Disability, accessible tourism and accommodation information preferences. *Tourism Management*, 31(6), 816-826.
9. Darcy, S. A. (2004). *Disabling Journeys: the social relations of tourism for people with impairments in Australia-an analysis of government tourism authorities and accommodation sector practice and discourses*. Doctoral dissertation.

10. Darcy, S., & Dickson, T. J. (2009). A whole-of-life approach to tourism: The case for accessible tourism experiences. *Journal of Hospitality and Tourism Management*, 16(1), 32-44.
11. Darcy, S., Cameron, B., & Pegg, S. (2010). Accessible tourism and sustainability: a discussion and case study. *Journal of Sustainable Tourism*, 18(4), 515-537.
12. Darcy, S., McKercher, B., & Schweinsberg, S. (2020). From tourism and disability to accessible tourism: A perspective article. *Tourism Review*, 75(1), 140-144.
13. European Disability Strategy 2010-2020: A Renewed Commitment to a Barrier Free Europe, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM%3A2010%3A0636%3AFIN%3AEN%3> (5.01.2024)
14. Gassiot, A., Prats, L., & Coromina, L. (2018). Tourism constraints for Spanish tourists with disabilities: Scale development and validation. *Documents d'anàlisi geogràfica*, 64(1), 49-71.
15. Jević, J., Čerović, S., Jević, G., & Čavlin, M. (2019). Accessible tourism as the factor in creating the image of Serbian wineries as a segment of agritourism supply. *Економика пољопривреде*, 66(4), 1157-1171.
16. Kaganek, K., Ambroży, T., Mucha, D., Jurczak, A., Bornikowska, A., Ostrowski, A., Janiszewska, R., Mucha, T. (2017): Barriers to Participation in Tourism in the Disabled. *Polish Journal of Sport and Tourism*. 24. 10.1515/pjst-2017-0013
17. Kaganek, K., Ambroży, T., Mucha, D., Jurczak, A., Bornikowska, A., Ostrowski, A., & Mucha, T. (2017). Barriers to Participation in Tourism in the Disabled. *Polish Journal of Sport and Tourism*, 24(2), 121-129.
18. Kołodziejczak, A. (2019). Information as a Factor of the Development of Accessible Tourism for People with Disabilities. *Quaestiones Geographicae*, 38(2), 67-73.
19. Luiza, S. M. (2010). Accessible tourism—the ignored opportunity. *Annals of Faculty of Economics*, 1(2), 1154-1157.
20. Marušić, F. (2020). Usluge u turizmu za osobe s invaliditetom na području grada Splita. *Zbornik radova Međunarodna konferencija Kultura različitosti: Podzastupljene i ranjive skupine u muzejskom okruženju*, Tiflološki muzej, ISBN 978-953-7287-41-2, p.191-201
21. McKercher, B., & Darcy, S. (2018). Re-conceptualizing barriers to travel by people with disabilities. *Tourism management perspectives*, 26, 59-66.
22. Ozogul, G. i Baran, G.G. (2016): Accessible tourism: the golden key in the future for the specialized travel agencies, *Journal of Tourism Futures*, Vol. 2 No. 1, 79-87
23. Packer, T. L., Packer, T. L., Mckercher, B., & Yau, M. K. (2007). Understanding the complex interplay between tourism, disability and environmental contexts. *Disability and rehabilitation*, 29(4), 281-292.
24. Poria, Y., Reichel, A. i Brandt, Y. (2011): Dimensions of hotel experience of people with disabilities: An exploratory study, *International Journal of Contemporary Hospitality Management*, 23, 571-591
25. Šerić, N., Peronja, I. i Marušić, F. (2020). *Upravljanje razvojem specijaliziranog turističkog proizvoda*. Split: Redak
26. Tippett, J., & How, F. (2020). Where to lean the ladder of participation: a normative heuristic for effective coproduction processes. *Town Planning Review*, 91(2), 109-132.
27. Tyler, N. (2017). Safety accessibility and sustainability: The importance of micro-scale outcomes to an equitable design of transport systems. *IATSS research*, 41(2), 57-65.
28. Wiastuti, R. D., Adiati, M. P., & Lestari, N. S. (2018). Implementation of accessible tourism concept at museums in Jakarta. In *IOP conference series: Earth and environmental science* (Vol. 126, p. 012061). IOP Publishing.

29. World Tourism Organization and Fundacion ACS (2015): Manual on Accessible Tourism for All – Public-Private Partnerships and Good Practices, UNWTO, Madrid, <https://www.e-unwto.org/doi/pdf/10.18111/9789284416585> (12.09.2020.)
30. Yau, M., Mckercher, B., Packer, T. (2004): Traveling with a disability: More than an Access Issue. *Annals of Tourism Research*, 31, 946-960
31. Zajadacz, A. (2014). Dostępność przestrzeni turystycznej w ujęciu geograficznym. *Turyzm*, 24(1), 49-55.
32. Załuska, U., Kwiatkowska-Ciotucha, D., & Grześkowiak, A. (2022). Travelling from perspective of persons with disability: results of an international survey. *International Journal of Environmental Research and Public Health*, 19(17), 10575.

## STATE OWNERSHIP AND FIRM PERFORMANCE – EVIDENCE FROM LARGE CROATIAN ENTERPRISES

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### **ABSTRACT**

*Despite numerous privatization programs and efforts to reduce state ownership in enterprises, state-owned enterprises continue to play a significant role in various economies and contribute substantially to their gross national products. In different countries and at different times throughout history, the role and significance of state-owned enterprises have often changed influenced by four broad groups of reasons: historical, economic, political, and ideological. Consequently, various reasons justify state ownership in enterprises. However, they are most commonly found in the achievement of specific economic and social objectives, as well as in addressing market failures and information asymmetry. A key disadvantage of state-owned enterprises is their lower efficiency, theoretically grounded primarily through agency, property rights, and public choice theories. Each of the theories mentioned above focuses on the behaviour of politicians and managers of state-owned enterprises and the incentives that guide them in achieving the goals of state-owned enterprises and their personal goals. The inefficiency of state-owned enterprises has also been confirmed in numerous empirical studies, which have used varied methodologies and different efficiency measures. Despite significant efforts in privatization, state-owned enterprises continue to play an essential role in Croatian economy. This can be substantiated by data showing that in 2021, state-owned enterprises generated 51 billion HRK in revenue, managed assets worth 232 billion HRK (which represents 53% of the GDP), realized more than 7 billion HRK in investments (accounting for 23% of total investments) and employed over 47 thousand workers (comprising 5% of the total workforce). This paper evaluates the efficiency of state-owned enterprises compared to private ones using a sample of large Croatian companies from 2018 to 2022. It analyzes return on assets and return on equity, confirming the hypothesis of the lower efficiency of state-owned enterprises.*

**Keywords:** *Firm performance, Efficiency, Return on Assets, Return on Equity, State Owned Enterprises*

### **1. INTRODUCTION**

In different countries and at different times throughout history, the role and significance of state-owned enterprises have often changed, influenced by four broad groups of reasons: historical, economic, political, and ideological. Despite numerous privatizations since the 1980s, according to La Porta et al. (2002), state-owned enterprises play a significant role in many economies, even on a global scale, with a growing trend in some sectors. Toninelli (2000) classifies state-owned enterprises into four main groups: utility services, base products, financial services, and social services. Megginson (2005) highlights how the role of state ownership has changed over time and that contemporary economic theory supports state ownership for three key reasons: balancing economic and social goals, responding to market failures and in situations of information asymmetry. The existence of state-owned enterprises is the subject of numerous debates, analyzing their purpose and cost-benefit analysis, considering business indicators and broader social and economic impact. The literature often mentions state-owned enterprises' lower efficiency than private ones, focusing mainly on business indicators. This paper aims to contribute to the research on the performance of state-owned enterprises in Croatia.

The paper includes an analysis of theoretical considerations on the lower efficiency of state-owned enterprises and the latest empirical studies testing this problem. An analysis was conducted on a sample of large enterprises in state and private ownership in Croatia. The scientific contribution of the paper is reflected in the systematic presentation of existing theoretical knowledge, evaluation of current empirical research, and analysis of the performance of state and private enterprises in the Croatian economic context.

## **2. LITERATURE REVIEW**

### **2.1. Theoretical Considerations**

In the 20th century, the study "The Modern Corporation and Private Property" by Berle and Means (1932) initiated an extensive discussion on corporate governance, particularly the relationship between ownership, ownership structure and business performance. The authors suggested that modern enterprises require the inclusion of a more significant number of people (shareholders) due to the size and complexity of operations. With the development of financial markets, the number of shareholders increases, and control is often delegated to management. According to the authors, there is a negative relationship between ownership dispersion and business performance. Following that study, many researchers expanded this thesis to various aspects of ownership (state, private, insider, outsider, employee stock ownership, etc.). A critical study, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure" by Jensen and Meckling (1976), uses agency theory to explain the inverse relationship between ownership and performance. The research by Shleifer and Vishny (1997) proposed shareholder protection laws and ownership concentration as solutions to the conflict of interest between shareholders and managers. Furthermore, based on these theories, a debate has developed on state ownership's (in)efficiency. Boycko, Shleifer, and Vyshny (1994) believe that state-owned enterprises are inefficient due to political decisions, where politicians use enterprises to favour their supporters (voters). Continuing on these foundations, a theoretical discussion on the issue of (in)efficiency of state ownership has also developed. Thus, Boycko, Shleifer, and Vyshny (1994) consider that state-owned enterprises are inefficient due to deliberate political decisions of governments because politicians use state-owned enterprises to favour their political supporters through employment, targeted regional investments and deliberate unrealistic reductions in product prices or imposing excessive prices for purchased goods (through politically connected suppliers). Politicians have a motive for "bribing managers" – to cater to their voter base and achieve their own political goals – and managers have a motive for bribing politicians – to allocate or retain management positions. Thus, corruption endogenously appears in the model. The analysis of the inefficiency of state-owned enterprises can be viewed through the problems of incentives and contracts at the microeconomic level. La Porta and Lopez-de-Silanes (1997) distinguish two causes for the lack of adequate incentives for efficiency. First, it is believed that supervision in public enterprises is weaker, leading to weaker incentives for efficiency. (Vickers and Yarrow 1988) Secondly, political interference distorts the goals and constraints of managers in state-owned enterprises. (Shleifer and Vishny 1994) According to Shapiro and Willig (1990), the lower efficiency of public ownership results from distorted managerial goals. Managers of state-owned enterprises often answer to politicians and sometimes strive for a political career, thus neglecting efficiency in favour of maximizing employment and political prestige. (Kornai 1986) This approach is supported by soft budget constraints, where the state budget covers poor business decisions of state-owned enterprises due to the high political cost of enterprise failure. Weak supervision is a common reason for poor incentives. Managers of state-owned enterprises are under weak supervision because their companies are not traded on the market like private companies, eliminating the possibility of hostile takeovers and shareholder influence on company performance.

According to Yarrow (1986), the capital market does not play a role in disciplining managers because the debt of state-owned enterprises is part of the public debt. Agency theory, one of the fundamental approaches for understanding the efficiency of state versus private ownership, has been developed in the works of many authors, including Megginson (2005), Shapiro and Willig (1990), Laffont and Tirole (1990), Bos (1991), Yarrow (1989), De Fraja (1993), Boycko, Shleifer, and Vishny (1994, 1996), Shavell (1979), and Williamson (1975). This theory focuses on the relationship between principals (owners) and agents (managers) and explores how principals can effectively supervise agents to act in their interests. In the case of state-owned enterprises, there is a dual principal-agent relationship: citizens as principals entrust management to politicians, and politicians as principals entrust the management of state-owned enterprises to managers. Agency theory emphasizes the challenges of citizens supervising politicians and the supervision of managers in state-owned enterprises by politicians. The theory asserts that both managers and politicians, like all individuals, maximize their own goals. The inefficiency of state-owned enterprises arises from information asymmetry, incomplete contracts, and lack of clear goals, leading agents to pursue their goals. In contrast, in private ownership, control mechanisms are more effective. Private enterprises' managers are disciplined by various external and internal control mechanisms, including the managerial labour market and rewards based on performance. Such mechanisms are often lacking in state enterprises, leading to less efficiency. The theory of property rights, developed in the works of authors such as Veljanovski (1987), Starr (1989), Furubotn and Pejovich (1972), Pejovich (1990), Demsetz (1967), Zeckhauser and Horn (1989), Bos (1991), Barnes (1985), Cowling (1980), Alchian (1965), Fama (1980), Grossman (1980) and Yarrow (1986) argues that public enterprises are economically less efficient due to the way ownership affects systems of rewards and punishments for managers. Dispersed property rights reduce the motivation for efficient use of assets. Although shareholders in large corporations cannot supervise management as owners in smaller enterprises can, there are compensatory mechanisms. State ownership needs better-defined property rights with the threat of takeover or bankruptcy to prevent managers from "relaxing" and becoming less efficient. Public choice theory, developed by Parker (1998), De Alessi (1969, 1974), Cook and Kirkpatrick (1995), Starr (1987), Borchering, Bush, and Spann (1997), Self (1994), Stretton and Orchard (1994), Boston (1991), Osborne and Gaebler (1993) and Lane (1991) also has clear views on state ownership. Political motives prevail over economic efficiency in state ownership, leading to higher costs. As a representative of citizen-owners, the government focuses on re-election instead of the common good, and managers of state-owned enterprises aim to strengthen power and prestige. There is a problem of information asymmetry between voters (principals) and politicians (agents), leading politicians to set goals not aimed at the common good but at short-term objectives such as maximizing employment for re-election.

## **2.2. Empirical Studies**

Numerous empirical studies have confirmed the theoretical assumptions about the impact of state ownership on firm performance. According to Laporšek et al. (2021), this literature usually focuses on two approaches: comparing performance of enterprises before and after privatization and comparing the concurrent performance of state-owned and private enterprises. The historical approach, which compares performance before and after privatization, is often applied to a small sample, which carries problems of sample selection and generalization, as noted by Tandon (1997). Moreover, it is difficult to determine the impact of changing ownership structure from the impact of the changing economic environment. Frydman et al. (1999) emphasize the importance of financial investments and restructuring before privatization, which can affect results after privatization. Both approaches face the problem of measuring performance.



Chang and Singh (1993) point out two conceptual problems with using profitability as an indicator of the performance of state-owned enterprises: short-term impacts on profitability that are not necessarily related to long-term performance and the fact that state enterprises often have broader goals beside profitability. Researches usually include indicators of profitability, but also others such as investments, output and employment. Boardman and Vining (1989) point out the importance of defining appropriate performance measures, emphasising that private sector criteria cannot always be applied to state-owned enterprises due to different goals and constraints. Empirical research on the performance of public versus private and privatized enterprises uses various methodologies, criteria for measuring performance and data samples. The literature assessing the performance of the private and public sectors often favours private sector indicators, assuming the same performance criteria regardless of ownership type and performance measures used are often more applicable for the private sector. This presents a challenge in analysing the performance of different enterprises in different countries, where the reasons for the existence of state-owned enterprises can vary. Most works from the first group confirm privatization's positive effects, i.e., better performance of private-owned enterprises. Notable works include Megginson (1994), Boubakri and Cosset (1998), Marthue (2007), Claessens and Djankov (1999), Frydman, Gray et al. (1999), Claessens, Djankov, and Pohl (1996), Megginson and Netter (2001), Djankov and Murrell (2002), Martin and Parker (1995), D'Souza and Megginson (1999), D'Souza, Nash, and Megginson (2000), Earle and Estrin (1996). In the second approach, which compares state and private enterprises concurrently, better performances are found in the private sector. Notable studies include Borchering et al. (1982), Millward and Parker (1983), Boardman and Vining (1989, 1992), Sappington and Stiglitz (1987), Laffont and Tirole (1990), De Fraja (1993), Boycko, Shleifer, and Vishny (1994, 1996), Hart, Shleifer and Vishny (1997).

### **3. ANALYSIS OF THE PERFORMANCE OF STATE-OWNED ENTERPRISES IN CROATIA**

According to Crnković et al. (2011), the development of the current state portfolio owned by the Republic of Croatia should primarily be viewed through the lens of the transformation and privatization of former social enterprises, which began with the transition process. Privatization was complex due to transitional and war conditions and the aspiration to achieve economic, political and social goals. The process began in 1991 with the Law on the Transformation of Social Enterprises and continued with the Law on Privatization in 1995, covering almost 3,000 enterprises. Despite significant efforts in privatization, state-owned enterprises still play an essential role in the Croatian economy. According to MPUGDI (2022), state-owned enterprises in 2021 generated 51 billion HRK in revenue, managed assets worth 232 billion HRK (53% of GDP), realized more than 7 billion HRK in investments (23% of total investments) and employed over 47 thousand workers (5% of the total workforce). Therefore, state-owned enterprises are an essential part of Croatia's GDP and national economy and can be an effective tool of economic policy, provided they are efficiently managed. State-owned enterprises in Croatia can generally be divided into two groups: those owned by the central state and those owned by regional and local government units. Central government-owned enterprises can be divided into two groups: enterprises of particular state interest currently not intended for privatization and other enterprises remaining in the portfolio after privatization. Given the specificities of local and regional self-government enterprises, which are typically companies established to provide utility services and are mainly micro, small and medium enterprises, the analysis will compare large state-owned enterprises with large private enterprises. The number of large enterprises by ownership from 2018 to 2022 is shown in Table 1. According to the data, it is evident that state-owned enterprises make up 12.1% to 12.7% of the total number of large enterprises in the Republic of Croatia each year, once again showing their importance and

significance in the economy. Also, it is noticeable that the number of state-owned enterprises remains constant, primarily due to the non-implementation of privatization processes.

	2018	2019	2020	2021	2022
SOE <sup>1</sup>	52	52	52	52	52
POE <sup>2</sup>	375	372	371	363	357
Total	427	424	423	415	409

*Table 1: Number of enterprises by type of ownership  
(Source: Prepared by author based on FINA<sup>3</sup> data)*

	2018	2019	2020	2021	2022
SOE	17.382	17.880	18.160	18.681	20.056
POE	35.337	40.273	40.722	43.955	49.519
Total	52.719	58.153	58.883	62.637	69.575

*Table 2: Total assets of enterprises by type of ownership (in million Euros)  
(Source: Prepared by author based on FINA data)*

Table 2 shows the total assets managed by enterprises in the Republic of Croatia, indicating that depending on the year, state-owned enterprises manage 28% to 32% of the total assets of large enterprises, reconfirming their significance in the national economy. Given that the share of state-owned enterprises in total assets is significantly larger than their share in the total number of enterprises, it is clear that state-owned enterprises, on average, manage up to 3 times larger assets per enterprise than private ones, which is also confirmed by the data in Table 3. This can be explained by the specific role of state-owned enterprises, typically infrastructural companies managing large network systems (electricity supply, roads, gas pipelines, oil pipelines, etc.)

	2018	2019	2020	2021	2022
SOE	334.27	343.85	349.24	359.26	385.69
POE	94.23	108.26	109.76	121.09	138.71
Total	123.46	137.15	139.20	150.93	170.11

*Table 3: Mean assets per company by type of ownership (in million Euros)  
(Source: Prepared by author based on FINA data)*

In order to conduct a comparison of the performance between state-owned and private companies, the average values for the Return on Assets (ROA) and Return on Equity (ROE) indicators were calculated for each group of companies for each of the observed years. ROA and ROE were selected as the key indicators that determine the efficiency of a enterprise in generating profits concerning its total assets and equity capital, respectively. From the data presented in Tables 4 and 5 and Figures 1 and 2, it is evident that private companies have significantly higher profitability as measured by ROA and ROE indicators in all the years observed. Specifically, in the pre-pandemic period (up to 2020), private companies achieved almost the double return in terms of ROA. The difference in ROE is even more significant, reaching up to three times. In the post-pandemic year of 2021, private companies achieved almost five times better results in both ROA and ROE, indicating the sluggishness and unpreparedness of state-owned companies for recovery after the pandemic.

<sup>1</sup> State Owned Enterprises

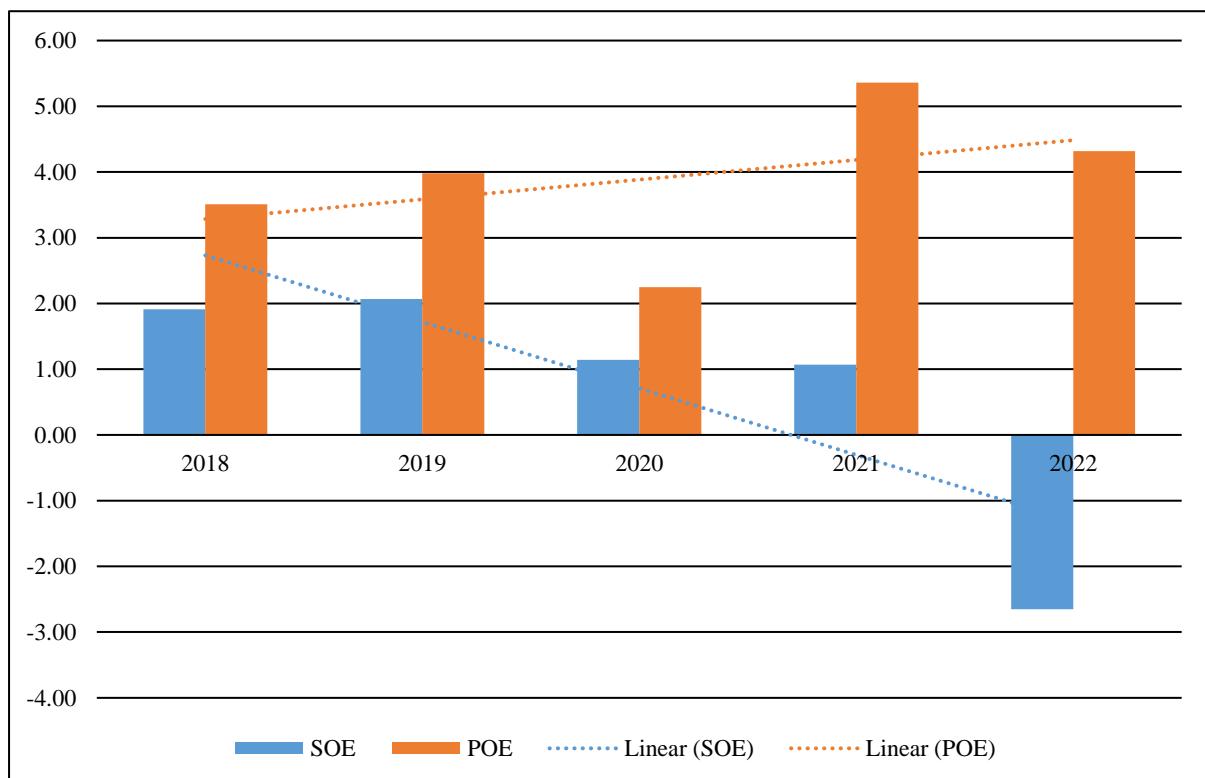
<sup>2</sup> Private Owned Enterprises

<sup>3</sup> Croatian Financial Agency - <https://infobiz.fina.hr/>

In 2022, state-owned companies recorded negative ROA and ROE, primarily as a consequence of the Croatian government's decision to control energy prices (especially electricity), leading to substantial losses for Hrvatska Elektroprivreda d.d. and consequently negative returns for the entire group of state-owned enterprises.

	2018	2019	2020	2021	2022
SOE	1,91	2,07	1,14	1,07	-2,65
POE	3,51	3,98	2,25	5,36	4,32

*Table 4: Mean return on assets (ROA) by ownership type  
(Source: Prepared by author based on FINA data)*

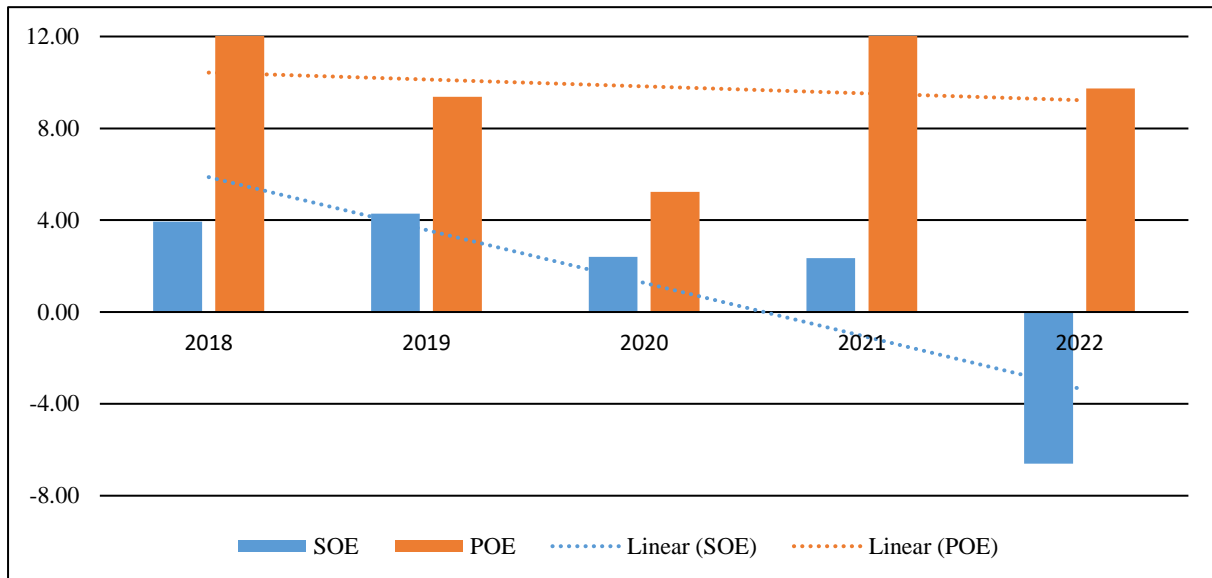


*Figure 1: Mean return on assets (ROA) by ownership type  
(Source: Prepared by author based on FINA data)*

Based on a sample of large Croatian companies, the results confirm the general hypothesis of the lower efficiency of state-owned enterprises compared to private ones. It is important to note that this research has limitations, which also imply directions for future research. Specifically, only two measures of profitability are used and to get a complete picture of the performance, it would be necessary to analyze other indicators from both the balance sheet and the profit and loss statement, which was impossible in this study due to its scope. Additionally, it is essential to mention that large state-owned enterprises in Croatia, as previously noted, are mainly companies that provide so-called network goods. Therefore, they typically manage significantly more assets than private companies, affecting the ROA and ROE indicators calculation. Also, the mentioned fact about the nature of large state-owned enterprises indicates the goals for which they exist: infrastructural goods used by both the population and entrepreneurs. Therefore, their primary goal is not profitability but the provision of infrastructural goods. However, even in fulfilling these goals, it is essential to be guided by the motive of efficiency and rational use of resources.

	2018	2019	2020	2021	2022
SOE	3,93	4,29	2,40	2,34	-6,61
POE	12,63	9,37	5,24	12,17	9,73

*Table 5: Mean return on equity (ROE) by ownership type  
(Source: Prepared by author based on FINA data)*



*Figure 2: Mean return on equity (ROE) by ownership type  
(Source: Prepared by author based on FINA data)*

#### 4. CONCLUSION

Despite numerous privatization programs and efforts to reduce state ownership in enterprises, state-owned enterprises continue to play a significant role in various economies and contribute substantially to their gross national products. In different countries and at different times throughout history, the role and significance of state-owned enterprises have often changed, influenced by four broad groups of reasons: historical, economic, political, and ideological. Consequently, various reasons justify state ownership in enterprises and they are most commonly found in the achievement of specific economic and social objectives, as well as in addressing market failures and information asymmetry. A key disadvantage of state-owned enterprises is their lower efficiency, theoretically grounded primarily through agency, property rights, and public choice theories. Each of the theories mentioned above focuses on the behaviour of politicians and managers of state enterprises and the incentives that guide them in achieving the goals of state-owned enterprises and their personal goals. The inefficiency of state-owned enterprises has also been confirmed in numerous empirical studies, which have used varied methodologies and different efficiency measures. Despite significant efforts in privatization, state-owned enterprises continue to play an essential role in Croatian economy. This can be substantiated by data showing that in 2021, state-owned enterprises generated 51 billion HRK in revenue, managed assets worth 232 billion HRK (which represents 53% of the GDP), realized more than 7 billion HRK in investments (accounting for 23% of total investments) and employed over 47 thousand workers (comprising 5% of the total workforce). This paper analyzed the efficiency of state-owned enterprises compared to private ones using a sample of large Croatian companies from 2018 to 2022. According to the data, it is evident that state-owned enterprises make up 12.1% to 12.7% of the total number of large enterprises in the Croatia each year, once again showing their importance and significance in the economy.

Depending on the year, state-owned enterprises manage 28% to 32% of the total assets of large enterprises, reconfirming their significance in the national economy. Given that the share of state-owned enterprises in total assets is significantly larger than their share in the total number of enterprises, it is clear that state-owned enterprises, on average, manage up to 3 times larger assets per enterprise than private ones. To compare the performance of state-owned and private enterprises, the average values of Return on Assets (ROA) and Return on Equity (ROE) were calculated for each of the observed years. The results show that private companies achieve significantly higher profitability as measured by the ROA and ROE indicators across all the years observed. Consequently, the results of this analysis confirm the initial hypothesis of the lower efficiency of state-owned enterprises, even in the sample of large Croatian companies. Results also suggest a need for further analysis, considering state-owned and private enterprises' different objectives and capital structures.

#### LITERATURE:

1. Alchian, A. A. (1965). Some economics of property rights. *Il politico*, 816-829.
2. Barnes, P. (1985). UK Building Societies: A Study of the Gains from Merger. *Journal of Business Finance and Accounting*, 75–91.
3. Berle, A., & Means, G. (1932). *The Modern Corporation and Private Property*. New York: Harcourt, Brace.
4. Boardman, A., & Vining, A. (1992). Ownership versus Competition – Efficiency in Public Enterprise. *Public Choice*, 2(73), 205–239.
5. Boardman, A., & Vining, A. R. (1989). Ownership and performance in competitive environments: a comparison of the performance of private, mixed, and state-owned enterprises. *Journal of Law and Economics*(33), 1-33.
6. Borchering, T., Bunaby, B., Pommerehne, W., & Schneider, F. (1982). Comparing the Efficiency of Private and Public Production: the Evidence from Five Countries. *Zeitschrift flier Nationaloekonomie*(2).
7. Borchering, T., Bush, W. C., & Spann, R. M. (1997). The Effects on Public Spending on the Divisibility of Public Outputs in Consumption, Bureaucratic Power and the Size of the Tax Sharing Group. U T.
8. Bos, D. (1991). *Privatisation: A theoretical treatment*. Oxford: Clarendon Press.
9. Boston, J. (1991). *The Theoretical Underpinnings of Public Sector Restructuring in New Zealand*. U J.
10. Boubakri, N., & Cosset, J.-C. (1998). Privatization in Developing Countries: An analysis of the performance of newly privatized firms. *Private Sector*(156).
11. Boycko, M., Shleifer, A., & Vyshny, R. (1994). Voucher Privatization. *Journal of Financial Economics*(35), 249-266.
12. Chang, H.-J., & Singh, A. (1993). *Public Enterprise in Developing Countries and Economic Efficiency: A*
13. Claessens, S., & Djankov, S. (1999). *Ownership Concentration and Corporate Performance in the Czech Republic*. CEPR .
14. Claessens, S., Djankov, S., & Pohl, G. (1996). *Ownership and Corporate Governance: Evidence from the Czech Republic*. Policy Research Working Paper 1737.
15. Cook, P., & Kirkpatrick, C. (1995). *Privatisation Policy and Performance: International Perspectives*. New York: Harvester Wheatsheaf.
16. Cowling, K. e. (1980). *Mergers and Economic Performance*. Cambridge: Cambridge University Press.
17. Crnković, B.; Požega, Ž.; Karačić, D. (2011): *Izazovi korporativnog upravljanja u državnim poduzećima – hrvatske perspektive*”, *Ekonomski vjesnik*, broj 2/2011

18. D'Souza, J., & Megginson, W. (1999). The Financial and Operating Performance of Newly Privatized Firms in the 1990s. *Journal of Finance*(54), 1397.
19. D'Souza, J., Nash, R., & Megginson, W. (2000). Determinants of Performance Improvement in Newly-Privatized Firms: Does Restructuring and Corporate Governance Matter? Norman: University of Oklahoma.
20. De Alessi, L. (1969). Implications of Property Rights for Government Investment Choices. *American Economic Review*, 1(59), 13–24.
21. De Alessi, L. (1974). An Economic Analyses of Government Ownership and Regulation: The Theory and the Evidence from Electric Power Industry. *Public Choice*, 1(19), 1-42.
22. De Fraja, G. (1993). Productive Efficiency in Public and Private Firms. *Journal of Public Economics*(50), 15–30.
23. Demsetz, H. (1967). Toward a Theory of Property Rights. *American Economic Review*, 2(57), 347–379.
24. Demsetz, H. (1967). Toward a Theory of Property Rights. *American Economic Review*, 2(57), 347–379.
25. Djankov, S., & Murrell, P. (2002). Enterprise Restructuring in Transition: A Quantitative Survey. *Journal of Economic Literature*, XL(3), 739-792.
26. Earle, J., & Estrin, S. (1996). Privatization versus Competition: Changing Enterprise Behaviour in Russia. London: London School of Economics.
27. Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of political economy*, 88(2), 288-307.
28. Frydman, R., Gray, C., Hessel, M., & Rapaczynski, A. (1999). When does privatization work? The impact of private ownership on corporate performance in the transition economies. *Quarterly Journal of Economics*, CXIV, 1153-1191.
29. Furubotn, E., & Pejovich, S. (1972). Property Rights and Economic Theory: A Survey of Recent Literature. *The Journal of Economic Literature*, 4(10), 1137–62.
30. Grossman, S. J. (1980). Takeover bids, the free-rider problem, and the theory of the corporation. *The Bell Journal of Economics*, 42-64.
31. Hart, O. A., Shleifer, A., & Vishny, R. (1997). The Proper Scope of Government: Theory and an Application to Prisons. *Quarterly Journal of Economics*(112), 1127–1161.
32. Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
33. Kornai, J. (1986). The Soft Budget Constraint. *Kykos*, 1(39), 3–30.
34. Laffont, J.-J., & Tirole, J. (1990). Privatization and Incentives. Cambridge: MIT.
35. Lane, R. (1991). *The Market Experience*. Cambridge : Cambridge University Press.
36. Levy, B. (1987). A theory of public enterprise behavior. *Journal of Economic Behavior & Organization*, 8(1), 75-96.
37. MacCarthaigh, M. (2010). Managing state-owned enterprises in an age of crisis. Working Papers 201040. Geary Institute, University College Dublin. Dohvačeno iz <https://www.ucd.ie/geary/static/publications/workingpapers/gearywp201040.pdf>
38. Marthue, I. B. (2007). The effects of privatization on the performance of newly privatized firms in emerging markets. *Emerging Markets Review*, 134–146.
39. Martin, S., & Parker, D. (1995). Privatization and Economic Performance Throughout the UK Business Cycle. *Managerial and Decision Economics*(16), 225–37.
40. Megginson, W. L. (1994). The financial and operating performance of newly privatized firms: An international empirical analysis. *The Journal of Finance*, 403–452.
41. Megginson, W. L. (2005). *The Financial Economics of Privatization*. New York: Oxford University Press.
42. Megginson, W. L., & Netter, J. M. (2001). From State to Market: A Survey of Empirical Studies on Privatization. *Journal of Economic Literature*, 39(2), 321 - 331.

43. Millward, R., & Parker, D. (1983). *Public and Private Enterprise: Comparative Behaviour and Relative Efficiency*. U R. Millward, D. Parker, S. L. Rosenthal, & N. Toppham (Ur.), *Public Sector Economics*. London: Longman.
44. MPUGDI (2022): *Izvešće o poslovanju pravnih osoba u državnom vlasništvu za 2021*, Ministarstvo prostornoga uređenja, graditeljstva i državne imovine RH Zagreb
45. Osborne, D., & Gaebler, T. (1993). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. Plume.
46. Parker, D. (Ur.). (1998). *Privatisation in the European Union: Theory and Policy Perspectives*. New York: Routledge.
47. Pejovich, S. (1990). *The Economics of Property Rights: Towards a Theory of Comparative Systems*. Dordrecht: Kluwer Academic.
48. Sappington, D. E., & Stiglitz, J. (1987). Privatization, Information and Incentives. *Journal of Policy Analysis and Management*(6), 567–582.
49. Self, P. (1994). *Public Choice and Public Benefit: Politics, Public Service and Market*. Presentation at the Anuala RIPPA Conference, Melbourne.
50. Shapiro, C., & Willig, R. (1990). Economic rationales for the scope of privatization. U E. N. Suleiman, & J. Waterbury (Ur.), *The Political Economy of Public Sector Reform and Privatization*. Boulder: Westview Press.
51. Shavell, S. (1979). Risk sharing and incentives in the principal and agent relationship. *Bell Journal of Economics*, 10(1), 55-73.
52. Shleifer, A., & Vishny, R. (1994). Politicians and Firms. *The Quarterly Journal of Economics*(46), 995–1025.
53. Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*(52), 737-783.
54. Starr, P. (1987). *The Limits of Privatization*. U S. Hanke (Ur.), *Privatization and Development*. San Francisco: Institute for Contemporary Studies.
55. Starr, P. (1989). *The Meaning of Privatization*. U S. Kamerman, & A. Kahn (Ur.), *Privatisation and Welfare State*. Princeton: Princeton University Press.
56. Stretton, H., & Orchard, L. (1994). *Public goods, public enterprise, public choice : theoretical foundations of the contemporary attack on government*. New York: St. Martin's Press.
57. Tandon, P. (1997.). Efficiency of privatised firms: evidence and implications. *Economic and Political Weekly*, xxxii(50), 3199-3212.
58. Toninelli, P. (2000). *The rise and fall of state-owned enterprise in the western world*. Cambridge: Cambridge University Press.
59. Veljanovski, C. (1987). *Selling the State: Privatisation in Britain*. London: Weidenfeld and Nicolson.
60. Vickers, J., & Yarrow, G. (1988). *Privatization: An Economic Analysis*. Cambridge: The MIT Press.
61. Williamson, O. E. (1975). *Markets and hierarchies: analysis and antitrust implications: a study in the economics of internal organization*. Illinois: University of Illinois.
62. Yarrow, G. (1986). Privatization in Theory and Practice. *Economic Policy*(2), 324–364.
63. Yarrow, G. (1989). *Privatization and Economic Performance in Britain*. U K. Brunner, & A. Meltzer (Ur.), *IMF Policy Advice, Market Volatility, Commodity Price Rules and other Essays*. Amsterdam: North Holland.
64. Zeckhauser, R., & Horn, M. (1989). *The Control and Performance of State Owned Enterprises*. U P. MacAvoy (Ur.), *Deregulation and Privatization in the United States*. Edinburgh: Edinburgh University Press

# THE ROLE OF CULTURAL ROUTES IN THE DEVELOPMENT OF OUTDOOR TOURISM

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## ABSTRACT

*In today's tourism market, there is a growing interest for outdoor activities among tourists. Outdoor activities have become an integral part of daily life, and consequently the tourism market shows its orientation towards these activities. This paper examines the role of cultural routes as a key factor in the development of various outdoor activities and thus outdoor tourism. Cultural routes, whose itineraries may include cultural heritage, art, religion, gastronomy, and other cultural aspects, are proving to be a significant segment in the development of various forms of cultural tourism. Their potential, which goes beyond the aforementioned interpretation, is underutilized as a tourism product and remains insufficiently explored in academic articles. This paper examines how cultural itineraries can be integrated into the growing trend of outdoor activities in order to contribute to the development of their visibility. To this end, a survey was conducted among visitors to cultural route in the Primorje - Gorski Kotar County to investigate the influence of outdoor activities on the development of cultural routes. The study provides results on the competitiveness of cultural routes based on outdoor activities such as walking, hiking, and running. This study contributes to the identification of elements for the development of cultural route offers in the context of outdoor tourism. The study contributes to the development of small and medium-sized enterprises along existing routes and to the improvement of the tourism offer in order to create a better competitive advantage.*

**Keywords:** *cultural routes, outdoor activities, tourism*

## 1. INTRODUCTION

Interest for outdoor activities in tourism markets has been on the rise over the past ten years. The quality of everyday life is improving with diverse outdoor activities. Consequently, those activities are in demand while traveling and staying at tourism destinations. For the purpose of achieving the most diverse activities, there is a greater need for itineraries providing such activities, while facilitating additional learning about history, cultural-historical heritage, gastronomy and more through outdoor activities, and likewise facilitating entrepreneurial activities offering various services along the itineraries. Cultural-historical heritage represents a significant element in the tourism development of destinations, and it is a core part of various types of tourism, including those types focused on outdoor activities.



In order to create a special and innovative tourism activity, the link between outdoor activities (especially walking) and a destination's cultural offer enables market-competitive tourism products and has also sparked the regional development of rural areas. Mariotti (2012) states that innovation and creativity, especially in cultural production and communication, including through cultural itineraries, could be the path towards reaching a position of strong cultural identity and dynamic offer in the new international environment, while simultaneously being focused on increasing participation and engagement by both the local community and visitors. In the process of creating an offer that synergistically combines cultural values and outdoor activities, the biggest stakeholders are small businesses and the local community that can use such an offer to improve their regional development by increasing employability, reducing the depopulation of rural areas and more. This paper tackles what exactly connects a cultural route with outdoor activities and what attracts visitors to such activities.

## **2. LITERATURE REVIEW**

Cultural routes based on historical and cultural values are tourism products recording increasing interest in the tourism market in recent years. Many researchers emphasize the importance of cultural values in the tourism offer (Richards, 2011). Pančić Kombo (2006) notes that there are specific areas of demand in tourism that are constantly developing as tourists seek authenticity and cultural meaning. Cultural resources, including routes, paths, and trails, become tourism attractions through planning, and they become products through interpretation. Rudan (2023) states that cultural routes and trails are becoming more prominently considered in the domain of destination management, with the aim of creating communication and interpretation between specific natural and cultural values present in certain spaces. Zabbini (2012) points out that the context of a cultural itinerary stems from the rich heritage based on many tangible and intangible variables, both past and future, that can lead to unique and outstanding results, as well as certain experiences taking place in a given time or location. Cultural routes can be observed as a combination of three elements: geographical area and points of interest, a topic connecting the various parts of routes, and tourism products and services offered to visitors in various destinations connect to the route (Pattanaro, Pstocchi, 2016). Bogacz-Wojtanowska, Goral (2018) state that a route connects locations and places selected according to a thematic criterion. This criterion is a unique and representative example illustrating the broadly understood cultural heritage of a specific area, community, ethnic group, national minority, or people. According to Iakovaki (2023), a cultural route is a collection of points of interest (POI) encompassing a specific geographical area sharing similar attributes, a main theme, as well as distinctive architectural or historical features near objects, buildings, and natural landscapes. Majdoub (2010) states that cultural routes are a type of cultural spending and impact the creation of a cultural experience. The cultural experience on cultural routes is based on a complex interaction between various elements, thus enriching a visitor's journey using deeply rooted cultural aspects of a certain area. Key factors shaping and spreading a cultural experience on such routes include historical heritage and tradition, artistic expression, gastronomy, outdoor education, as well as outdoor activities. Furthermore, Vada, Dupre, Zhang (2022) researched the literature on route tourism and state that there are four key aspects of route tourism. First, there is a consensus that route tourism is based on mobility – there is a journey to undertake, meaning that the destination requires a certain level of infrastructure, while visitors have a certain level of preparation to do in order to get the sense of achievement at the end of their trip. Second, route tourism is spatially defined and a high level of collaboration between stakeholders can be expected from a structural perspective. Third, attractions and activities differ from route to route, they are narrowly tied to the main theme, while tangible features of a route, e.g. its physical attributes, can and do not have to contribute to attractiveness.

Fourth, route tourism can change over time, e.g. a drop in interest for the route, and it can change spatially, e.g. reducing or expanding the route. According to Richards (2011), cultural routes are important not just because of the physical journey, but also because they are in themselves a form of narrative. Routes tell stories about the places they pass through and link, and about the people who travel them. Somoza, Lois, Samoza (2023) state that a new sensibility for walking and exercise became prominent because of the Camino de Santiago route, and later with the creation of European Culture Routes. Many destinations are searching for opportunities to develop cultural routes and outdoor activities on those routes following the example of the Santiago de Compostela Pilgrim Routes. Over 45 Cultural Routes of the Council of Europe cover a host of themes, from architecture and landscape to religious motifs, from gastronomy and intangible heritage to key figures of European art, music, and literature. Furthermore, Somoza, Lois, Samoza report that The UNESCO World Heritage Declarations reinforce this symbolism, endowing the paths intended for walking or cycling with a brand of international prestige present in the demand. It is paramount to develop sustainable development in such spaces in order to preserve the environment and create an offer that will attract visitors through its authenticity. Graf and Popesku (2016) state that cultural routes enable an area to be better branded and promoted, i.e. they facilitate innovation and the creation of something completely new and unique using available resources. Cultural routes enable a synergy between various participants, the local population, and small businesses acting in such rural spaces. Additionally, connecting cultural-historical heritage and creating an innovative tourism product contributes to the satisfaction and quality of life of the local population, as well as the quality of tourists' stay at destination. Zabbini (2012) highlights that the success of a tourism route is based on the idea of collaboration. Collaboration is the foundation of an itinerary and achieving sustainability, which is a goal set based on an integrative approach to marking a route. To successfully implement sustainable tourism, many stakeholders must be taken into account, making collaboration a major factor. Local stakeholders (local government and self-government, entrepreneurs, local population, destination management) must be involved in designing the future of cultural-historical heritage as cultural heritage can only be turned in a new value for the destination through a joint, systematic approach (Rudan, 2023).

### **3. OUTDOOR ACTIVITIES AND CULTURAL ROUTES**

Creating new values for a destination based on cultural routes is more frequently veering away from observing the impact of routes on a destination's economy. Schubert et al. (2020) determined that outdoor activities on cultural routes have become and incubator for innovation and economic diversification, and that the cultural route offer is more commonly being expanded with outdoor activities. Outdoor activities encourage a deeper connection between tourists and cultural heritage and promote a deeper sense of cultural immersion. Vistad et al. (2020) determined that activities on cultural routes have an effect on self-introspection, awareness and sensation of nature, focus on freedom, relationship with others, and focus on experiences. The literature highlights the diversity of outdoor activities that can be integrated into cultural routes – from educational walks and heritage trails to adventurous activities such as rock climbing and kayaking. By incorporating such activities and being able to meet diverse interests and preferences, a destination can attract a broader range of tourists. Preferences can involve anything from a desire to get to know the cultural and traditional values, seeing the cultural attractions, to attending events along the route and more. Outdoor activities on cultural routes such as exploring the environment, hiking, cycling, or other outdoor activities offer visitors a chance not just to see the cultural landmarks, but to connect them with the environment and other visitors on the route in a unique manner. When defining outdoor tourism, Hao et al. (2016) state that it is a special destination product that combines tourism with natural, cultural, and human resources.

Silva et al. (2021) describe outdoor tourism as a set of activities that aims to convert free time into dynamic, participatory, and creative activities, thus facilitating a synergy between tourism, sport, and nature, and enabling tourists to enjoy their activities in rich nature. Such activities encourage interaction between tourists and cultural heritage. By exploring natural wonders and areas of cultural importance in the open, tourists have the opportunity to experience a destination's authenticity and participate in activities that strongly connect them with the local identity. Additionally, outdoor activities encourage tourists to make a connection with local communities, which enables the exchange of knowledge and participation in authentic cultural events. Tourists also connect with other visitors on a route. Outdoor activities on cultural routes, which can be classified as hard or soft activities, contribute to the physical experience of the space, and encourage an emotional connection and deeper understanding of cultural heritage. Baker et al. (2021), Baker and O'Brien (2017) divide outdoor activities into hard and soft types of activities that can take place on land, in air or in water, where soft activities entail low risk, minimum dedication and beginner skills, while hard activities involve high risk, intensive dedication and advanced skills. Through dynamic and interactive research methods, tourists become active participants in preserving and promoting cultural heritage, thus facilitating sustainable tourism and long-term preservation of cultural values. Therefore, an analysis of the roles of outdoor activities on cultural routes is key to understanding how tourism activities can shape and enhance the cultural experience while contributing to the preservation of unique cultural values.

#### 4. OUTDOOR ACTIVITIES AND CULTURAL ROUTES IN PRIMORSKO-GORANSKA COUNTY

Outdoor activities on cultural routes have been researched using routes located in the Primorje – Gorski Kotar County in Croatia, which offers the possibility of visiting castles, forts, old towns, and religious facilities (Primorje – Gorski Kotar County, 2024). According to the goals of the research, the authors of this paper propose the following research questions: 1. Which activities in outdoor tourism can contribute to the development of cultural routes, 2. Which entrepreneurial activities can be developed on a cultural route by improving the outdoor tourism offer? Data was collected from March to October of 2023 on a total number of 348 visitors to a cultural route, who were sent a link to access the questionnaire. The response rate was 31.9% (111 participants).

Issue		
<b>Gender</b>	Nm.	%
M	50	45.04%
F	61	54.95%
TOT	111	100%
<b>Age</b>		
18-25	14	12.61%
26-30	20	18.02%
31-45	15	13.51%
46-60	38	34.23%
> 61	24	21.62%
TOT	111	100%

*Table 1: Demographic profile  
(Source: Authors' own elaboration)*

Most participants are 31-45 years (33%) and female (61%).

The questionnaire contained 35 items divided into 5 dimensions: demographic profile, reason for visit, preferences towards outdoor activities, integration of the outdoors into the cultural route offer. The Likert scale was used, from 1 (completely agree) to 7 (completely disagree). The analysis showed that preferences for visiting a cultural route based on outdoor activities are grouped as soft outdoor activities, hard outdoor activities, and other, i.e. participants who did not find outdoor activities relevant. Most participants (39.6%, 44 visitors) stated that they are interested in casual walks while visiting cultural routes, while 22.5% (25 visitors) noted hard outdoor activities (such as motocross or mountain biking) as motivation for visiting a cultural route. A total of 42 visitors (37.8%) stated that outdoor activities are not a priority for them and that they do not visit a cultural route because of an outdoor activity. The participants mostly positively responded to broadening cultural route offer with outdoor activities. A total of 47.7% of the visitors are willing to revisit the culture route if it were enhanced with outdoor activities. Within that dimension, the participants most commonly opted for renting bicycles as motivation. The analysis shows the difference in outdoor activity preferences based on gender, age, and reason of visit. Male visitors show a higher tendency for outdoor activities, both soft and hard activities on cultural routes. Visitors whose primary motivation is to get to know the cultural and traditional values on the cultural route are aged 45 and over, and mostly female. Various events on the cultural route show no significant statistical differences between the demographic groups. Active vacationing is an especially prominent category when evaluating the motivation level for visiting a cultural route. Specifically, 29.7% of participants (33 visitors) stated that visiting a cultural route represents a part of active vacationing and that they see routes as a way to enhance a destination's outdoor offer. The same participants recognize cultural routes as an opportunity for entrepreneurial innovation in outdoor tourism, from renting hot air balloons to renting VR glasses and more. Participants state that additional offers on the cultural route contribute to the route being recognized, ensures more visits, and makes it easier for the local population to develop entrepreneurial activities.

<b>Issues</b>	<b>Aver. score</b>	<b>St.dev.</b>
Hard outdoor activities	2.5	1.62
Soft outdoor activities	2.8	1.75

*Table 2: Type of outdoor activity as motivation for visiting a cultural route  
(Source: Authors' own elaboration)*

Table 2 shows the degree of introducing types of outdoor offer that affect motivation for visiting a cultural route. Participants evaluated the stated offer using a Likert scale, where 1 = lowest motivation for visit, and 7 = highest motivation for visit. The participants' willingness to visit the route again indicates that the offer of soft activities is ahead of hard activities, even though the difference between the two is not particularly significant. Specifically, 33% of participants (37 visitors) consider hard activities to be a better way to attract new visitors than soft activities. A majority of visitors perceive that a unique outdoor experience is the most important element for attracting new visitors to a cultural route. In fact, 55.8% of participants (62 visitors) state that introducing an innovated offer specific to a cultural route and not available at competitive cultural routes leads to diversification and recognizability of the route and attracting new visitors. Some of the activities include ballooning, hang gliding, parkour festivals and more. Based on the acquired data and analysis, the answer to the research question about trends in outdoor tourism that could be applied to innovate the offer of a cultural route comprises mostly hard activities – the participants highlighted activities in the air and on land, and the most mentioned included hard activities in the air such as ballooning or hang gliding. The conducted research provides insight into the development of entrepreneurial ideas based on preferences stated by visitors of cultural routes, i.e. what they define as the most attractive motivations for

the visit. Entrepreneurship on cultural routes plays a key role in broadening the tourism experience and supporting local economy. Diverse outdoor activities on land, in the air and in water offer a significant opportunity for the development of small and medium businesses, especially in partnership with a traditional gastronomic offer. Based on participants' attitudes, outdoor activities such as e-bike, motocross, organized hiking tours, and gastronomy with traditional dishes are the most prominent options for introducing a new offer, thus also creating the foundation for entrepreneurial activity. The results of the polls show that tourists are more and more interested in an experience that involves high quality activities such as adventure sports, museum, interpretation centers and other cultural facilities. Activities on land form the base component for developing entrepreneurship on cultural routes. E-bike rides, motocross adventures, and hiking attract a broad spectrum of visitors, from adventurous types to soft family-friendly activities. Additionally, the gastronomic offer with a focus on traditional dishes offers visitors an authentic local cuisine experience, further facilitating collaboration with local restaurants and food producers. The greatest competitive advantage on cultural routes can stem from innovative offers on water and in air. Ballooning is a unique way to explore old towns or castles from the air, providing spectacular view and unforgettable memories. Sailing on traditional boats around the coast and islands and connecting cultural locations further enriches the tourism experience. Such a concept creates an opportunity for local entrepreneurs, tourist agencies, and restaurant operators to impact the creation of a special tourism experience. Entrepreneurial ideas are further emphasized with increased interest in innovative digital platforms facilitating interaction between tourists and cultural routes. Collaboration between local communities, artists, and entrepreneurs in developing digital narratives is becoming more prominent. Virtual tours and mobile apps for cultural routes are becoming important tools for creating a personalized experience for visitors. By implementing such innovations, small and medium businesses can take over a key role in the valorization of cultural routes. Tourist agencies would have the opportunity to create packages combining land and water activities, thus enabling visitors to have an all-encompassing destination experience. Restaurant operators could specialize in traditional cuisine reflecting local identity. Such an entrepreneurial initiative not only support local economy, but also contributes to the preservation of heritage as visitors learn about the history and significance of cultural locations. This type of approach to tourism supports sustainable development, raises awareness on the importance of preserving cultural heritage, and encourages mutual respect between the local community and visitors. Through innovation, authenticity, and sustainability, small and medium businesses can play a key role in creating memorable experiences for visitors, and simultaneously support economic growth and preservation of heritage.

## **5. CONCLUSION**

Cultural routes are an important part of a destination's tourism offer and in many locations they facilitate regional development. They are not just significant for visitors or travelers reaching their goal, but all stakeholders along the way – the local population, small businesses, trades and crafts, and anyone else who contributes to creating a tourism product. Outdoor activities taking place on the routes are also a key feature. The development and participation in the outdoor offer depend on the specific physical and spatial properties of the route. Physical activity connected with cultural values are a combination that can contribute to the development of tourism, especially in rural area, and in two domains – cultural and outdoor tourism. Research conducted on the territory of the Primorje – Gorski Kotar County highlights the importance of connecting outdoor activities with cultural routes as an innovative approach to developing the tourism offer. Cultural routes are becoming more prominent in the tourism market because they have the power to attract visitors by combining cultural heritage and outdoor activities.

When analyzing visitor preferences, there is a tendency towards diverse outdoor activities, including light walking, cycling, and hiking, but also attractive adventurous activities such as ballooning and motocross. This diversity of preferences can shape the foundation for creating innovative tourism products on cultural routes as carriers of entrepreneurial activities in the future. Outdoor activities not only contribute to the physical experience of a location, but they also facilitate learning and getting to know the cultural heritage. Introducing innovative entrepreneurial ideas like ballooning, sailing on traditional boats, digital platforms, and virtual tours paves the way for developing sustainable tourism and increasing the quality of life of the local population by developing new initiatives on cultural routes. Combining cultural routes with outdoor activities has the potential to spark regional development, facilitate sustainable tourism and contribute to the preservation of cultural heritage.

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#### LITERATURE:

1. Baker, M., Carr, N., Stewart, E. J. (2021). *Leisure activities in the outdoors: Learning, developing and challenging*. Walingford: CABI.
2. Baker, M., O'Brien, W. (2017). National ‘soft skills’ training: Investigating soft skill training in the outdoor recreation sector. *Lamped Research*. Retrieved 29.9.2020. from <https://auscamps.asn.au/application/files/5515/5010/2468/ACA-Soft-skills-study-Formative-Public-Report-2March2017.pdf>.
3. Bogacz-Wojtanowska, E., Góral, A. (2018). Networks or Structures? Organizing Cultural Routes Around Heritage Values. Case Studies from Poland. *Humanist Management Journal*, No. 3, 253–277.
4. Council of Europe, Cultural Routes of the Council of Europe programme, Retrieved 03.01.2024. from <https://www.coe.int/en/web/cultural-routes/about>
5. Graf, M., Popeasku, J. (2016). Cultural routes as innovative tourism products and possibilities of their development. *International Journal of Cultural and Digital Tourism*, Vol. 3, No. 1, 24-44
6. Hao, X., Wu, B., Morrison, A. M., Wang, F. (2016). Worth thousands of words? Visual content analysis and photo interpretation of an outdoor tourism spectacular performance in Yangshuo-Guilin, China. *Anatolia*, Vol. 27, No. 2, 201-213.
7. Iakovaki, E., Markos K., Alexandros T., Konstantakis, G. (2023). Analyzing Cultural Routes and Their Role in Advancing Cultural Heritage Management within Tourism: A Systematic Review with a Focus on the Integration of Digital Technologies. *Encyclopedia* 3, No. 4, 1509-1522.
8. Majdoub, W. (2010). Analyzing cultural routes from a multidimensional perspective. *AlmaTourism*, Vol. 1, No. 2, 29-37.
9. Malaperdas, G. (2022). Techniques for drawing and mapping a Cultural Route. *e-Review of Tourism Research*, Vol. 19, No. 2, 280–307.
10. Mariotti, A. (2012). Sistemi Locali, Reti e Competitività Internazionale: dai Beni agli Itinerari Culturali. *Journal of Tourism, Culture and Territorial Development*, No. 5, 81-95.
11. Pančić Kombol, T. (2006). Kulturno naslijeđe i turizam. *Radovi Zavoda za znanstveni rad HAZU Varaždin* 16-17, 211-226.
12. Pattanaro, G., Pistocchi, F. (2016). Linking Destinations Through Sustainable Cultural Routes. *Symphonya. Emerging Issues in Management*, No. 1, 83–96.
13. Primorsko-goranska županija (2024). Kulturno-turistička ruta „Putovima Frankopana“. Retrieved 06.01.2024. from: <https://frankopani.eu/o-projektu/>

14. Richards, G. (2011). Tourism trends: Tourism, culture and cultural routes. n: Khovanova-Rubicondo, K. (ed.) *Impact of European Cultural Routes on SMEs' innovation and competitiveness*. Strasbourg: Council of Europe Publishing, 21-39.
15. Rudan, E. (2023). Razvoj kreativnog turizma na kulturnim rutama i stazama. *Proceedings of 6th International Scientific and Professional Conference "The Challenges of Today"*. Šibenik: Veleučilište u Šibeniku, 229-236.
16. Rudan, E. (2023). Circular Economy of Cultural Heritage—Possibility to Create a New Tourism Product through Adaptive Reuse. *Journal of risk and financial management*, 16, 196; 1-12.
17. Schuhbert, A., Thees, H., Herbold, V., Weinreiter, J., & Kantsperger, M. (2020). Cultural tourism routes as incubators for innovation and economic diversification: A potential analysis in the framework of the new silk road initiative in Azerbaijan. *Zeitschrift für Wirtschaftsgeographie*, Vol. 64, No. 4, 211-232.
18. Silva, G., Correia, A., Rachão, S., Nunes, A., Vieira, E., Santos, S., Soares, L., Fonseca, M., Ferreira, F. A., Veloso, C. M., Carranca, P., Fernandes, P. O. (2021). A methodology for the identification and assessment of the conditions for the practice of outdoor and sport tourism-related activities: the case of Northern Portugal. *Sustainability*, Vol. 13 No. 13, 1-16.
19. Vada, S., Dupre, K, Zhang, Y. (2022). Route tourism: a narrative literature review, *Current Issues in Tourism*, Vol. 26, No. 6, 879-889.
20. Somoza Medina, X., Lois González, R.C. & Somoza Medina, M. (2023) Walking as a cultural act and a profit for the landscape. A case study in the Iberian Peninsula. *GeoJournal* Vol. 88, 2171–2186.
21. Vistad, O. I., Øian, H., Williams, D. R., & Stokowski, P. (2020). Long-distance hikers and their inner journeys: On motives and pilgrimage to Nidaros, Norway. *Journal of Outdoor Recreation and Tourism*, Vol. 31, 100326.
22. Zabbini E. (2012). Cultural Routes and Intangible Heritage. *AlmaTourism*, No. 5, 59-80.

# THE INTERCONNECTION BETWEEN THE ECONOMIC LAW OF INTELLECTUAL PROPERTY AND THE FASHION INDUSTRY IN BRAZIL

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## ABSTRACT

*Interdisciplinary studies in fashion have expanded to encompass various academic domains. Political economy is a critical dimension in understanding fashion as a social and economic phenomenon, especially in the interplay between the pursuit of wealth and power. Economic Law, dealing with the instrumentalization of economic policy, centers on market organization and the competition for economic surplus. From this viewpoint, legal protection of creativity within the fashion industry becomes pivotal. Analyzing this market dynamic can unveil drivers of innovation, critical points in the production chain, and where the protection of intellectual assets should be applied. This perspective goes beyond the individual creator, reaching into the structure of the market itself. Thus, it is an exercise in the Economic Law of Intellectual Property applied to fashion. This work explores fashion's political economy, intellectual property's economic significance in the fashion industry, and the application of fashion law in Brazil. It aims to evaluate whether Brazilian law adequately regulates the fashion industry, providing the necessary legal protection for its dynamism.*

**Keywords:** *Copyright, Economic Power, Fashion Law, Imitation, Intellectual property*

## 1. INTRODUCTION

Until the 19th and 20th centuries, fashion was predominantly associated with clothing. Throughout this period, but especially afterward, fashion penetrated and influenced a variety of sectors, industries, markets, and forms of cultural expression, taking on the substance of what Lipovetsky (2009, p. 132) calls consumer fashion, being no longer so much a specific and peripheral sector as a general form at work in the social whole. The expansion into the broader set of elements of human sociability, has transformed fashion in an increasingly multidisciplinary research object. In legal studies, this approach dates to the beginning of the 21st century, when the first fashion law course was offered at Fordham University in the United States, where the Fashion Law Institute was also established in 2010 (SCAFIDI, 2019).



Other areas of knowledge, such as philosophy, economics, or sociology, have been in dialogue with fashion for a longer time, and there is a large accumulation of interdisciplinary knowledge to be considered in legal approaches to fashion (HANSON, 1990; HEMPHILL & SUK, 2009; ASPERS & GODART, 2013). The various epistemological dimensions of the fashion industry and fashion as a social phenomenon are amalgamated into political economy, which can be defined as the study of the reciprocal interaction between the pursuit of wealth and the pursuit of power (GILPIN, 1975, p. 43). From the point of view of economic law, the branch of law that deals with the instrumentalization of economic policy (COMPARATO, 1978), political economy, and law are inseparable: underpinning every legal rule, it is possible to detect a "political economy of the legal form." In other words, economic law is concerned with the "generation, dispute, appropriation and destination of economic surplus" (OCTAVIANNI & BERCOVICI, 2014). According to Geraldo de Camargo Vidigal (1977), one of the essential disciplines of Economic Law is the organization of markets. As a branch of law that sets out to manage economic policy, organize markets, and deal with the generation of economic surplus and the dispute over its appropriation and distribution - with a strong influence from the political economy - Economic Law is legitimized as a suitable field to discuss the organization of the fashion industry in one of its essential aspects: the discipline of intellectual property and the extent of legal protection for creativity. It is essential to identify the political-economic nature of the fashion market and how it is structured in terms of the dispute for power and wealth if the law is to produce the appropriate form of legal regulation for this market. Investigating the dynamics of the fashion market can indicate: (i) what are the main drivers of innovation and economic growth in this market; (ii) what is the critical point in the fashion production chain for creating surplus through the exercise of creativity; and (iii) consequently, where the legal protection of intellectual assets should be focused. This analysis goes beyond the microeconomic perspective of the individual creator, turning it towards the macroeconomic angle of the organization or structuring of the market itself. In this sense, it is an exercise in Intellectual Property Economic Law applied to the fashion industry. The first topic of this paper will map out the framework of the debate, namely the political economy of fashion. Next, we will reflect on the economic importance of intellectual property in the fashion industry and then move on to a practical analysis of how fashion law is applied in Brazil. The methodological approach adopted during the research was that of a bibliographical review, selecting sources that reflect on fashion and intellectual property and then comparing the notions extracted from them with the practical application of fashion law in Brazil. The aim is to understand whether Brazilian law adequately regulates the fashion industry, offering the legal protection necessary for its dynamism. Ultimately, we will see that the Brazilian case can be analyzed positively. The rules for protecting intellectual property in fashion and the direction of case law favor the solidity of a sector that stands out internationally<sup>1</sup>.

## 2. POLITICAL ECONOMY OF FASHION

The assumption that, in most industries, new markets for new products are born out of innovation has been entirely naturalized in the lexicon of the social sciences, at least since Joseph Schumpeter (1994) laid the foundations for his theory of "creative destruction". In the fashion industry, however, innovation takes a particular form of inspiration. In fashion, the new and the old are not mutually exclusive. Innovation does not require the destruction of the outdated. What Jean Baudrillard (1996) characterizes as the "enchantment of fashion," that is, this "spectral and cyclical world of disappearing forms that are endlessly resurrected as effective

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<sup>1</sup> Brazil has one of the most comprehensive textile production chains in the West, having internalized the production of fibers in its market, from cotton plantations to fashion shows, including spinning mills, weaving mills, processing plants, clothing manufacturers and a robust retail sector, according to data from the Brazilian Textile and Apparel Industry Association (Abit). Available at: <https://www.abit.org.br/cont/perfil-do-setor>. Accessed on 28.11.2023.

signs", Lipovetsky (2009) finds in the manifestation of the postmodern moment, when the return of all forms and ideas is possible and ready to be explored. The appreciation of the old and the aspiration for the new coagulate in the fashion world, giving inspiration the central role of driving the development of new markets. Without inspiration, innovation itself cannot become a trend. It is through trends that new fashion markets effectively come into being. Trends are about spreading a new fashion. This is why the creation of fashion paradoxically differs from conventional technological innovation. Fashion is born from inspiration, from recycling, without losing its aspirational novelty; as Raustiala and Springman (2010), pointed, at the same time, it is born to inspire and to be imitated, and that, in fact, the copying of designs fosters market growth and creativity. It is through imitation, in the inspirational sense - and not counterfeiting (HEMPHILL & SUK, 2009, p. 1153)<sup>2</sup> - that fashion exercises its normative power over social behavior (VINKEN & HEWSON, 2010, pp. 14-15). Consequently, in the fashion industry's production chain, it is the innovative, trend-setting creative potential that is at the epicenter of the creation of economic surpluses. It is the trendsetter who creates the new market, but it is the imitators, supported by the mechanism of inspiration, who will realize the full potential of the trend. This must be considered by Law. In this sense, the engine that generates economic surpluses is innovative creation, capable of establishing new trends. As trends gain strength and gain a foothold in the industry, the market grows, enriching itself based on new surpluses that would not exist in the absence of the new replicating, inspirational trend. In fashion, for an innovation to become a trend, it must be in tune with the *Zeitgeist* - the spirit of the times, an omnipresent means of understanding the direction of culture. Designers "possessed by the *Zeitgeist*" foreshadow the future of fashion and set about creating new trends (VANGKILDE, 2015). The *Zeitgeist* cannot be abstracted from the historical and material conditions of society. The way in which society is arranged hierarchically plays an important role in the evolution of the spirit of the times. Many thinkers understood this when they thought about the vectors of fashion development. Fashion is intrinsically related to the differentiation-inclusion binomial. The differentiation vector drives the launch of the new, while the inclusion vector demands that the new be imitated, hence its strong social and hierarchical connotation. When Adam Smith (2015) stated that the "disposition to admire and consequently to imitate the rich and the great" constitutes the meaning of fashion, he immediately concluded that poverty esteems the glory of wealth, and that it is an "envied situation". It's not surprising that Smith dealt with fashion in his *Theory of Moral Sentiments*. For Thorstein Veblen (1965), elegance can be associated with the clothing of the idle class, whose social situation means that they don't have to dedicate themselves to productive work. In such a way that fashion presents itself as the "insignia of idleness (...) it demonstrates that the wearer is able to consume a relatively large amount, but at the same time it attests to the fact that he consumes without producing". Interpreting Veblen, Lipovetsky (2009) points out that, in this view, "an object is never consumed for its own sake or for its use value (...), but because of the prestige, the status, the social position it confers". The socially hierarchical dimension of fashion can also be seen in the work of Georg Simmel (2008), for whom fashion is class fashion. Yet, the idea that fashion is essentially driven by imitating the tastes and preferences of the upper classes is not unanimous. There is also fashion emerging from the bottom of the social hierarchy, as Paul Blumberg (1974) explained about counterculture fashion. Whether fashion trends are promoted from the bottom up or the top down, the most important thing is that, to become a trend, a certain style gains sufficient symbolic capital.

<sup>2</sup> As the author points, "Design copying must be distinguished from other forms of relation between two designs, which may go by any number of names including inspiration, adaptation, homage, referencing, or remixing. Our analysis resists elision of close copies and myriad other activities that produce, enable, and comprise trends. Goods that are part of the same trend are not necessarily close copies or substitutes. Rather, they may be efforts to meet the need of consumers for individual differentiation within flocking".

The concept of symbolic capital, developed by Pierre Bourdieu, shows that "the value of any form of capital depends, in part, upon its recognition." (CROSSLEY, 2014, p. 88). Competition in the fashion market is for social recognition and prestige. The greater the symbolic capital, the greater the role of desire - or envy, as Smith points out - in imitation and, consequently, in generating trends. A legal reflection on the role of intellectual property in the organization of the fashion market must start from the premise that there is a specific point in the fashion industry's production chain where creative power is exercised in such a way as to create new forms of symbolic capital. This is the core to be protected by intellectual property economic law.

### **3. ECONOMIC ANALYSIS OF INTELLECTUAL PROPERTY IN THE FASHION INDUSTRY**

The relationship between intellectual property and the development of Fashion Law can be analyzed through different economic models that include aspects such as innovation, equity, sustainability, exclusivity, and global trade. Regarding innovation, Landes and Posner (2003) discuss how the protection of intellectual property can act as a catalyst for innovation in various sectors, including the fashion industry. The author argues that intellectual property rights, such as patents, copyrights, and trademarks, play a crucial role in providing financial and legal incentives for creators and innovators. In fashion, such protection is key to encouraging designers to develop new designs, fabrics, patterns, and exclusive techniques, as it guarantees them rights over their creations. The guarantee of gratification with recognition for creative work, through intellectual property systems, can act as a driving force for investment in research and development in the fashion industry. This stimulus not only fosters creation, but also promotes competitiveness between brands and designers, who seek to differentiate themselves by designing authentic and unique styles and ideas. This concept is widely discussed by experts such as authors William M. Landes and Richard A. Posner (2003). Furthermore, the authors highlight how the protection of intellectual property protects the rights of creators and acts as a mechanism that promotes innovation, encouraging continuous progress in the fashion industry. So, in this model, patents, copyrights, and trademarks play a vital role in stimulating creativity in fashion. However, much discussion has been about the possible harm inherent in intellectual property reservations in fashion innovation. A study published in the California Law Review addresses how fashion's fluid and derivative nature can conflict with traditional notions of intellectual property (RAUSTIALA & SPRIGMAN, 2006). The author argues that imitation and copying are often seen as negative in other industries, which are essential components of the creative cycle in fashion. Excessive restrictions can lead to an environment where innovation is stifled in favor of protecting property rights. Landes and Posner explore the delicate balance between intellectual property protection and access to knowledge in fashion. They discuss how enforcing copyrights, patents, and trademarks is key to protecting creativity and innovation in the fashion industry. At the same time, they address the challenges associated with maintaining this balance, avoiding excessive restrictions that could limit the dissemination of ideas and trends in fashion. The balance-centered approach focuses on how rigid intellectual property protection can restrict the spread of ideas and trends in the fashion industry. It argues that a more flexible stance could speed up the spread of styles, boosting innovation and democratizing access to fashion. On the model of sustainable development, Jennifer Farley Gordon and Colleen Hill (2015), explore sustainable fashion over time, offering an in-depth analysis of how intellectual property can drive innovation in this context. The authors emphasize the growing value placed on sustainability in the fashion industry and investigate how intellectual property is crucial in promoting sustainable innovation. They argue that protecting patents, copyrights, and other forms of intellectual property not only encourages but also drives the creation and dissemination of more environmentally responsible practices and

technologies in fashion. Thus, by protecting production methods, designs, and innovations aimed at reducing the environmental and social impact of the fashion industry, intellectual property can stimulate investment in research and development of sustainable materials, eco-friendly manufacturing techniques, and more ethical business models. Weaving in economic analysis models, brand value and exclusivity are essential aspects, in the book "Who Owns Culture? Appropriation and Authenticity in American Law" by Susan Scafidi (2005) addresses issues of cultural appropriation and authenticity in American law, providing valuable insights into how intellectual property contributes to building brand value in the fashion industry. The author explores how intellectual property, including copyrights, trademarks, and patents, plays a crucial role in defining and protecting the identity of fashion brands. She analyzes how brands use these legal elements to create an image of exclusivity, authenticity, and distinction. Thus, it is understood that in the fashion world, intellectual property protection goes beyond safeguarding exclusive designs or logos; it encompasses the creation and maintenance of a unique narrative and identity for brands. This legal safeguard plays a fundamental role in establishing an emotional connection between brands and consumers. Protecting intellectual property increases brand value by creating an aura of exclusivity around designs and trademarks. This influences consumer perception and can impact prices and demand for certain items or brands. From the point of view of Susan Scafidi's economic analysis, strict enforcement of intellectual property laws can impact consumer access to fashion. Excessive restrictions can result in high prices and shortages of certain items, making fashion inaccessible to certain demographic groups. In addition, the author highlights how the harmonization of these laws between countries can affect the competitiveness of fashion brands on a global scale, as well as their strategies for entering and operating in different markets. In a globalized market, the protection of intellectual property is crucial to ensuring the competitiveness of brands in international trade. Agreements such as TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) play a key role in harmonizing intellectual property laws between countries. In this sense, the intersection between intellectual property and fashion law is multifaceted, requiring a balanced approach to drive innovation, promote sustainability, ensure equitable access to fashion, and maintain competitiveness on the global stage. Finding this balance is essential for the sustainable and inclusive development of the fashion industry.

#### **4. INSTRUMENTS AND PRACTICAL APPLICATION OF FASHION LAW IN BRAZIL**

Brazil has a strong history of protecting intellectual property rights. With legal provisions for the protection of inventions and inventors since before independence, the institute has been present in Brazilian legislation since the first Constitution in 1824 - even before the Union of Paris of 1883 - followed by other specific laws on the subject. Following the logic adopted by several other countries, the system currently in force divides copyright and industrial property rights, which are currently regulated by Laws No. 9,610/98 and 9,279/96, respectively. According to Fábio Ulhoa Coelho (2012), two differences exist between copyright and industrial property. Firstly, concerning registration: while industrial property derives from an administrative act of a constitutive nature, copyright arises from the act of creation itself, and its registration only serves as proof of prior art. The second difference concerns the extent of the protection: while industrial property deals with the inventive idea itself, copyright is only concerned with how the idea is externalized and presented to the public<sup>33</sup>. Copyright - unlike industrial property - follows a logic of protection closely linked to the author, the creator, granting protection that lasts for their entire life and for a further 70 years after their death (except for some specific types of work). As far as protected works are concerned, the legislator opted to create a non-exhaustive list with a series of examples of what would be protected intellectual works, the creations of the spirit, subject to protection by copyright (art. 7 of the

law above), followed by an exhaustive list, in article 8, of works that are not subject to protection by copyright. If, on the one hand, the law leaves open the types of work protected, with the intention of not limiting its application to new types of work that may arise, on the other hand, it leaves open subjective understandings about whether it applies to works that are not mentioned there. This is where the discussion about the protection - or not - of fashion through copyright comes in. First, it must be considered that fashion creations are quite broad, ranging from a simple drawing - called a sketch - to different types of garments (which can be produced on an industrial scale or exclusive and made completely by hand, as in the case of Haute Couture garments). The scope of copyright is to protect literary, artistic, or scientific works, computer programs and related rights. In the field of fashion, it is only artistic creations that matter. According to the Berne Convention, to which Brazil is a signatory, copyright protection must be granted regardless of the mode or form of expression of the literary, artistic, or scientific work. Article 7(VIII) states that fashion sketches, like prints, are subject to copyright protection. The big debate revolves around whether copyright applies to clothing - whether produced on an industrial scale or by hand. The Court of Justice of the State of São Paulo (TJSP) decided to this effect in the case brought by the French brand Hermès against the Brazilian brand Village 284, for the "I'm not the original" collection, launched by 284 in April 2010, consisting of bags with a design identical to that used by the French brand in its Birkin model, made of sweatshirt. The Court not only upheld the first instance decision and recognized the right of the Hermès brand through copyright, but also considered the Birkin bag to be a "work of applied art", using the teachings of Gama Cerqueira (1946): "The reproduction of a work of art by industrial processes or its application to industry does not denature it, does not take away its artistic character" and Delia Lipszyc (1993), who points the artistic nature of creations, which can also have an utilitarian dimension. The field of industrial property, regulated by Law 9.279/96, includes various institutes, such as trademark law, patents, industrial designs, and geographical indications. A patent is a temporary property title granted by the state to prevent third parties from using the invention and making a profit (free rider). Inventions that meet the requirements of novelty, inventive step, and industrial application are the subject of a patent called an "Invention Patent" and is protected for 20 years. The "Utility Model" is the protection granted to the "improvement of an invention", a new form or arrangement that results in a functional improvement in its use or method of manufacture, with the inventor having exclusive rights of use for 15 years. As it is a protection granted to products with an industrial application, in the field of fashion, it is the appropriate institute for the protection of new fabrics, such as the technological fabrics that appear repeatedly today, machinery, and others. The industrial design, as provided for in article 95, is intended to protect "the ornamental plastic form of an object or the ornamental set of lines and colors that can be applied to a product, providing a new and original visual result (...)", except for works of a purely artistic nature (98). This exclusivity of use is granted to the holder for 10 years, renewable for another three successive periods of five years, thus adding up to a maximum term of 25 years. It is granted almost automatically since it does not require an examination of the merits before the National Institute of Industrial Property (INPI); it is just a formal examination. Among the fashion industry this exclusivity is widely used, as it encompasses various products that can be protected by it, such as fashion accessories like glasses, jewelry items, handbags, and perfume bottles. To illustrate, the Chanel fashion brand, like many others, has several industrial design registrations with the INPI, such as the following items: BR 302018000370-5 (eyeglass frame); BR 302017003244-3 (perfume bottle); BR 30 2021 004117 0 (handbag); and BR 302017003905-7 (watch hand in the shape of the brand's founder Coco Chanel). In addition to three-dimensional items, the industrial design also protects two-dimensional objects, such as prints (for example, BR 302018055161-3, Chanel brand print).

Unlike patents and industrial designs, trademarks can be renewed every ten years in perpetuity. Unlike the provisions of article 15.1 of TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights), which considers a trademark to be "any sign or combination of signs capable of distinguishing the goods or services of one company from those of other companies," the Industrial Property Law, in its article 122, states that "visually perceptible distinctive signs, not included in the legal prohibitions, are susceptible to registration as trademarks." This difference prevents Brazil from recognizing various types of trademarks (known as non-traditional trademarks), unlike countries such as the United States, France, Germany, and some Latin American countries. Several of these trademarks are widely used in the fashion industry, including the olfactory trademark, an important competitive resource as a form of brand differentiation and increasingly used in the sector by various brands to link a particular scent to the brand, drawing the consumer's attention. As far as traditional trademarks are concerned (i.e., word, figurative, and mixed trademarks), there are no new developments in the field of fashion. Trademark registrations must be made following the traditional rules for each type of trademark. What deserves to be debated concerns non-traditional trademarks, especially the position mark, which became accepted in Brazil in September 2021, with the first INPI decision published in May 2023 - recognizing the distinctiveness of the three eyelets applied to the uppers of Osklen sneakers, a national fashion brand. However, in another trademark case, this time involving the French brand Christian Louboutin, the INPI did not recognize the distinctiveness of the red sole used by the brand<sup>3</sup> - and recognized as such in several countries around the world, such as France and the United States, as well as by WIPO and the European Union. The INPI's non-recognition stems from the provisions of Article 124, item VIII of the Industrial Property Law, on the non-registrability of "colors and their names, unless they are arranged or combined peculiarly and distinctively." The legal provision prevents the registration of colors and their names, as it is understood that this is quite limited. Given the number of existing colors, the exclusive use of colors would limit competition and prevent innovation. However, what is being claimed is not the exclusive use of red, but the exclusive use of red applied to the sole of a shoe. And, considering the traditions of the footwear industry, it must be recognized that this is not a common market practice, nor does it impact competition, as it is not a functional element for the manufacture of footwear; on the contrary, the practice makes production more expensive (lacquering process) and when used wears out on first use. In this way, the agency should have considered the distinctiveness acquired over the years of use of the red sole by the brand and recognized the innovative character of the designer in applying color to the sole, considering it as a case of exception to the rule, as provided for in item VIII of article 124. Faced with the agency's decision, the Christian Louboutin brand opted for the direct judicial route, abandoning the administrative route, and filing an injunction to suspend the decision handed down by the INPI. The court case is currently underway<sup>4</sup>. In the field of trademarks, it is also interesting to mention the possibility of registering a print as a trademark, as is the case with the Canvas Monogram, a print by George Vuitton<sup>5</sup> created in 1896 in honor of his father, Louis Vuitton. As each of the elements of the print has been registered as a figurative trademark (in addition, of course, to the brand logo that also makes up the print), as well as the set of these elements, it is a case where a print is protected by trademark registration and therefore has perpetual protection, provided it is renewed every ten years.

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<sup>3</sup> For more information, see: BRAZIL, National Institute of Industrial Property (INPI). Case No. 901.514.225. Administrative decision. May 30, 2023. Available (in Portuguese) at: <https://www.conjur.com.br/wp-content/uploads/2023/09/juiza-suspende-decisao-inpi-negou.pdf>

<sup>4</sup> For more information, see: BRAZIL. FEDERAL JUSTICE, 13th Federal Court of Rio de Janeiro,. Case No. 5082257-22.2023.4.02.5101/RJ, Judge Márcia Maria Nunes de Barros, August 10, 2023. Available at: [https://www.jfrj.jus.br/sites/default/files/SEASI/evento\\_4\\_-\\_despade1.pdf](https://www.jfrj.jus.br/sites/default/files/SEASI/evento_4_-_despade1.pdf)

<sup>5</sup> George Vuitton died in 1936. Under the copyright rules, print protection would only be valid until 2007. With the possibility of protection via trademark law, the luxury brand does not lose the exclusive use of one of its main elements.

Finally, geographical indications are a special type of protection that collaborates and is provided for in articles 177 and 178 of the law. In Brazil, they are divided into *Indicação de Procedência* and *Denominação de Origem*<sup>6</sup>. While the first protects products from a place known as the center of extraction, production, or manufacture, the other protects products from a specific place of origin, which, as a result, have characteristics unique to that location. It is an important tool because it is a means of valuing traditional and regional products, widely used as a way of signaling the product's reputation, quality, and identity, as well as having a differentiating function about competitors - given that the geographical indication seal is recognized by the consumer - and promoting tourism and the culture of the region (GIESBRECHT, MINAS, GONÇALVES and SCHWANK, 2016)<sup>7</sup>.

## 5. CONCLUSIONS

In summary, there is an overlap of institutes in the protection of fashion creations, which can be protected by copyright and industrial property. Some types of creation fall under more than one institute simultaneously, and the right holder can request the most beneficial and convenient protection according to their market strategy. At the same time, the forms of legal protection in Brazil and the case law are clearly not too generic. Nor are they permissible to the point of unprotecting the creator. In this way, Brazil has an adequate legal infrastructure for the fashion industry to flourish, which protects the link in the industrial chain where the vector for generating economic surpluses is found. The innovative and trend-setting creative potential is at the epicenter of generating economic surpluses in the fashion industry. The exercise of this potential in the fashion market occurs precisely where the author's creation meets the legal protection of intellectual property - which, in Brazil, comes in various overlapping forms. This protection, however, only expands to the point of excessively protecting the author's rights against any kind of creative inspiration. The *Hermes v. Village 284* case represents legal protection in the face of counterfeiting. The mere existence of the debate about the red sole of the French brand Christian Louboutin indicates that Brazilian jurisprudence is eager to protect the inspirational mechanism that propagates trends. From the analysis of the Economic Law of Intellectual Property, it can be said that the organization of the fashion market in Brazil has formatting qualities that drive its development and make the national market very competitive in the global fashion circuit.

## LITERATURE:

1. ANGKILDE, K. T. (2015). "Possessed by the Zeitgeist: Inspiration and Prophecy in the Business of Fashion," *Journal of Business Anthropology*, 4(2), pp. 178-200.
2. ASPERS, P., GODART, F. (2013). "Sociology of fashion: Order and change." *Annual Review of Sociology*, 39, pp. 171-192.
3. BAUDRILLARD, J. (1996). *A Troca Simbólica e a Morte*, São Paulo, Loyola.
4. BLAKENEY, M. (1996). *Trade-Related Aspects of Intellectual Property Rights: a Concise Guide to the TRIPS Agreement*, London, Sweet & Maxwell.
5. BLUMBERG, P. (1974). "The Decline and Fall of the Status Symbol: Some Thoughts on Status in a Post-Industrial Society," *Social Problems*, 21(4), pp. 480-498.

<sup>6</sup> Respectively, indication of origin and denomination of origin

<sup>7</sup> In the field of fashion, Brazil recognizes (i) finished leather from Vale dos Sinos - RS; (ii) Irish lace from Divina Pastora - SE; (iii) embroidery from Caicó - RN; (iv) renaissance lace and colored cotton, both from the state of Paraíba; (v) filé embroidery, from Alagoas; (vi) footwear from Franca - SP; (vii) golden grass, from Tocantins; and (viii) opals from Pedro II - PI. All these products are protected through the "Indication of Origin" modality. Cf. GIESBRECHT, H. O., MINAS, R. B. A., GONÇALVES, M. F. W., SCHWANKE, F. H. *Indicações geográficas brasileiras: Brazilian geographical indications: indicaciones geográficas brasileñas*, Brasília, SEBRAE, INPI, 2016.

6. BRAZIL. FEDERAL JUSTICE, 13th Federal Court of Rio de Janeiro, Order. Case No. 5082257-22.2023.4.02.5101/RJ, Judge Márcia Maria Nunes de Barros, August 10th. 2023. Available at: [https://www.jfrj.jus.br/sites/default/files/SEASI/evento\\_4\\_-\\_despadecl.pdf](https://www.jfrj.jus.br/sites/default/files/SEASI/evento_4_-_despadecl.pdf).
7. BRAZIL. COURT OF JUSTICE OF THE STATE OF SAO PAULO, Judgment in Appeal No. 0187707-59.2010.8.26.0100. Village 284 Participações e Comércio De Vestuário Ltda X Hermes International and Hermes Sellier.
8. COELHO, F. U. (2012). *Curso de Direito Comercial, Volume 1: Direito de Empresa*, 16th edition, São Paulo, Saraiva.
9. COMPARATO, F. K. (1978). "O Indispensável Direito Econômico", in COMPARATO, F. K. *Ensaios e Pareceres de Direito Empresarial*, Rio de Janeiro, Forense.
10. CROSSLEY, N. (2014). "Social Class," in GRENFELL, M. Pierre Bourdieu: Key Concepts, UK, Acumen Publishing.
11. GIESBRECHT, H. O., MINAS, R. B. A., GONÇALVES, M. F. W., SCHWANKE, F. H. (2016). *Indicações geográficas brasileiras: Brazilian geographical indications: indicaciones geográficas brasileñas*, Brasília, SEBRAE, INPI.
12. GILPIN, R. (1975). *U.S. Power and the Multinational Corporation: the political economy of foreign direct investment*, New York, Basic Books, Inc.
13. GORDON, J. F., HILL, C. (1990). *Sustainable fashion: past, present and future*, London, Bloomsbury, 2015.
14. HANSON, K. "Dressing down dressing up: the philosophic fear of fashion," *Hypatia*, 5, pp. 107-121.
15. HEMPHILL, C.S., SUK, J. (2009). "The law, culture, and economics of fashion." *Stanford Law Rev.*, 61, pp. 1147-1199.
16. JIMENEZ, G. C., KOLSUN, B. (coord.). (2016). *Fashion Law: a Guide for Designers, Fashion Executives and Attorneys*, Ed. Bloomsbury.
17. LANDES, W. M., POSNER, R. A. (2003). *The Economic Structure of Intellectual Property Law*, Harvard University Press, <https://doi.org/10.2307/j.ctv1q3z2pn>.
18. LIPOVETSKY, G. (2009). *O Império do Efêmero: A moda e seu destino nas sociedades modernas*, São Paulo, Companhia de Bolso.
19. OCTAVIANI, A., BERCOVICI, G. (2014). "Direito e Subdesenvolvimento", in OCTAVIANI, A. *Estudos, Pareceres e Votos de Direito Econômico*, São Paulo, Singular.
20. RAUSTIALA, K., SPRIGMAN, C. (2006). "Intellectual Property and Innovation in the Fashion Industry," *California Law Review*, pp. 575-625.
21. RAUSTIALA, K., SPRINGMAN, C. J. (2010). "Why Imitation is the Sincerest Form of Fashion", *The New York Times*, Aug. 12.
22. SCAFIDI, S. (2005). *Who owns culture? Appropriation and authenticity in American Law*, New Brunswick, Rutgers University Press.
23. SCAFIDI, S. (2019). "Towards a Jurisprudence of Fashion," *Fordham Intell. Prop. Media & Ent. L.J.*, 29, 429.
24. SCHUMPETER, J. A. (1994). *Capitalism, Socialism & Democracy*, London and New York, Routledge.
25. SIMMEL, G. (2008). "A moda", *Revista de Moda, Cultura e Arte*, São Paulo, v.1, n. 1, Apr./Aug.
26. SMITH, A. (2015). *Teoria dos Sentimentos Morais*, 2nd ed., São Paulo, Editora WMF Martins Fontes.
27. VEBLEN, T. (1965). *A Teoria da Classe Ociosa*, São Paulo, Enio Matheus Guazzelli & Cia Ltda.
28. VIDIGAL, G. (1977). *Teoria geral do Direito Econômico*, São Paulo, Editora Revista dos Tribunais.



29. VINKEN, B., HEWSON, M. (2010). Fashion Zeitgeist: Trends and cycles in the fashion system, Berg Publishers.

# THE ROLE OF TOURISM AS A FACTOR OF RURAL DEVELOPMENT IN THE STRATEGIC AND FIELD CONTEXT OF CROATIA: EXPERTS' PERSPECTIVES

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## **ABSTRACT**

*Rural development has been a nominally present issue in the political sphere in Croatia for decades. During the transition to a democratic and market society, its endogenous model began to be promoted, according to which the village should preserve its authenticity as a reservoir of biodiversity and a slower pace of life. Such a vision is seen as significant in the face of the ecological crisis and the dynamic and blasé lifestyle of urban population, which is becoming increasingly dominant on a global scale. Local resources have become a potential when considering activities such as organic agriculture, energy production from renewable sources, traditional gastronomy and enology, and rural tourism. Rural tourism is widely recognised as a platform for networking numerous activities, attracting the urban population and promoting holistic local sustainability in economic, environmental and socio-cultural terms. Despite the strategic documents at the national level, which to a certain extent favour endogenous principles, Croatia's rural areas are burdened by long-term neglect and structural inequalities compared to urban areas. This paper analyses the results of semi-structured interviews conducted with rural experts in 2022. The aim of the study is to investigate the relationship between the positioning of rural tourism in strategic rural development documents and its potential at the local level. The analysed results will be compared with previous studies. According to experts, rural tourism is not sufficiently represented in the aforementioned documents, which primarily promote agricultural development. The promotion of agriculture still lacks clear spatial guidelines and diversification by supporting a broader base of family farms. Although there are undoubtedly natural and cultural resources to strengthen rural tourism in most parts of Croatia, its condition at the local level is consequently characterised by underdevelopment, individual initiatives and insufficient networking of the offer. The existing strategic guidelines and their implementation do not allow for a significant change in the trends of de-ruralization and centralised spatial development in Croatia.*

**Keywords:** *Croatia, development, experts, tourism, rural areas*

## **1. INTRODUCTION**

The study of the development possibilities of Croatian rural areas necessarily includes a review of the most important modernisation effects at the national level during the last century and at the beginning of this century. According to some scholars, Croatia underwent three waves of modernisation in this period (Rogić, 2000). However, none of them was comprehensive. The first took place from the middle of the 19<sup>th</sup> to the middle of the 20<sup>th</sup> century. It led to the collapse of the feudal system and the penetration of the capitalist economy. The second involved centralised planning within the framework of socialism. The third began with Croatia's independence from Yugoslavia and the transition to a market economy and a democratic society. It has not yet been completed. Bušljeta Tonković (2015: 11) points out that the modernisation effects in rural areas were partial in the framework of the above-mentioned

interpretation scheme, i.e. they did not lead to a profound economic and socio-cultural transformation. Although the changes were the result of political decisions or chance rather than systematic planning based on scientific analysis, certain modernisation requirements were implemented. They facilitate rural development (Cifrić, 2003: 14; Bušljeta Tonković, 2015: 23). The most important changes were the following:

- 1) *The first modernisation*: It was characterised by the "position of a double periphery" – that of Croatia in relation to Vienna and Pest and that of Austria-Hungary in relation to the West, which was affected by industrialisation. The pace of modernisation was very slow on Croatian territory, just like in other countries of "peripheral capitalism" that served the export of agricultural products and raw materials (Hodžić, 2006: 19; Štambuk, 2014: 17). Four-fifths of the population were predominantly illiterate and had no significant contact with urban areas (Gross, 1981: 349; Hodžić, 2006: 90). Changes in the countryside included the dissolution of family cooperatives, the individualisation of agriculture and the strengthening of market relations. However, the circumstances described above made innovation in the economy in general, the accumulation of wealth and the improvement of the quality of life (housing standards, nutrition, health, various leisure activities, etc.) impossible (Popović, 2023: 13).
- 2) *The second (socialist) modernisation*: It took place in the second half of the 20<sup>th</sup> century, more precisely between 1945 and 1990. It involved a "paradigm of linear growth" that insisted on industrialisation and urbanisation (Cifrić, 2003: 398), adapted to the socialist vision of the disappearance of the village as a specific cultural space and of the peasantry as a relatively autonomous social group that could represent a political counterweight (Seferagić, 2002: 12). The qualitative and quantitative dimensions of the changes compared to the pre-industrial period were discussed. The changes in rural culture were seen as desirable, i.e. as part of general social progress (Cifrić, 2003: 318). Agriculture was industrialised and collectivised. The dominant role was assigned to state-controlled combines (farms). The processes of de-agrarianisation (abandonment of agriculture) and de-ruralisation (migration to the cities) began. In the period between 1953 and 1991, the rural population decreased from 74.6% to 43.8% (Šundalić, 2010: 43). The main push factors for moving to the cities were the better opportunities for education, social contacts, leisure, work and career. In contrast to individual farmers, those working in the industry had a secure salary, pension and health insurance, the right to housing and credit, paid vacation, etc. (Šundalić, 2010: 75). Despite the unfavourable outcome of the socialist system for the Croatian countryside, certain civilizational achievements have been made that facilitate rural development. Socialist modernisation has fundamentally changed the way of living and working. However, the quality of life was not the same as in urban areas. According to Šuvar (1973: 138-142), the main reasons for this were the lack of regional planning as opposed to urban planning and the selfish policy of the cities, i.e. keeping municipal resources for themselves. In addition, other development problems took center stage in the 1980s. The consequences of the world economic crisis spread to the socialist economy, which did not reach the standards of the West (Puljiz, 1987: 12). Some of the most important projects in rural areas during socialist modernization concerned: 1. the strengthening of communal standards (electrification and expansion of roads), 2. equipping households with the contents of urban culture (e.g. household appliances and mass media), 3. the development of human capital (raising the average level of education, increasing representation of secondary and tertiary occupations, etc.) (Puljiz, 1987: 13; Hodžić, 2006: 129).
- 3) *The third modernization*: It began with Croatia's independence from the Socialist Federal Republic of Yugoslavia. This was followed by a period of transition that included the transformation and privatization of collective social property, the introduction of the

market, and the introduction of a multi-party system. Such a "revolutionary" change in the social order was accompanied by a state of anomie in the Durkheimian sense. It meant the spread of deviant phenomena such as bribery, corruption, financial misconduct, and violence as a result of the social context in which people lost their framework for action because old values and norms had been abandoned and new ones had not yet been defined (Cvjetičanin and Supek, 2003: 12). The situation was further destabilized by the Homeland War (1991 – 1995) over the independence and integrity of the Croatian state, which made it easier for certain criminal groups to take up key positions within the political and economic stratification (Kuvačić, 2008: 142-143). The beginning of the new millennium was extremely difficult for the rural areas, as the war mainly took place there. Many inhabitants were displaced, injured or died, while houses and infrastructure were destroyed (Šundalić, 2006: 130). The socialist development model, according to which the socio-cultural differences between the village and the city should have been eliminated, was also abandoned. As Šuvar (1973: 67) emphasises, little was to remain of the *Gemeinschaft* (pre-industrial rurality) in the face of the dominance of the *Gesellschaft* (modern society). Rural areas were and still are predominantly perceived in terms of "village and agriculture". This represents an inappropriate model of development (agrarian development) that does not enable a higher quality of life for the local population (Štambuk, 2014: 7). This model has been abandoned in the European framework for decades as dictated from outside, from urban centres, dependent on subsidies and destructive for rural culture and the environment (see more in Popović, 2023: 20:25). Despite the nominal insistence on agriculture, problems in this sector have increased during the transition. Large agro-industrial combines disappeared as professional and financial support for farmers. Trade lobbies were given too many opportunities to import goods from abroad (lack of protection for farmers), and banks gave less risky loans (Cifrić, 2003; Šundalić, 2010; Klempić Bogadi et al., 2015). The rural population realised that it was more profitable to invest in other businesses, some of which have a development function (Cifrić, 2003: 405). This is the case with tourism in the rural areas of Istria, while the settlements on the mainland occupy a much more modest position in this respect, as tourism tends to develop in an unplanned way (Cifrić and Trako, 2009: 17). Croatia's membership in the European Union (2013) has opened up new perspectives for rural areas. Given the centralisation of politics, economy and culture in the cities, especially in the post-socialist countries (Svirčić Gotovac, 2017: 98), the European Union is striving to improve the quality of life of the rural dwellers, who accounts for about 60% of the population (Bock and Krzysztofowicz, 2021: 4). Harmonisation of spatial development can help to alleviate typical urban problems such as overcrowding, pollution, congestion of municipal infrastructure, etc. A neo-endogenous development model is preferred for rural areas. It basically implies a paradigm of sustainable development that assumes greater control of the development process by local actors (Popović, 2023: 22). This means that actors should strengthen their human (knowledge) and social capital (trust and cooperation) by networking at the local level and using extra-local resources and networks as needed (see more in Galdeano-Gómez et al., 2011). Preference is given to activities that do not harm the environment and promote an authentic rural culture, while they must be economically sustainable. These include organic farming, renewable energy sources and rural tourism. Such development aims to reposition rural areas according to their greater attractiveness and benefits for the local population and society as a whole (van der Ploeg et al., 2008: 3). For decades, rural tourism has proven to be an important development platform that can bring together numerous activities (agriculture, gastronomy, entertainment and recreation, education, accommodation rental, etc.) and integrate the village into the global society on the basis of gradual emancipation, i.e. the creation of relatively autonomous local structures and a recognisable regional identity (Kušen, 2003:

69; Hodžić, 2006: 104; Neumeier, 2012: 59). Abercrombie et al. (2008: 355) point out that rural tourism had a strong impact on rural life in the second half of the 20th century and thus became an important topic of rural sociology and other disciplines investigating its potential. The European Union is an important extra-local actor for its members in a neo-endogenous sense, co-financing their rural development programs. Member States can choose the appropriate measures according to their needs and the EU's priorities. The seven-year programs are approved by the European Commission and are mainly financed by the European Agricultural Fund for Rural Development. Under the *Rural Development Program of the Republic of Croatia (2014-2020)*, 3.2 billion euros were available. Most of the measures were related to agriculture, while some were aimed at improving living and working conditions in general (measures 6 and 7 – development of non-agricultural activities, infrastructure, cultural activities, etc.). According to Devčić (2022: 21), the contribution of the measures can initially be analysed based on the amount of funds realized and the success of project implementation. It is necessary to analyse the sustainability of the activities after the funding period and the dispersion of the effects in socio-demographic and spatial terms (Popović, 2023: 25). When designing future programs, the factors mentioned above will have a major influence on their quality if neo-endogenous development is truly the goal. Programs should be managed in a multisectoral, multifunctional and territorial way (e.g. LEADER). This differs from the common practice of favoring agriculture and centralized management, which can be observed not only in post-socialist countries but also in other members of the European Union (Galdeano-Gómez et al., 2011; Bokan and Obad, 2018; Popović, 2023).

Rural tourism has considerable potential if we look at strategic documents and local experiences. It first gained importance in Croatia in the mid-1990s, when public authorities began to organise training on agritourism and promote related projects (Demonja, 2014: 74). The *Tourism Development Strategy of the Republic of Croatia until 2020* (2013: 35) recognises rural tourism as an important product in most regions (except in the area of the capital Zagreb as a predominantly urban region according to the OECD classification, where this product does not exist). On the other hand, the above-mentioned strategy and the current *Strategy for the Development of Sustainable Tourism until 2030* (Official Gazette, 2023, No. 2) recognise its insufficient profile and weak development. Certain destinations such as Istria, where the offer is successfully integrated and internationally competitive (agritourism, holiday homes, facilities such as culinary and craft workshops, enology, etc.), confirm significant opportunities (Pamuković et al., 2016: 58). In Istria, the importance of training and networking of entrepreneurs and regional promotion is recognised (Rajko, 2013: 52). This example can serve as a benchmark for increasing the average development of the tourism product and the quality of life of rural areas in Croatia. In the last two decades, the number of holiday homes in the coastal region has risen sharply and ethno-villages are often built. However, researchers point to the questionable authenticity of such an offer due to insufficient information on the part of entrepreneurs and the use of scientific knowledge (ethnology, architecture and sociology). Its insufficient contribution to the quality of life is also evident, as there is no collaboration, i.e. the offer is atomised (Čiča and Mlinar, 2010; Popović, 2023). Even such tourism offers the possibility of survival in rural areas, as the example of the Christmas theme park Božićno selo in the Dalmatian hinterland shows. It is a business in a settlement with only a few inhabitants, among whom are entrepreneurs who work in this family business (Popović et al., 2022: 44). The main reasons for the current underdevelopment of rural tourism are described in the *Action Plan for the Development of Tourism in Rural Areas of the Republic of Croatia* (Ivandić and Kunst, 2015: 53-55) and in the conclusions of the 5<sup>th</sup> *International Rural Tourism Congress* held in Cavtat in

2022<sup>1</sup>. The coincidence of the results of these two documents confirms the extremely slow development dynamics of rural tourism. The main problems are the lack of a national vision for this activity and consequently insufficient measures to finance it, weak human capital (insufficient training of entrepreneurs and political elites in terms of business and destination management), neglect of natural and cultural resources and underdevelopment of the offer (especially more complex offers that would be interesting for travel agencies). This paper defines certain steps to realize rural development and rural tourism development in a strategic and local context. The division of these dimensions is only possible in an analytical sense, while in reality they must overlap in order to achieve neo-endogenous development. Only in this way can rural areas in Croatia position themselves as high-quality alternative living and working spaces based on the promotion of various activities, the strengthening of municipal infrastructure and socio-demographic renewal (Cifrić, 2003: 409; Štambuk, 2009: 40).

## 2. METHODOLOGY

The aim of the study is to analyse the development of rural tourism in a strategic sense and at the local level. It was carried out in July 2022 using the expert interview method. Five participants were selected. These were scholars specialising in rural sociology, geography and architecture, as well as an employee of a professional administrative organization in the tourism sector (tourist board). This method was chosen in order to understand the results of the existing studies from a broader perspective. Official strategic documents also serve this purpose, but their quality and implementation should be verified by the experts' findings. There is a growing scientific interest in the topic of rural tourism related to local cases such as Eastern Croatia, Istria, Lika, Zagora and the Dalmatian islands. A relatively recent meta-analysis of the representation of rural sociology in scientific journals in Croatia shows that rural tourism in particular is one of the biggest interests when it comes to the use of space in economic terms (Popović et al., 2017: 80). Numerous authors point to the possibility of creating interesting destinations by enhancing natural resources and rural heritage and traditions (Ružić and Medica 2010; Kranjčević and Marinović Golubić, 2014; Smolčić Jurdana et al., 2018). The method of expert interviews was chosen according to the principle of "sociological imagination", which Wright Mills emphasised in his 1959 classic of the same name. According to this author, the sociological imagination is an approach by which the researcher interprets actions and relationships at a local level and links them to broader structures. Questions of social life go beyond the biographies of individuals and the local community, whose lives are interwoven with the institutions of a particular historical society as a whole (Wright Mills, 1959: 6-8). In this sense, the expert interviews conducted contribute to the understanding and interpretation of existing studies on rural tourism in two ways:

- 1) by placing them in the broader context of rural policy,
- 2) by providing recommendations for rural development and rural tourism at a strategic and local level.

In the expert interview method, the research questions are usually more general. The reason for this is the selection of participants who have in-depth knowledge of the topic. In this way, it is possible to gain comprehensive insights for various analyses and interpretations (Gillham, 2010: 63-64). During the research, the experts were asked various questions on the following categories:

- 1) the strategic development of rural areas in Croatia and the role of European integration and financial instruments in this process,
- 2) the main problems of rural areas and their possible solutions,

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<sup>1</sup> See more at: <https://5kongres.klubselo.hr/>

- 3) the role of tourism in the development of rural areas so far and the necessary measures to promote it,
- 4) the recognition of tradition at the political and business level as a fundamental resource for development.

The collected data was processed using a thematic analysis of the interview transcripts. Each of these transcripts was read in detail and analytical codes were defined for each of the thematic units (categories). Typical statements of the interviewed participants are attached to the codes. Thematic analysis is useful for summarising the key features of large datasets, highlighting their similarities and differences, and potentially revealing unexpected findings (see more in Brown and Clarke, 2006; Nowell et al., 2017). Accordingly, only some of the results were interpreted, with the authors using available strategic documents and existing studies as additional sources. All research participants were familiarised with the aims and means of data use. Their participation was preceded by informed consent and they were assured anonymity and confidentiality of the data. Participants could withdraw from the study at any time and not answer any questions they did not wish to answer. The entire interviews were tape-recorded, transcribed as a Microsoft Word document and stored in the researcher's archive.

### 3. RESULTS

The experts interviewed agree that rural development in Croatia is not carried out strategically (Table 1). Although such official documents exist, they are not elaborated well enough or do not comply with the principles of neo-endogenous development. As an example, we can take the last two comprehensive documents at the national level, namely the *Rural Development Strategy of the Republic of Croatia (2008-2013)* and the *Rural Development Program of the Republic of Croatia (2014-2020)*. The former correctly identifies the fundamental deficits created by previous modernization movements, such as: 1. weak human and social capital (out-migration and aging population, lower level of education compared to cities, lack of entrepreneurial initiatives), 2. poorer municipal facilities and 3. organizationally and financially weak local self-government units. On the other hand, activities related to neo-endogenous development were highlighted as opportunities, of which rural tourism is one of the most important. Its potential development is favored by the preservation of the environment and the specificity of culture. Bušljeta Tonković (2015: 16) considers these strengths as a positive consequence of the previous neglect of rural areas. However, the *Rural Development Strategy of the Republic of Croatia (2008 – 2013)* (2008: 40) does not prescribe operational measures, and the financial instruments are only mentioned in general terms in relation to the planned total amounts. As for the *Rural Development Program of the Republic of Croatia (2013-2020)*, the list of contracted measures shows a strong focus on agriculture. The opinion of Štambuk (2014: 7) that rural development is primarily seen as agrarian development is confirmed by one of the experts, who points out that even funds that are not earmarked for this activity are allocated to farmers through direct subsidies. The same expert points out that the Ministry's alibi is the lack of capacity, i.e. the lack of interest of the local population in non-agricultural activities and non-economic aspects of development (Table 1). He also claims that it is rather a matter of insufficient preparation of the population for designing project proposals and dealing with this issue. Local Action Groups (LAGs) as potentially important actors (public, private and civil sector partnerships) do carry out some training, but this is not systematic enough. Such groups can be funded through rural development programs. They can formulate local development strategies and motivate the population to implement them by applying for projects. Although there were 56 LAGs registered in Croatia in 2017, covering 92% of the total number of settlements at the national level, a survey of 132 of their members conducted in the same period shows that LAGs are not sufficiently active in rural areas.

This was noted by almost half of the respondents (41%) (Žutinić and Zrakić, 2018: 169-171). The insistence on agriculture does not correspond to the reality in Croatia, as Expert 2 emphasizes and points to the considerable changes in the character of modern villages (Table 1). Different socio-professional groups live in them and their quality of life should be taken into account if they are to be preserved. In order to attract migrants and visitors, it is also necessary to create a desirable living and working alternative to the cities. Although agriculture plays an important role because food production is a global and strategic resource, which is clearly confirmed by the crises related to the new coronavirus pandemic and the war in Ukraine, it should be considered as part of a broader rural development. This is confirmed by the data on a share of only 2.5% of agricultural employees in the total number of employees (Majdak, 2021: 12), as well as by the data on significant emigration from predominantly rural regions such as Slavonia after joining the European Union (Živić, 2021). In any case, the experts point to unfavorable strategic guidelines in the agricultural sector, according to which the measures of the *Rural Development Program of the Republic of Croatia (2014-2020)* are only suitable for larger farmers, while small and medium-sized family farms occupy the majority of agricultural land (Expert 1). Failure to solve certain problems, such as fragmented and uncompetitive farms, strengthening human capital, mechanization, storage conditions and preparation of products for the market, discourages the practice of agriculture (Expert 4). It is not surprising that Croatia imports half of its food (Majdak, 2021: 31-32), while almost 400,000 hectares of agricultural land are unused. This is an area sufficient for the country's needs, but also for the production of raw materials and food for export.<sup>2</sup> Expert 3 points to the non-participatory management of rural development as a major problem in rural areas (Table 1). When drafting strategy documents, there is rarely a political interest in the opinions from the field, i.e. pyramidal decision-making without systematic consultation of local voices is evident (Seferagić, 2000: 144). Numerous studies on rural tourism point to the lack of serious contacts between entrepreneurs and government representatives and the problem of mistrust in politics (e.g. Popović and Relja, 2015; Buzov et al., 2021; Popović, 2023). This is incompatible with the neo-endogenous understanding of development, which relates higher and lower order structures from the supranational to the local level (Cifrić, 2003: 423) in order to gradually create capacities for local self-sustainability (development of human and social capital, the economy and an optimal quality of life in general).

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<sup>2</sup> See more at: <https://www.bojezemlje.hr/poljoprivreda/u-hrvatskoj-400-000-hektara-neiskoristenog-zemljista/>



Category	Topic	Participants' statements
<b>Rural development</b>	Dominance of agriculture (agrarian development)	<p><i>"In the latest rural development program, the funds are again mainly earmarked for agriculture... There is also an alibi from the Ministry... Money that is not earmarked for agriculture is being transferred from the second to the first pillar of the Common Agricultural Policy so that it does not go unpaid. It's about direct subsidies for farmers, not a broader development framework... We don't even manage to spend the money that is made available to us for strategic socio-economic purposes, with the excuse that we don't have the capacity... The LAGs educate about projects, but I don't think that's enough."</i> (Expert 1)</p> <p><i>"Larger farmers benefit from the aforementioned strategic directions... However, most of the agricultural land belongs to medium and small family farms, which, apart from basic subsidies, benefit little from this one comprehensive strategic program, at least for now."</i> (Expert 1)</p> <p><i>"We import a lot of agricultural products, which is a result of all the problems in agriculture, such as aging households, fragmented ownership, outdated technology, lack of entrepreneurial experience..."</i> (Expert 4)</p> <p><i>"The reports only say how much money we will receive from the EU, but we don't know how much agricultural land we want to cultivate. If it were clear what we should do per region, that would be a kind of strategy. Agriculture, transport, tourism and settlements are not taken into account... So many of these elements are not considered at the same time. We know that in the countryside today only a small percentage of people work in agriculture. The village is no longer the village it used to be and it needs a more complex approach. Simply getting money from the EU is not a strategy in my opinion, it should be a tactic. The real question is what we want with rural Croatia."</i> (Expert 2)</p>
	Non-participatory management of development	<p><i>"It is the task of the state to motivate people to start participating and to gradually realise this kind of participation... Generations should be educated to achieve a higher level of participation. So that people themselves determine what their problems are in the community and how they want to solve them, and then, in this kind of neo-endogenous development, hire an expert, ask for money from outside and share experiences with someone. That's what it means to lead your own development. We are so far away from that."</i> (Expert 3)</p>

Table 1: The experts' views on rural development in Croatia

Research participants see the state of rural tourism as a consequence of the strategic approach to rural areas described above (Table 2). Although there is a lot of talk about the potential and benefits of rural tourism, the utmost that has been done strategically is the creation of the *National Catalog "Rural Tourism in Croatia"* in Croatian and English in 2015 (Expert 1). This document can be effective in marketing as it summarizes interesting natural and cultural attractions by region and presents a business offer with detailed contact information (Krešić-

Jurić and Rajković, 2015). The legal inconsistency and the overload of standards show that the policy is not sufficiently concerned with rural tourism. Ivandić and Kunst (2015: 53) point out that it would make sense to enact a special law for this activity in order to standardize the quality of the offer. Systematic statistical data collection would also contribute to this. Currently, there is some data on the distribution of agritourism facilities (Demonja, 2014), while there is no reliable data at the national level for other forms of rural tourism (Grgić et al., 2015: 68). The strategic documents should aim to significantly increase funding for rural tourism, and one important measure concerns the training of entrepreneurs. A study from 2015, in which two hundred of them participated, shows that the workshops are poorly organized and entrepreneurs lack knowledge about all aspects of the business (Smolčić Jurdana and Milohnić, 2018: 216). Expert 2 emphasizes how important it is to start planning rural tourism and to be patient with the results. An integrated offer does not happen overnight, which is especially true for rural development as a broader, multi-sectoral and multifunctional concept (Table 2). Several counties have adopted their rural tourism strategies (Sisak-Moslavina County, Zagreb County and Split-Dalmatia County) (Ružić and Demonja, 2013: 35). Expert 5 notes that future similar documents should avoid existing mistakes such as the impossibility of realizing ideas. In this sense, clearly defined priorities, measures, sources of funding, implementation deadlines and bodies responsible for implementation are necessary. It is important to develop strategies based on information from the field, i.e. to investigate the motivation, needs and wishes of the population so that implementation can be successful. Finally, Expert 3 believes that strategies are a good way to avoid social polarization that can be caused by rural tourism (Table 2). As previous research has shown, starting certain types of businesses requires significant savings or a high credit score. This is the case with holiday homes, which are widespread in the coastal region and significantly increase the standard of living of their owners, as confirmed by the participants of the case study in Split-Dalmatia County (Popović, 2023: 111-113). Research also recognizes the economic viability of agritourism, rural hotels and adventure tourism (Popović and Relja, 2015; Buzov et al., 2021). However, entrepreneurial networks that would lead to the integration and faster development of an (interesting) offer are rare. They can be promoted through strategic planning that would improve the economic opportunities of a larger number of residents (Expert 3 and Expert 4) (Table 2). Planning can also avoid certain situations of overtourism that overwhelm destinations in terms of their environmental, psychological and socio-cultural capacities (Peeters, cited in Bušljeta Tonković, 2019: 253). Overtourism occurs in Krka and Plitvice Lakes National Parks and shows that rural tourism can have the same impact as mass tourism if care is not taken.

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Category	Topic	Participants' statements
<b>Rural tourism</b>	Lack of a thorough strategic orientation at national level	<p><i>"This development framework was originally created in 1995, although there were already very good examples of rural tourism in Croatia before that. Today we still have good examples, but the framework is missing. The National Catalog "Rural Tourism in Croatia" was only published in 2015. It took about 20 years for Croatia, as a country with a tourism share of about 25% of GDP, to create a kind of catalog that summarises the forms of rural tourism in one place."</i> (Expert 1)</p> <p><i>"I am absolutely in favour of rural tourism and the provision of accommodation services, but again, it should all be planned somehow. Even if a strategy is drawn up now, there will be no significant results in the next ten years. Different strategies should be linked together if we want real rural development. It takes time to build a road, settle people and so on. In Germany and France, the rural population has grown, but the incentives are different..."</i> (Expert 2)</p>
	The impracticability of regional development strategies	<p><i>"Existing strategies are an ideal development model. We have municipalities that are small and lack capacity in terms of funding and human resources to educate people about laws and other possibilities of funding. It seems that rural tourism at the county level is more dependent on chance. More attention is being paid to mass tourism on the coast, but we need to pursue some strategies. They have some advantages. County tenders are set according to their guidelines."</i> (Expert 5)</p>
	Tangible socio-economic impact of certain forms of rural tourism	<p><i>"There are some areas in Croatia where these selective forms of tourism contribute to rural development. Istria, the Baranja region and the Hrvatsko Zagorje region are some examples. The most prominent at the moment are Istria and the Šibenik hinterland, i.e. the area near the Krka National Park, where we are also experiencing overtourism."</i> (Expert 1)</p> <p><i>"Tourism raises local standards. After all, it is a level of development. Houses are being built, investments are being made in traditional architecture... People are coming to us. Tolerance and connection with people from outside are increasing. People have more money, so they go on holiday somewhere and see something interesting."</i> (Expert 3)</p>
	Risk of social polarisation	<p><i>"I always ask the question: what about those who don't have the means to engage in rural tourism? There will be a complete polarisation here. There will be people who can invest large sums to build a house with a swimming pool, earn a lot and buy apartments in Zagreb. On the other hand, there will be those who are not in position to do so and who will become poorer and poorer. For tourism to become an engine for the development of a local community, it should be managed by local self-government in a participatory way."</i> (Expert 3)</p> <p><i>"If it is planned, there is room for everything in tourism - wine tasting rooms, picnic areas, crafts, holiday homes... A diverse offer attracts people from outside while engaging the local population and improving their economic opportunities..."</i> (Expert 4)</p>

*Table 2: The experts' views on rural tourism in Croatia*

The adherence to conventional agriculture as the predominant development concept leads to an insufficient appreciation of tradition as a valuable resource on which authentic rural tourism can build (architecture, original gastronomy, old crafts, organic farming, typical activities and events, etc.) (Table 3). The policy does very little to promote tradition.

In recent years, the Ministry of Tourism and the Ministry of Culture have published several manuals on vernacular architecture in different regions of Croatia with practical and useful examples (Baćac, 2011; Živković, 2013; Živković, 2015). There are also certain conservation rules when it comes to protected buildings or areas (Baćac, 2011: 74). However, the approach should be much more comprehensive - from legal regulation and education about the value of cultural heritage and tradition in the modern context to their greater financial promotion in the context of tourism under clear criteria (Table 3). Expert 3 underlines the importance of lifelong education to internalize the values mentioned and make them a respectable practice in the community. With these steps, politics would assert itself as the "guardian" of tradition, but not in the pre-industrial sense, where tradition was the dictate of the past over the present and the future. Today it can only survive if it is reflexive, i.e. it should be legitimized according to its functionality in comparison to other forms of action (Giddens, 2005: 54). The advantages of certain rural traditions are numerous. Peasant society did not pollute nature through agriculture (no chemicals were used), and houses were built of stone and wood. The use of existing facilities saves space and natural resources. At the same time, the materials used are natural, which makes this practice very sustainable. The economic and ecological benefits of such housing are obvious. The same applies to rural tourism, because traditional buildings are an attraction in a world that is looking for authenticity and a departure from the McDonaldization (standardization) of everyday life (Expert 4). Using the example of abandoned houses in Lika and Gorski Kotar in particular, Šarić Žic (2006: 373-374) emphasizes the recognition of the functionality of tradition as the only sure pledge for the future of tradition. The basis should be everyday life, not just tourism. This reduces the risk of tradition becoming a clichéd scene without any authenticity, focused only on profit and whose attractiveness is questionable in the long run (Arbutina and Alfirević Arbutina, 2017: 254). An affirmative attitude towards tradition at all levels would curb the inappropriate use of it (Expert 2), which can often be seen in examples of ethno-villages and holiday homes in Croatia (Čiča and Mlinar, 2010; Popović 2023). Researchers play an important role in classifying the appropriateness of changes in tradition, which, like culture in general, should not be deprived of its right to develop (Frangeš, 2008: 108). Culture survives today only in this way, which is consistent with the idea of neo-endogenous development as a perspective of rural areas in modern society.

*Table following on the next page*

Category	Topic	Participants' statements
<b>Tradition as a development resource</b>	Insufficient recognition	<p><i>"What can you expect if there is not enough support from the state? In our context, everyone is looking at how they can do something as quickly and as cheaply as possible. When it comes to protected areas, the use of traditional elements is binding to a certain extent." (Expert 1)</i></p> <p><i>"Without tradition, there is no rural tourism. You don't get an impression of what the area used to look like and what life was like along the way. There are too few rural architects in Croatia, there is too little knowledge about tradition, but this should not be seen as an obstacle, but as a challenge." (Expert 4)</i></p> <p><i>"There is no systematic research because we don't know what we as a society want from the village. For the houses that have a rental licence, there should be some kind of records and criteria. The locals are aware of their traditions but they need to be educated about their possible functions. Sometimes they are not even aware that they know them, and also by invading the capital, they can destroy these traditions." (Expert 2)</i></p>
	Various possibilities of affirmation	<p><i>"Licences are important, but perhaps education is even more important for future development. You don't learn about Croatian culture. We don't have mechanisms to develop our style and a kind of attitude towards these styles. That's why it doesn't poke you in the eye when something goes wrong. We need legal procedures, education and a good public reputation. Quite simply, some values should be promoted that become naturalised. If the inspector checked whether you were using a PVC window or whether it was funny for others, you'd wonder what had gone wrong..." (Expert 3)</i></p> <p><i>"Certainly the lack of education is one of the elements. Well, there is also a lack of financial resources and incentives. Something like that should be given much more consideration." (Expert 1)</i></p>

Table 3: The experts' views on tradition as a development resource in Croatia

#### 4. CONCLUSION

The modern understanding of rural development is a marginal phenomenon in strategic planning in Croatia. The focus is still on agriculture, which is not being developed under the existing land capacities by promoting a broad base of family farms. As with the first two modernizations, rural areas remain partially modernized for the time being. Štambuk (2014: 7) refers to the rural periphery that has already emerged on the outskirts of the four largest Croatian cities (Zagreb, Split, Rijeka and Osijek), where the economy, cultural institutions and

population are concentrated. The attitude towards rural areas described above means that local entrepreneurs are left to their own devices. Therefore, rural tourism is mostly developed ad hoc, i.e. without a plan, networking, clusters, training to create the best possible offer, etc. As the idea of (neo)endogenous development has been known in Europe for decades and there are positive examples of modernized rural areas (e.g. in France), it is necessary to implement similar principles within the framework of a strategic policy that must be in line with the perspectives of the local population.

#### LITERATURE:

1. Abercrombie, N., Hill, S., Turner, B. (2008). *Rječnik sociologije*. Zagreb: Naklada Jesenski i Turk.
2. Arbutina, D., Alfirević Arbutina, H. (2017). Graditeljska baština te kulturni i kultivirani krajolik u ruralnom prostoru. In A. Korlaet, A. (eds.). *Urbano-ruralne veze* (pp. 248-257). Zagreb: Hrvatski zavod za prostorni razvoj.
3. Baćac, R. (2011). *Priručnik za bavljenje seoskim turizmom: korak po korak od ideje do uspješnog poslovanja*. Zagreb: Ministarstvo turizma Republike Hrvatske.
4. Bock, A. K., Krzysztofowicz, M. (2021). *Scenarios for EU Rural Areas 2040. Contribution to European Commission's long-term vision for rural areas*. Luxembourg: Publications Office of the European Union.
5. Bokan, N., Obad, O. (2018). Nevidljivi Dubrovnik. Istraživanje razvojnih perspektiva u ruralnoj lokalnoj zajednici. *Etnološka tribina*, 41(48): 213-237.
6. Brown, D. L., Schafft, K. A. (2011). *Rural People and Communities in the 21st Century: Resilience and Transformation*. Cambridge: Polity.
7. Bušljeta Tonković, A. (2019). (Un)sustainable (rural) tourism: a Case study of Lika-Senj County. *Socijalna ekologija*, 28(3): 249-268.
8. Bušljeta Tonković, A. (2015). *Održivi razvoj Središnje Like. Prinosi analizi ljudskog i socijalnog kapitala*. Zagreb, Gospić: Institut društvenih znanosti Ivo Pilar, Državni arhiv u Gospiću.
9. Buzov, I., Gutović, T., Popović, T. (2021). The Importance of Lifelong Learning in the Development of Entrepreneurship in Rural Tourism. In J. Bacovska Nedikj, S. Lazarova-Molnar, T. Ersoy, R. Svickey, A. Lj. Spasov (eds.). *Proceedings of the First Virtual Conference of the Center for Scientific Exchange and Education* (pp. 17-26). Skopje: Center for Scientific Exchange and Education.
10. Cifrić, I. (2003). *Ruralni razvoj i modernizacija. Prilozi istraživanju ruralnog identiteta*. Zagreb: Institut za društvena istraživanja.
11. Cifrić, I., Trako, T. (2009). Seoski krajobraz kao razvojni potencijal. In B. Petrač, A. Šundalić, K. Zmaić (eds.). *Sadašnjost i budućnost sela i poljoprivrede. Zbornik radova sa znanstvenog skupa „Globalizacija i regionalni identitet“* (pp. 12-35). Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet, Poljoprivredni fakultet.
12. Cvjetičanin, V., Supek, R. (2003). *Emile Durkheim i francuska sociološka škola*. Zagreb: Naklada Ljevak.
13. Čiča, Z., Mlinar, A. (2010). Etno-sela između očuvanja identiteta i poduzetničkog trenda. *Etnološka tribina*, 33(40): 117-128.
14. Demonja, D. (2014). The Overview and Analysis of the State of Rural Tourism in Croatia. *Sociologija i prostor*, 52(1): 69-90.
15. Devčić, A. (2022). Pregled kriterija i investicija u nepoljoprivredne djelatnosti kroz Program ruralnog razvoja RH 2014.–2022. *ET<sup>2</sup>eR – ekonomija, turizam, telekomunikacije i računarstvo*, 4(1): 15-21.

16. Frangeš, G. (2008). Etnološko istraživanje kao izvor podataka za planiranje strategije održivog razvoja ruralnih područja. Ogledni slučaj: Žumberak. *Etnološka istraživanja*, 12/13: 107-125.
17. Galdeano-Gómez, L., Aznar-Sánchez, A., Pérez-Mesa, J. C. (2011). The Complexity of Theories on Rural Development in Europe: An Analysis of the Paradigmatic Case of Almería (South-east Spain). *Sociologia Ruralis*, 51(1): 54-78.
18. Giddens, A. (2005). *Odbjegli svijet – kako globalizacija oblikuje naše živote*. Zagreb: Naklada Jesenski i Turk, Klub studenata sociologije Diskrepancija.
19. Gillham, B. (2010). *Case Study Research Methods*. London: Bloomsbury Publishing.
20. Grgić, I., Zrakić, M., Gudelj Velaga, A. (2015). Agroturizam u Republici Hrvatskoj i nekim državama Europske unije. *Agronomski glasnik*, 77(1-2): 61-74.
21. Gross, M. (1981). O društvenim procesima u sjevernoj Hrvatskoj u drugoj polovici 19. st. In M. Gross (ed.). *Društveni razvoj u Hrvatskoj od 16. do početka 20. stoljeća* (pp. 343-371). Zagreb: Sveučilišna naklada Liber.
22. Hodžić, A. (2006). *Selo kao izbor?* Zagreb: Institut za društvena istraživanja u Zagrebu.
23. Ivandić, N., Kunst, I. (2015). *Action Plan for the Development of Tourism in Rural Areas of the Republic of Croatia*. Zagreb: Ministry of Tourism, Institute for Tourism.
24. Klempić Bogadi, S., Podgorelec, S., Šabijan, M. (2015). Hrvatsko selo na početku 21. stoljeća – studija slučaja općina Gornja Rijeka. *Sociologija i prostor*, 53(2): 139-161.
25. Kranjčević, J., Marinović Golubić, M. (2014). Prostor kao element ruralne rekonstrukcije. In M. Štambuk, L. Šikić-Mičanović (eds.). *Ruralna općina: sutra. Društvena re/konstrukcija na ruralnom teritoriju* (pp. 85-98). Zagreb: Institut društvenih znanosti Ivo Pilar.
26. Krešić-Jurić, D., Rajković, V. (2021). *National Catalog „Rural Tourism in Croatia“*. Zagreb: Croatian Chamber of Economy, Ministry of Tourism.
27. Kušen, E. (2003). Uređenje, razvoj i obnova hrvatskog ruralnog prostora. Prostorni, gospodarski i sociokulturni okvir za razvoj ekološke poljoprivrede. *Sociologija sela*, 41(1-2): 29-45.
28. Kuvačić, I. (2008). *Sjećanja*. Zagreb: Razlog.
29. Majdak, T. (ed.) (2021). *Godišnje izvješće o stanju poljoprivrede u 2020. godini*. Zagreb: Ministarstvo poljoprivrede, Uprava za poljoprivrednu politiku, EU i međunarodnu suradnju.
30. Neumeier, S. (2012). Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? – Proposal for a Stronger Focus on Social Innovations in Rural Development Research. *Sociologia Ruralis*, 52(1): 48-69.
31. Nowell, L. S., Norris, J. M., White, D. E., Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1): 1-13.
32. Pamuković, A., Dorbić, B., Radeljak, M. (2016). Iskustvo i praksa razvoja agroturizma u Europi te njegov utjecaj na Hrvatsku. *Agronomski glasnik: glasilo Hrvatskog agronomskog društva*, 78(1): 51-64.
33. Popović, T. (2023). *Refleksivnost tradicije u ruralnim područjima: studija slučaja kuća za odmor u Splitsko-dalmatinskoj županiji* (Doctoral Thesis). Split: Filozofski fakultet u Splitu.
34. Popović, T., Relja, R. (2015). Strategic Planning and Actors' Perspectives in Rural Tourism. In A. Mašek Tonković, A. (ed.). *Economy of Eastern Croatia – Vision and Growth* (pp. 439-453). Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet.

35. Popović, T., Relja, R., Gutović, T. (2017). Aktualnost ruralne sociologije: problematiziranje održivosti “prostora iza”. In A. Bušljeta Tonković, Ž. Holjevac, I. Brlić, N. Šimunić (eds.). *Koga (p)održava održivi razvoj? Prilozi promišljanju održivosti ruralnih područja u Hrvatskoj* (pp. 71-94). Zagreb, Gospić: Institut društvenih znanosti Ivo Pilar.
36. Popović, T., Relja, R., Marasović, A. (2022). Mogućnosti razvoja tematskog turizma u ruralnim područjima: studija slučaja Božićnog sela. *Agroeconomia Croatica*, 12(1): 42-51.
37. Puljiz, V. (1987). Ruralno-sociološka istraživanja i glavni trendovi promjena u našem selu. *Sociologija sela*, 25(97-98): 9-18.
38. Rajko, M. (2013). Institucionalni model razvoja ruralnog turizma na primjeru Središnje Istre. *Oeconomica Jadertina*, 3(2): 50-62.
39. Rogić, I. (2000). *Tehnika i samostalnost. Okvir za sliku treće hrvatske modernizacije*. Zagreb: Hrvatska sveučilišna naklada.
40. *Rural Development Program of the Republic of Croatia* (2014 – 2020). Zagreb: Ministry of Agriculture.
41. *Rural Development Strategy of the Republic of Croatia* (2008 – 2013). Zagreb: Ministry of Agriculture, Fisheries and Rural Development.
42. Ružić, P., Demonja, D. (2013). Prirodna i antropogena osnova turizma Hrvatske. *Sociologija i prostor*, 51(1): 45-65.
43. Ružić, P., Medica, I. (2010). Tradicijski seoski identitet Istre – njegovo prepoznavanje i uključivanje u turistički proizvod. *Sociologija i prostor*, 48(3): 479-504.
44. Seferagić, D. (2002). Selo između tradicionalne i virtualne zajednice. In D. Seferagić (ed.). *Selo: izbor ili usud* (pp. 11-33). Zagreb: Institut za društvena istraživanja u Zagrebu.
45. Seferagić, D. (2000). Kvaliteta življenja u selu u tranziciji. *Sociologija sela*, 38(1-2): 109-148.
46. Smolčić Jurdana, D., Milohnić, I. (2018). Sustav obrazovanja za ruralni turizam: analiza stanja i preporuke. In D. Smolčić Jurdana, I. Milohnić (eds.). *4 međunarodni kongres o ruralnom turizmu. Novo vrijeme – vrijeme za ruralni turizam* (pp. 210-219). Rijeka, Zagreb: Fakultet za menadžment u turizmu i ugostiteljstvu, Hrvatska udruga za turizam i ruralni razvoj „Klub članova selo“.
47. Smolčić Jurdana, D., Soldić Frleta, D., Đedović, L. (2018). Obilježja turizma u ruralnom prostoru. In D. Smolčić Jurdana, I. Milohnić, I. (eds.). *4 međunarodni kongres o ruralnom turizmu. Novo vrijeme – vrijeme za ruralni turizam* (pp. 220-229). Rijeka, Zagreb: Fakultet za menadžment u turizmu i ugostiteljstvu, Hrvatska udruga za turizam i ruralni razvoj „Klub članova selo“.
48. *Strategy for the Development of Sustainable Tourism until 2030* (2023). Zagreb: Official Gazette, No. 2.
49. Svirčić Gotovac, A. (2017). (Ne)mogućnost održivog razvoja za male i srednje gradove u hrvatskom prostornom sustavu. In A. Bušljeta Tonković, Ž. Holjevac, I. Brlić, N. Šimunić (eds.). *Koga (p)održava održivi razvoj? Prilozi promišljanju održivosti ruralnih područja u Hrvatskoj* (pp. 95-107). Zagreb, Gospić: Institut društvenih znanosti Ivo Pilar.
50. Šarić Žic, I. (2006). Prikaz tradicijskog graditeljstva na području Krivog Puta. *Senjski zbornik*, 33: 353-376.
51. Štambuk, M. (2014). Razvojna samoodrživost na ruralnom teritoriju. In M. Štambuk, L. Šikić-Mičanović (eds.). *Ruralna općina: sutra. Društvena re/konstrukcija na ruralnom teritoriju* (pp. 9-23). Zagreb: Institut društvenih znanosti Ivo Pilar.
52. Štambuk, M. (2009). Neki elementi ruralne obnove u Hrvatskoj. In B. Petrač, A. Šundalić, K. Zmaić (eds.). *Sadašnjost i budućnost sela i poljoprivrede. Zbornik radova sa znanstvenog skupa „Globalizacija i regionalni identitet“* (pp. 37-48). Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet, Poljoprivredni fakultet.



53. Šundalić, A. (2010). *Selo iz autentičnosti u neprepoznatljivost. Prilog sociološkom istraživanju ruralnosti Slavonije i Baranje*. Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet u Osijeku.
54. Šundalić, A. (2006). Osiromašivanje i nerazvijenost – Slavonija i Baranja u očima njezinih stanovnika. *Socijalna ekologija*, 15(1-2): 125-143.
55. Šušvar, S. (1973). *Između zaseoka i megalopolisa*. Zagreb: Institut za društvena istraživanja, Centar za sociologiju sela.
56. *Tourism Development Strategy of the Republic of Croatia until 2020* (2013). Zagreb: Croatian Government.
57. van der Ploeg, J. D., van Broekhuizen, R., Brunori, G., Sonnino, R., Knickel, K., Tisenkopfs, T., Oostindie, H. (2008). Towards a framework for understanding regional rural development. In J. D. van der Ploeg, T. Marsden (eds.). *Unfolding webs* (str. 1-28). Assen: Van Gorcum.
58. Wright Mills, C. W. (1959). *The Sociological Imagination*. New York: Oxford University Press.
59. Živić, D. (2021). Aktualne demografske prilike i perspektive revitalizacije stanovništva Splitsko-dalmatinske županije. In G. Blagus (ed.). *Doprinos JLP(R)S-a demografskoj revitalizaciji Splitsko-dalmatinske županije* (pp. 4-5). Zagreb: Središnji državni ured za demografiju i mlade.
60. Živković, Z. (2015). *Tradicijska kamena kuća Dalmatinskog zaleđa. Priručnik za obnovu i turističku valorizaciju*. Zagreb: Ministarstvo turizma, Ministarstvo vanjskih i europskih poslova.
61. Živković, Z. (2013). *Hrvatsko tradicijsko graditeljstvo*. Zagreb: Ministarstvo kulture, Uprava za zaštitu kulturne baštine.
62. Žutinić, Đ., Zrakić, M. (2018). Revitalizacija ruralnih područja iz perspektive lokalnih akcijskih grupa. In A. Šundalić, K. Zmaić, T. Sudarić, Ž. Pavić, D. Janković, A. Dremel, N. Krivokapić (eds.). *Sudbina otvorenih granica: zbornik radova sa znanstvenog skupa Globalizacija i regionalni identitet* (pp. 165-183). Osijek: Filozofski fakultet.

# SUSTAINABLE TOURISM INDICATORS AS A FACTOR OF SUSTAINABLE DEVELOPMENT OF RURAL AREAS – A LITERATURE REVIEW

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## **ABSTRACT**

*The tourism sector has become a great potential for growth with its economic and social advantages. Given the global tourism changes, the new tourism industry is facing a major turning point. The solution to mass tourism in the tourism sector is reflected in the development of sustainable tourism in rural areas. Those who need this potential of the tourist offer are waiting for the development with new tourism policies, which act as a motivation for tourism seekers. Tourism in rural areas has great potential, which is reflected through history, health, culture, ecology as a potential for long-term sustainable development of the economy. The presence of certain changes and their strength is measured by indicators of sustainable tourism development. Indicators are also a measure of the presence of a phenomenon, its current impact on rural areas, as well as a measure of risk and occurrence of future problems. Of great importance is the measurability, relevance, availability, clarity and comparability of indicators of sustainable tourism in rural areas, which significantly contribute to economic progress. The aim of this paper is a theoretical presentation of sustainable tourism and the importance of measuring indicators of sustainable tourism in rural areas as a measure of long-term sustainable development of the economy through the tourism sector.*

**Keywords:** *indicators of sustainable tourism, sustainable development, rural areas, rural tourism*

## **1. INTRODUCTION**

In the past twenty years, a large number of definitions of sustainable tourism have appeared in domestic and foreign publications. However, the key one is that of the World Tourism Organization (UNWTO), which, respecting the definition of sustainable development, defined sustainable tourism as one that meets the needs of current tourists and receptive regions while protecting and improving opportunities for the future (Liu, 2003). Also relevant is the definition of the Institute for Tourism of the Republic of Croatia, according to which sustainable tourism is one that can survive over a long period of time because it does not cause environmental degradation, but achieves benefits in the economic, ecological, social and cultural environment in which it takes place (Carić, 2006). In addition to sustainable tourism, related concepts such as responsible, green tourism, ethical and ecotourism also appear. As with sustainable development, the effects of tourism on spatial reality are divided into three main categories or characteristics: environmental (natural, ecological), sociocultural and economic.

These categories are not mutually exclusive, but have a significant degree of overlap and serve as a tool in considering and interpreting the effects of tourism (Hall, 2008). Guided by these categories, the World Tourism Organization (UNWTO) proposed indicators as a means of monitoring the ecological, sociocultural and economic characteristics of sustainable tourism (UNWTO, 2004). In the proposals for the implementation of indicators of sustainable tourism, the ecological, sociocultural and economic groups of indicators are very clearly distinguished, which will be described in detail in the further text of this paper.

## **2. THE TERM AND CHARACTERISTICS OF SUSTAINABLE TOURISM OF RURAL AREAS**

The fact is that space and its geophysical properties are the basic assumptions on which the development of the tourist offer of an area is based. That is why it is very important to treat this space rationally and responsibly. This is especially important today, when ecology in general is given more attention due to the increasing threat to the human environment (Blažević, 2007: 459). The concept of sustainable development is one of the most widespread modern concepts of the development of all human activities, including tourism. By announcing the need for sustainability, tourism as a globally desirable factor due to the benefits and opportunities it brings to the local community is also viewed through the environmental aspect from which it is inseparable, from which it emerged that tourism and the environment are interdependent factors whose positive relationship should be strengthened due to the benefits of both factors (Čorak, 2011: 124). The concept of sustainable development of tourism was developed from the theory of sustainable development, which was developed as a reaction to increasingly pronounced ecological and sociocultural problems faced by humanity, especially urban areas. The application of the concept of sustainable development in tourism should ensure that uncontrolled development does not destroy or devastate the resources on the basis of which tourism began to develop in a certain area. Such a development concept implies that the needs of current generations should be met in such a way as not to jeopardize the ability of future generations to meet their needs. Therefore, the concept of sustainable development should be the development concept of tourism in the present and in the future at all levels of its development. Rural tourism implies the tourist development of agricultural areas, sustainable use of natural resources and cultural heritage, improvement of the preservation of local traditional customs through a special design of the tourist offer and meeting the needs of guests in terms of accommodation, food and beverage services, recreation and agricultural activities with the identity of the area (Vinšalek Stipić and et al., 2020). The main characteristics of rural tourism are the possibility of continuous utilization of tourist capacities and development of the tourist offer. The basic division of catering establishments distinguishes between establishments for food and accommodation. Catering facilities for food in rural tourism are restaurants and rural households. Apart from the basic role of accommodation, accommodation catering facilities can provide (Firšt and Godek, 1996: 465):

- boarding and non-boarding food services
- entertainment and recreation
- the possibility of buying different products from the host, such as cheeses, fruits, vegetables, wine
- rental of cars, horses for recreational riding, organization of excursions and the similar

Most of the income from tourism consumption is transferred to the economies where it was generated and constitutes the income of the local population. In tourism-developed countries, where rural tourism is at a higher level than in Croatia, it has a great influence on payment relations with other European countries.

Foreign tourists buy products and services during their tourist stay, which represents the so-called the "invisible export" and the organization and planning of tourist development are handled by the Tourist Board, which performs tasks: planning the tourist offer; marketing and promotion; financing and coordinating tourist tasks of different participants (Firšt and Godek, 1996: 466). The plan, as a basic document of rural tourism development, establishes the goal of rural tourism development and therefore it is necessary to measure the indicators of sustainable tourism. By creating a rural tourism development plan, the main attention should be paid to the economic and social benefits of tourism development by increasing economic benefits, increasing income from tourism and also on increasing employment with the necessary sustainable development. Sustainable development refers to the responsible management of social, economic and environmental aspects. A sustainable management approach is focused on responsibility, transparency, focus on participants, and on systematic measurement and reporting (Vinšalek Stipić, 2021). Globally accepted principles of sustainable development are defined through the Declaration from Rio and Agenda 21, and the Declaration and Implementation Plan from Johannesburg (Hens and Nath, 2005; Gallikowski, 1999): integration of environmental issues into development policies; internationalization of costs related to the environment; the participation of all social stakeholders in decision-making through the process of consultation and dialogue and the creation of partnerships; access to information and justice; generational and intergenerational equality and solidarity; the principle of interdependence between the local and global levels; access to services and financial resources necessary to meet basic needs. Tourists are mostly motivated by natural landscapes, monuments or events of cultural significance, i.e. natural and cultural attractions, not necessarily and only social ones. The rapid and uncontrolled development of mass tourism caused irreversible changes in its social and natural sphere and had a negative impact on the environment and its standard of living. Inadequate implementation of development plans and strategies, lack of experts in the field of tourism, excessive exploitation of natural resources with the aim of achieving the greatest possible economic profit, and the destruction of the cultural identity of the destination, are just some of the problems facing society due to unacceptable management of tourism. Also, at the same time, the motivation of tourists to go to a preserved environment and integrate with the local community is growing. In response to the above, sustainable tourism is beginning to develop, which tries to minimize the damage caused in the social, ecological and economic environment. Sustainable tourism is the result of the synergistic action of three seemingly conflicting areas, namely the environment, society and economy. From the environmental aspect, efforts are being made to encourage the strengthening of environmental responsibility, to inform the public, to protect and preserve natural resources and non-renewable energy sources, to minimize the level of environmental pollution and to take steps that would lead to a reduction in the amount of waste materials in the production process. From the economic aspect, efforts are made to achieve cooperation and partnerships between the local population, authorities and any other interested party, so that through the exchange of knowledge and experience of the parties involved, quality strategic plans for the development of an area can be developed and ensure its long-term and sustainable growth. Also, through the economic sphere of development, efforts are being made to ensure a fair distribution of profits from tourism among tourism stakeholders. In conclusion, the social component in sustainable tourism advocates for the development and strengthening of awareness of respect for socially sensitive issues, such as the rights of local communities and the protection of their identity. Therefore, the main goal of sustainable tourism is to achieve well-being and protection of essential values for current and future generations. The goals of sustainable development of tourism derive from the general goals of sustainable development, that is, from their adaptation to the specifics of tourism.

The World Commission on Environment and Development (WECD) states the goals of sustainable development (Bartoluci, 2013: 131):

- 1) Political system - ensures efficient participation of the local community in decision-making in planning
- 2) Economic system – is capable of providing new values and other technical knowledge on a sustainable basis
- 3) The social system - offers solutions to overcome the tensions arising from disharmonious development
- 4) Production system - respects the obligation to preserve the environment for future development
- 5) Technological system - new, advanced solutions are constantly coming out
- 6) International system - supports sustainable development models
- 7) Administrative system - it is flexible and has the ability to correct

Since the publication of the report "Our Common Future" by the Brundtland Commission in 1987 (UN, 1987), numerous studies have been conducted and works published on the topic of sustainable development and sustainable tourism. On the trail of such considerations are papers that prove the connection and impact of tourism on everyday life activities and the concept of sustainable living (Simpson, 2009; Tao and Wall, 2009) and the relationship between cultural heritage and sustainable tourism (Coccosis, 2008), which was preceded by a few years earlier research on the relationship between the local community and tourists from the aspect of using common resources (Briassoulis, 2002). A special interest in the research of sustainable tourism is, in addition to the relationship to the natural and cultural attraction base, it is devoted to the influence and mutual connections of tourism with the local population and the measurement of this influence. Among such works, extensive research was carried out, among others, in Turkey, Australia, the Slovenian coast, the Balearic Islands, British Columbia, Colorado, Arizona and Texas, where the attitudes of the local population were examined using different methods (Korca, 1996; Tovar and Lockwood, 2008; Nemec- Rudež and Vodeb, 2010; Aguiló and Nadal, 2005; Nepal, 2008; Besculides et al., 2002; Andereck et al., 2005; Choi and Sirakaya, 2005). As Bramwell (1994) noted in his introductory paper, "a key point in many developed countries is a particularly high regard for the countryside: it is seen as special and therefore particularly worthy of protection". Therefore, the focus of any tourism development in rural areas should be on sustainable development that protects or retains the intrinsic qualities of the countryside. Lane (1994) further states four additional reasons for the adoption of sustainable development policies: a) the need to implement sustainable management systems to protect sensitive areas; b) the need to mediate between the conflicting goals of conservation and development; c) the need to encourage balanced, broad, but community-oriented economic growth; d) the need to maintain the "rurality" of rural areas. These principles are, of course, common in the sustainable tourism literature, and other numerous papers in the 1994 edition that suggest ways to operationalize them. Effectively, therefore, rural tourism is considered to be synonymous with sustainable tourism development, with all that is implied for the nature, scope, character and ownership of tourism development (Roberts and Hall, 2001). Perhaps more relevant to this discussion, it is based on three basic assumptions: first, that all tourists visit the countryside primarily to experience rurality; second, that sustainable tourism is the most effective (and universally appropriate and acceptable) means of achieving economic growth; and, third, that the character and quality of rural areas should be protected or maintained as the world around them transforms or advances. Views of sustainability as a luxury of idealism remain, and this can of course be found in countries struggling with political, economic and social crises.

Sustainability issues, although still prominent in the rural tourism literature, have expanded to include a wider range of issues that seem to draw tourism into ever-increasing policy problems, and the achievement of 'sustainable' rural tourism is becoming increasingly elusive.

### **3. SUSTAINABLE TOURISM INDICATORS AS A FACTOR OF SUSTAINABLE DEVELOPMENT OF RURAL AREAS**

The development of sustainable tourism should ensure the optimal use of the natural base, preserving the socio-cultural authenticity of the local community with long-term social and economic welfare for all interest-influenced groups (Vinšalek Stipić, 2017). For this purpose, regular monitoring and supervision of all processes in tourism is necessary, which is why there is a need to apply appropriate quantitative and qualitative measuring instruments of sustainable tourism. Indicators of sustainable tourism are measures of the presence and size of a certain current phenomenon, signs of a future situation or problem, a measure of risk or possible need for action, and means of identification and measurement of the results of our actions. When choosing indicators of sustainable tourism, it is necessary to respect the criteria of relevance, feasibility (availability), credibility, clarity and comparability (Vojnović, 2014). An important but not decisive factor is the number of indicators used, while this depends on the size of the tourist destination or region, the outcomes that are to be verified, the interests of users and the availability of sources and information. The final number of indicators is greatly influenced by limitations such as available time, financial resources, and applied technology and methodology. Some indicators, although very important in the assessment of sustainable tourism, can be applied to individual destinations depending on the stage of tourism development. Indicators are sets of information that have been formally selected to measure changes important for the development and management of tourism, and are divided into three basic groups (Vojnović, 2014): Economic - tourism indicators; Social indicators; Abiotic – ecological indicators. There are different definitions of sustainable development of rural areas, but they all have in common the fact that they are based on the optimal use of resources and care for future generations with the aim of meeting the needs of not only participants in the tourist market. There is an increasing number of tourist arrivals and overnight stays, from which various benefits are realized, but certain damages also occur. The economic indicators of tourism are reflected in the growth of income from tourism consumption, the tourism multiplier and the employees who contribute to the realization of economic benefits from tourism. The development of tourism would not be possible without investments in tourism that are significant for achieving a certain level of quality of the tourist offer. Socio-cultural indicators aim to reduce socio-cultural differences and introduce tourists to the customs, traditions, and lifestyle of the local population. In order to meet all the requirements, there is a need for labor and there are migration movements, especially during the tourist season. Ecological indicators of tourism refer to the use of natural resources for the purpose of tourism, the concentration of tourists in a certain area at a certain time in order not to disturb the natural balance and biodiversity. There are also problems of waste disposal, air, water and soil pollution, the effects of which cause consequences for climate change. The ecological footprint is intended to indicate the insufficient amount of resources that humans need in everyday life through housing, food, transport and goods and services. It also measures the impact of man on planet Earth. Special emphasis is placed on the harmfulness of air transport to the environment and the unsustainability of such travel. Indicators of sustainable development of tourism indicate numerous benefits that tourism brings us. Based on the current availability of data on rural areas, only a partial and limited application of research on the development of rural tourism based on indicators of sustainable tourism is possible. In order for the benefits to be realizable in the future, it is necessary to develop tourism in accordance with the possibilities that the natural environment offers us.

#### 4. CONCLUSION

Numerous scientific and professional papers around the world have identified the great potential for rural tourism as a phenomenon and as an integral part of rural restructuring. From the scientific and professional point of view it can be stated that expectations of its potential achievements were therefore high and numerous. The development of sustainable tourism in rural areas significantly contributes to the development of rural regions. For this purpose, regular monitoring and supervision of all processes in tourism is necessary, which is why there is a need to apply appropriate quantitative and qualitative measuring instruments of sustainable tourism. Monitoring the development of sustainable tourism is carried out through indicators that measure the presence of certain phenomena. Measurability, relevance, accessibility, clarity and comparability are just some of the characteristics of indicators of sustainable tourism in rural areas. More discussion and additional perspectives are needed to determine alternatives for inclusive recreation today and in the new millennium. The limitations of this paper are reflected through the limited presentation of the relevant literature and the lack of empirical research. Therefore, the recommendation for the future research in the next paper is to include additional relevant scientific literature and to conduct an empirical research on a concrete example.

#### LITERATURE:

1. Agulio, P. E. & Nadal, J. R. (2005). Host community perceptions: a cluster analysis. *Annals of Tourism Research*, 32(4), pp. 925-941.
2. Andereck, K. L., Valentine, K. M., Knopf, R. C. & Vogt, C. A. (2005). Residents' perceptions of community tourism impacts. *Annals of Tourism Research*, 32(4), pp. 1056–1076.
3. Besculides, A., Lee, M. E. & McCormick, M. J. (2002). Residents' perceptions of the cultural benefits of tourism. *Annals of Tourism Research*, 29(2), pp. 303–319.
4. Blažević, B. (2007). *Turizam u gospodarskom sustavu*. Opatija: Fakultet za turistički i hotelski menadžment u Opatiji
5. Bartoluci, M. (2013). *Upravljanje razvojem turizma i poduzetništva*. Zagreb:, Školska knjiga
6. Bramwell, B. (1994). Rural tourism and sustainable rural tourism. *Journal of Sustainable Tourism* 2(1 + 2), pp. 1–6.
7. Briassoulis, H. (2002). Sustainable tourism and the question of the commons. *Annals of tourism research*, 29(4), pp. 1065-1085.
8. Carić, H. (ur.) (2006). *Održivi turizam u deset koraka: planiranje održivog turizma zasnovanog na baštini i prirodnom nasljeđu*. Zagreb: Institut za turizam i Odraz.
9. Coccossis, H. (2008). Cultural heritage, local resources and sustainable tourism. *International journal of services technology and management*, 10(1), pp. 8-14.
10. Cerovac, V. (1989). Revitalizacija starih istarskih gradića. *Gospodarstvo Istre*, 2(1):83-84.
11. Choi, H. S. C. & Sirakaya, E. (2005). Measuring residents' attitude toward sustainable tourism: development of sustainable tourism attitude scale. *Journal of Travel Research*, 43, pp. 380-394.
12. Čorak, S. (2011). *Izazovi upravljanja turizmom*. Zagreb: Institut za turizam
13. Firšt Godek, L. & Godek, J. (1996). Razvoj seoskog turizma u Bjelovarsko – bilogorskoj županiji. *Agronomski glasnik*, vol. 6., pp. 465-467.
14. Gallikowski, C. (1999). Agenda 21. *UWSF - Z Umweltchem Ökotox*, 11, 1.
15. Hall, C. M. (2008). *Tourism planning: policies, processes and relationships*. Harlow: Pearson.
16. Hens, L. & Nath, B. (2005). *World Summit on Sustainable Development: Johannesburg Conference*. Dordrecht: Springer.

17. Korca, P. (1996). Resident attitudes towards tourism impacts. *Annals of tourism research*, 23(3), pp. 695-697.
18. Lane, B. (1994). What is rural tourism? *Journal of Sustainable Tourism*, 2, pp. 7–21.
19. Liu, Z. (2003). Sustainable Tourism Development: A Critique. *Journal of sustainable tourism*, 11(6):459-475.
20. Nemeč-Rudež, H. & Vodeb, K. (2010). Perceived tourism impacts in municipalities with different tourism concentration. *Turizam*, 58(2), pp. 161-172.
21. Nepal, S. K. (2008). Residents' attitudes to tourism in Central British Columbia, Canada. *Tourism Geographies*, 10(1), pp. 42–65.
22. Roberts, L. & Hall, D. (2001) *Rural Tourism and Recreation: Principles to Practice*. CABI Publishing: Wallingford.
23. Simpson, M. C. (2009). An integrated approach to assess the impacts of tourism on community development and sustainable livelihoods. *Community development journal*, 44(2), PP. 86-208.
24. Tao, T. C. H. & Wall, G. (2009). A Livelihood approach to sustainability. *Asia Pacific Journal of Tourism Research*, 14(2), PP. 137-152.
25. Tovar, C. & Lockwood, M. (2008). Social impacts of tourism: an Australian regional case study. *International journal of tourism research*, 10, pp. 365-378.
26. UN (1987). *Report of the world commission environment and development „Our common future“*. New York: UN
27. UNWTO (2004). *Indicators of sustainable development for tourism destinations: A guidebook*. Madrid: UNWTO.
28. Vinšalek Stipić, V. (2017). Razvoj seoskog turizma na području Grada Knina. Zbornik radova Veleučilišta u Šibeniku, 3. međunarodna znanstveno-stručna konferencija, pp. 420-430.
29. Vinšalek Stipić, V. Grabić, J. & Vujasinović, T. (2020). Ruralno poduzetništvo kao strategija održivog razvoja. Zbornik radova I. Međunarodno - znanstveno stručna konferencija - Knin 2018, pp. 83-89.
30. Vinšalek Stipić, V. (2021). Importance And Significance of Sustainable Tourism for The Sibenik-Knin County. *Journal Of Economic and Business Issues*,1(1), 23-31.
31. Vojnović, N. (2014). Problematika implementacije temeljnih indikatora održivog turizma u Hrvatskim općinama i gradovima. *Ekonomska misao i praksa DBK*, XXIII(1), pp. 171-190.



