

Interactions between Entrepreneurship and Financial Efficiency in the EU: Implications for the Tourism Industry

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ABSTRACT

The current study looks at how financial institutions and tools affect entrepreneurship trends and activities in the European Union (EU) member states. The amount of entrepreneurial activity in the Union is shown to be

significantly influenced by financial markets and instruments by panel data econometric techniques. Results indicate that entrepreneurial developments in some member nations are adversely correlated with the economic system. This relationship may be caused by a variety of factors, including regulatory impediments and a lack of access to capital, which are discussed in more detail at the study's conclusion.

Keywords: Entrepreneurship; Financial System; Regulatory Barriers; Panel Data; European Union.

ÖZ

Bu çalışma, Avrupa Birlięi üye ülkelerinde finansal sistem ve araçların girişimcilik eğilimleri ve faaliyetleri üzerindeki etkilerini incelemektedir. Panel veri ekonometri prosedürlerinden elde edilen sonuçlar, finansal piyasaların ve araçların, Birlik içindeki girişimcilik faaliyetlerinin hacmi üzerinde istatistiksel olarak anlamlı etkiler yarattığını göstermektedir. Sonuçlar, bazı üye ülkelerde girişimcilik eğilimlerinin finansal sistemle olumsuz bağlantılı olduğunu göstermektedir; bunun nedeni, diğerlerinin yanı sıra, bu çalışmanın sonunda ana hatlarıyla belirtilen, finansmana erişim eksikliği ve düzenleyici engeller olabilir.

Anahtar Kelimeler: Girişimcilik; Finansal Sistem; Mevzuat Kısıtları; Panel Veri, Avrupa Birlięi

DEDICATION

To My Son, Kaya

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LIST OF ABBREVIATIONS

BSS	Business Services Sector
COMPROFINF	Commercial and Professional Infrastructure
CPI	Consumer Price Index
CULTRSOCNORM	Cultural and Social Norms
EBO	Established Business Ownership
EEA	Entrepreneurial Employee Activity
EGCC	Entrepreneurship as a Good Career Choice
ENTEDU	Basic School Entrepreneurial Education and Training
ENTINT	Entrepreneurial Intentions
F.I	Financial Institutions
FD	Financial Development
FEAROFFAIL	Fear of Failure Rate
FEMOPPTA	Female/Male Opportunity-Driven TEA
FEMTEA	Female/ Male TEA
FIA	Financial Institutions Access
FID	Financial Institutions Depth
FIE	Financial Institutions Efficiency
FINETR	Financing for Entrepreneurs
FM	Financial Markets
FMA	Financial Markets Access
FMD	Financial Markets Depth
FME	Financial Markets Efficiency
GDP	Gross Domestic Products

GMM	Generalized Method of Movements
GOVPROG	Governmental Programmes
GOVSUP	Governmental Support and Policies
HJCE	High Job Creation Expectation
HSSE	High Status to Successful Entrepreneurs
INNO	Innovation
INTMARK	Internal Market Dynamics
K	Gross Capital Formation
L	Labor Force
MOTIND	Motivational Index
PERCCAP	Perceived Capabilities
PERCOPP	Perceived Opportunities
PHYSERVINF	Physical and Services Infrastructure
POSTENTEDU	Post School Entrepreneurial Education and Training
RDTRANSFER	R&D Transfer
TAXBUR	Taxes and Bureaucracy
TEA	Total Early-Stage Entrepreneurial Activity

Chapter 1

INTRODUCTION

This chapter is designed to focus on the research background, the theoretical framework, the significance of the problem, the definition of the problem, the purpose of the study, the research question, a brief description of the proposed methodology, and ends with a chapter structure.

1.1 Research Background

Szirmai, Naudé, and Goedhuys (2011) declared that entrepreneurship is a dynamic and transformational force that drives economic growth, societal development, and innovation. It includes the development, administration, and expansion of new businesses that introduce innovative concepts, goods, or services to the marketplace. Visionaries who spot opportunities, take measured risks and gather resources to make their ideas a reality are called entrepreneurs. The entrepreneurial path is exciting and challenging, but one important factor that is vital to their success is financial efficiency.

According to Shahbaz, Nasir, and Lahiani (2022), financial efficiency is more important than ever in today's competitive corporate climate. It allows entrepreneurs to overcome uncertainty, adjust to shifting market dynamics, and develop long-term firms. Efficient financial management enables entrepreneurs to make better use of resources, improve operational procedures, and make more informed strategic decisions. Furthermore, it aids in recruiting investors, securing finance, and

establishing credibility, all of which are critical for expanding companies and drawing collaborations.

Sánchez-Robles (1997) pointed out that entrepreneurship and financial markets are interconnected factors that drive the success of new companies. Entrepreneurs who value financial efficiency are better able to make educated judgments, utilize resources efficiently, and capitalize on growth prospects. Entrepreneurs may construct a firm foundation for their companies, promote resilience, and leave a lasting effect in the ever-changing business landscape by implementing excellent financial management techniques. Sánchez-Robles (1997) also states in her study on why should financial efficiency be important for entrepreneurship. The author suggests that within macroeconomics, economic growth has emerged as a vibrant and cutting-edge field of study in recent years. Economists are attempting to determine the elements that support long-term growth and may permit higher levels of per capita income and welfare in the various nations by using both theoretical models and empirical data. One of these possible growth drivers is financial efficiency, according to recent contributions. Author also emphasizes that these days, experts generally agree that enhanced economic growth is a result of a more efficient financial system, and this issue is being explored more and more within the framework of the new growth theory.

1.2 Theoretical Framework

The conceptual structure of financial effectiveness and entrepreneurship seeks to investigate the connection between entrepreneurial endeavours and the efficiency of making financial decisions Li and Qian (2021). Flexibility theory states that a highly indebted corporation with investment potential may find it difficult to carry out its

plans, secure more finance, etc. (Myers, 1977). So, companies wait to issue debt or limit their debt capacity in order to retain flexibility.

According to flexibility models, if activities are successful as expected, it shows flexibility and avoid utilizing debt. This prediction is typically supported by empirical research on small and medium-sized enterprises (SMEs), as evidenced by studies by Chittenden, Hall, and Hutchinson (1996); Degryse, Kim, and Ongena (2009); Hall, Hutchinson, and Michaelas (2004); JS Ramalho and da Silva (2009); Michaelas, Chittenden, and Poutziouris (1999); Psillaki and Daskalakis (2009); Sogorb-Mira (2005) among others. Pecking-order theory mentioned by Myers and Majluf (1984) One of the presumptions is that companies are allowed to issue equity and debt. Most SMEs do not operate like this. Therefore, SMEs are less supportive of Pecking-27 instructions than are large enterprises. (see, for example, Frank and Goyal, (2003)).

Henry (2014) states that according to Schumpeter's Theory of Economic Development, entrepreneurs are the source of innovative destruction and an agent of change. A person who initiates a change is an entrepreneur. In the status quo, and all of the economic system's subsequent tremors may be traced back to them. In terms of the overall economic situation, the entrepreneurial state is always out of balance. Kirzner (2009), stressed that entrepreneurs often produce a new equilibrating pattern or initiate a system repair process rather than disrupting the system. The core of this debate is the difference between the Kirznerian and Schumpeter schools of thought. The former stressed that innovation is a process of identifying a gap in the industry that has to be filled and that entrepreneurship simply returns the system to a state of balance. The entrepreneurial act, on the other hand, does not disrupt the current order of production.

Although several models suggest a connection between information, efficient markets, and steady-state growth (Aghion, Dewatripont, & Rey, 1999), the relationships between market liquidity, information generation, and economic growth are not well-established in current theories. Economic development may be greatly accelerated through the multifaceted process of entrepreneurship development. According to available research, economic theory undervalues the role that entrepreneurial development plays in creating a thriving economy. Neoclassical theory has no place for entrepreneurs. A coherent theory of entrepreneurial development that can result in a viable, empirically tested model is absent from the notion of finance and economic analysis. Nevertheless, there has been some advancement in our knowledge of how entrepreneurship develops along the course of economic growth. Given their important roles in the growth and development of various economies, various enterprises have been appropriately referred to as the growth engine and initiator for the socioeconomic change in any nation. This has led to arguments that the growth of MSMEs is the driving force behind the development of entrepreneurship (Somoye, 2013).

Theoretically, not much has been studied in the area of entrepreneurial development (Somoye, 2013). There is relatively little empirical and theoretical support for these claims. Consequently, the dynamic process of producing additional income may be used to characterize entrepreneurial development. People who take on significant risks regarding equity, dedication, and/or time, or who add value to certain goods or services, are the ones that generate wealth. Authors in their work also add that financial economists wonder why entrepreneurship has almost vanished in the works of financial economics. A deficiency exists in clear connection between the field of

theoretical finance and the growth of entrepreneurship in the literature. Descriptive theorizing has been linked to the majority of estimating methodologies, as opposed to traditional theoretical modelling. Only a temporary fix for the growth of entrepreneurship may be found in decisions involving descriptive statistical approaches (Somoye, 2013).

Somoye (2013) analyzed financial models in entrepreneurship through two models. The Entrepreneurship Structural Financial Model (ESFM) and Entrepreneurship Acceleration Financial Model (EAFM) and the article suggest that for the models to fulfill their purpose, financial policy should be adjusted to allow for specialized investment in entrepreneurship. By doing this, economic development will accelerate and there will be significant increases in employment, rural development, per capita income, and poverty reduction. In addition, the study proposes a pattern change in the works to focus on this crucial sector of financial analysis and concludes that the hypothesized financial acceleration theory of entrepreneurial development will accelerate economic growth.

Although there are no specific theories studying entrepreneurship and financial efficiency, authors Somoye (2013) state that capital structure theory, pecking-order theory, and trade-off theory are related to and cover investment structure, the value of a company, financing, and debt relations.

The resource-based framework includes entrepreneurship as a complex component, as early resource-based theory (RBT) research recognized (Conner, 1991; Rumelt, 1984). But even though RBT has emerged as a prominent paradigm in strategic management research (Peteraf, 1993), its relationship to entrepreneurship has mostly

consisted of offering an empirical work "research setting" (e.g., Chandler and Hanks (1994)). Since resource-based research tends to overlook entrepreneurship, it is often unsuccessful in incorporating innovation and the entrepreneurial act in current RBT (Barney, 2001). Understanding how commercial acts, or the development and combination of resources to produce new, diversified resources, could offer previously undiscovered uses for resources, resulting in heterogeneous firm resources, which can be beneficial to resource-based theory. A firm's competitive edge is derived from its distinct set of resources that set it apart from rival companies. These resources have the potential to be lucrative. (Alvarez & Busenitz, 2001).

Many previous research on entrepreneurship has the potential to be divided into two groups: those that describe the phenomenon and those that ad hoc adopt theories from other fields. The environment of entrepreneurship offers a great place for a lot of empirical studies, but to prove the field's validity and unique contribution, entrepreneurship has to go further and draw clear limits (Busenitz *et al.*, 2003). Research contexts for entrepreneurship generally cover several units of study, which causes the discipline to become fragmented. This is one of the issues facing entrepreneurship studies.

Heterogeneousness is a shared feature of both resource-based and entrepreneurial theories; however, resource-based theory emphasizes resource value heterogeneity in beliefs, whereas resource-based logic emphasizes resource heterogeneity. Though it is acknowledged that opinions on the worth of resources are resources in and of themselves, the seeming contradictions between the two theories are reconciled (Alvarez & Busenitz, 2001).

1.3 Significance of the Problem

According to Toma, Grigore, and Marinescu (2014), economic progress is primarily fueled by entrepreneurship and financial efficiency. Entrepreneurship drives economic growth and supports a healthy and sustainable economy by fostering job creation, innovation, market efficiency, wealth generation, regional development, and resilience. Sachs *et al.* (2019) emphasizes importance of studying financial efficiency and entrepreneurship by stating that to realize the maximum potential of economic development, governments, organizations, and communities should give top priority to laws and procedures that foster financial efficiency and entrepreneurship.

1.4 Definition of the Problem

Entrepreneurship and financial efficiency studies are vast amount and their importance for economic development and prosperity is tested and validated. The effective and optimal use of financial resources within an entrepreneurial enterprise is referred to as financial efficiency. It entails meticulous planning, monitoring, and allocating finances to maximize profits while minimizing expenditures. Achieving financial efficiency necessitates a thorough awareness of the financial environment of the company, including revenue sources, cost structures, and cash flow dynamics. Entrepreneurs may improve their decision-making abilities, limit risks, and embrace chances for development and expansion by applying strong financial management techniques. According to Ajide and Ojeyinka (2022), future research may also address the question of whether entrepreneurship and financial development are causally related and finding out who leads the other would be interesting to know. Therefore, as no previous study in the literature has focused on the interaction between entrepreneurship and financial efficiency in the European Union, especially within the tourism industry, this study will focus on causality between both concepts.

1.5 Purpose of Study

The three notions of entrepreneurship, finance, and economic growth have a harmonious sense to them. Each entices and/or tracks the other, and the level of joint fortification, causation, interconnectedness among the ideas is a burgeoning study field in development economics, entrepreneurship, and finance (Henry, 2014). Within this work, we looked into the impact of financial system, financial market, and financial index on entrepreneurship.

For a business to start, it needs access to financial resources. Finances come in a wide variety. However, for a business to be sustainable, its finances must be efficient. For certain nations, the tourism industry is the driving force. As a result, to successfully acquire financial resources and start their commercial lives, tourism enterprises need to have effective and sustainable financial structures. Numerous entrepreneurship-related variables, including those relating to education, social capital, cultural capital, and human capital, are discussed in the literature. Researchers haven't concentrated on the impact of financial efficiency on entrepreneurship indicators up to now. There are no studies, in particular, on the financial effectiveness of these metrics for entrepreneurship in the tourism sector.

This study's scope includes a country-by-country analysis of the effect of financial efficiency on business, specifically on EU-based enterprises. Different educational institutions are constantly redefining notions of entrepreneurship in general and of particular industries. One of them is the entrepreneurship in tourism. The topic of tourism entrepreneurship has been the subject of numerous studies. Nevertheless, a comprehensive review of the literature reveals a dearth of studies on small businesses

in the tourism industry and entrepreneurship (Dewhurst & Horobin, 1998; Lynch & MacWhannell, 2000). A measurement gap has been identified between financial development and entrepreneurship in the tourism industry. The European Union acts to control immigration and asylum, deter and combat crime, and promote peace, its ideals, and the welfare of its citizens within its borders. It also acts to provide freedom, security, and justice, irrespective of national boundaries. EU is the biggest trading bloc in the world. At the same time as it is the world's biggest exporter of manufactured goods and services, it is the main import market for over 100 countries. The EU's core principle was unrestricted trade among its constituent nations. Wolfram, Brigitte, and Morten (2008) reinterpret the history of the European Union (EU) as the steady emergence over time of a European-level polity, emphasizing strong networking and informal political coordination and governance. This is a supranational political system that is part of a rising transnational political society, with a complicated institutional framework and policymaking procedures. The EU has been characterized as a supranational political organization with multiple levels of governance by political scientists who have primarily studied contemporary Community politics (Wolfram et al., 2008). Wolfram, Brigitte, and Morten (2008) reinterpret the history of the European Union (EU) as the steady emergence over time of a European-level polity, emphasizing strong networking and informal political coordination and governance. This is a supranational political system that is part of a rising transnational political society, with a complicated institutional framework and policymaking procedures. The EU has been characterized as a supranational political organization with multiple levels of governance by political scientists who have primarily studied contemporary Community politics (Wolfram et al., 2008)..

Wolfram *et al.* (2008) in his book clearly stated the gap why it's important to study the EU as a philosophically sound history of European integration is expected to yield a multitude of interesting empirical studies of important societal, financial, and dogmatic events which have influenced EU development and larger Europe. Hopefully, they will reveal aspects of EU history that social scientists would be foolish to ignore.

Understanding the EU's twenty-eight member states provides few obstacles. They have all of the traditional characteristics of sovereign nations, such as physical territory, sovereignty over that region, political independence, and international legal validity. In terms of administration, the majority are unitary states with the bulk of authority centered at the national level, although some are federal states in which power is divided between national and local administrations (McCormick, 2015).

This study focuses on the EU for a couple of reasons. Its representation and standards are a very important parameter. The EU is a unique political and economic cooperation of twenty seven European countries that has given over a half-century of peace, stability, and prosperity. Also, it compiles countries that take the most amount of tourist arrivals per year. Tourism is vital in the EU because of its economic and job opportunities, as well as its social and environmental ramifications. tourist data are used not just to track the EU's tourist policy, but also for its regional and sustainable development programs.

In the EU, tourism is a significant economic sector. It is projected to provide 10% of the GDP of the EU and 12% of the labor force overall.

The objectives of the EU's tourism policy are to maintain Europe's standing as a top travel destination, optimize the sector's growth and employment-generating potential, and foster cooperation among EU states, including the sharing of best practices. The EU offers financial assistance for tourism through countrywide and regional initiatives, including as the Cohesion Fund and European Regional Development Fund, which provided €4 billion and €6.4 billion, respectively, between 2014 and 2020 ("EU Support for Public Projects in the Tourism Sector," 2020).

The EU supports and coordinates the Member States' initiatives in tourism policy, playing a complementary role. The EU has allocated no specific funds for tourism for the years 2021–2027. Several EU programs might offer financial help for tourism. Funding for tourism-related investments can be obtained through several EU projects and programs. Thirteen programs, including ones designed to lessen the pandemic's effects, might be used to fund tourism-related initiatives between 2021 and 2027. These programs could be managed directly or through joint management.

Sustainable tourism is one of the particular policy objectives of the The legal framework for European Regional Development (ERDF) from 2021 to 2027. Apart from this particular goal, any other policy goal can also promote sustainable tourism, provided that investments support the goal's achievement and adhere to any relevant enabling conditions or regulations. The public authorities in the Member States select projects to fund and oversee their implementation based on the operational programs.. Finally, this study focuses on the EU as the amount spared for tourism is significant as stated above ("Guide to EU Funding 2023 Edition," 2023).

Therefore, this thesis aims to ascertain how financial efficiency affects entrepreneurship in the tourism sector of the European Union.

1.6 Research Question

H1: Entrepreneurship activities/ trends are significant and driven by the financial system efficiency. Although the full version of this analysis is provided in this text, the published and shorter version of the research analysis is provided in Appendix.

1.7 Proposed Methodology

For a panel of 28 nations between 1995 and 2017, the relationship between financial development, entrepreneurship, and institutional circumstances is examined.

1.8 Chapter Structure

There are seven chapters in this thesis. Each chapter begins gives an overview of the chapter. Chapter 2 of the upcoming book provides a review of the literature on entrepreneurship. its definition, levels, indicators, and importance to robustness of firms and countries' competitiveness. The chapter will also include a definition of financial development as well as indicators that help measure financial efficiency. Chapter 3 discusses tourism entrepreneurship in the European Union. Chapter 4 presents interactions with the financial system and entrepreneurship and Chapter 5 is the final chapter which provides a conclusion and highlights the relevance of the work.

Chapter 2

LITERATURE REVIEW

This chapter offers the literature review on the role of entrepreneurship in the business sector and macroeconomics, the determinants of entrepreneurship, a theoretical framework that explains entrepreneurship capabilities, role of entrepreneurship in the services industry. This chapter will also provide research gap in the field of determinants of entrepreneurship performance as well as its importance to tourism as a services sector. Last but not least, chapter will discuss financial markets as a research gap and driver for entrepreneurship performance of businesses and how the financial system could be a driver for tourism performance.

2.1 Definition of Entrepreneurship

Entrepreneurship is about improving an existing activity, doing something different, producing a new product, and creating a business that doesn't exist. Therefore, entrepreneurs who change their methods and the traditional ways, are the actors who play the most important social role to change the technological, economic, and social fields. The act of accumulating and allocating the financial, artistic, managerial, or technological resources required because becoming successful in a new business is frequently referred to as entrepreneurship. More specifically, it refers to the "ability and willingness to conceive, organize, and manage a business venture along with any risks it may involve" (Brockhaus & Horwitz, 2002) or the process of starting, operating, and managing a new business, which is frequently comparable to running a small business.

Entrepreneurship happens in a process. The first step in starting a business is having the drive and willingness to do so. The next is coming up with a business idea (Van der Veen & Wakkee, 2004). As we reiterate the linkages between financial development and entrepreneurship in this thesis, we will be concentrating on the third aspect. The initial phase in the entrepreneurial process, the willingness to begin, depends on variables referred to as entrepreneurship potentials. It's vital to note that the terms entrepreneurial potential and potential entrepreneur have different meanings. The term entrepreneurship potential describes the population of potential entrepreneurs. However, potential entrepreneurs refer to the whole of the traits that, taken individually, cause a person to become an entrepreneur (Bozkurt & Erdurur, 2013).

It is commonly acknowledged that there isn't a single, universally recognized definition for the term "entrepreneurship". This is due to the fact that entrepreneurship is always evolving as it moves through its stages of development, changing, reforming, and reinventing itself., and entrepreneurs are frequently setting the pace with innovations, inventions, new goods and services, and new markets, according to Gartner and Shane (1995). Throughout history, academics have been competing by working on theories to define this phenomenon which is summarized in table 1.

According to Čihák et al. (2012), there are four facets of national financial growth, each of which could have an impact on how entrepreneurship and financial intermediation interact. First, by expressing the size of the financial system relative to the actual sector of an economy, financial depth acts as a proxy for the total amount of credit and financial services provided by the financial system (Čihák et al., 2012). For example, increased financial stability with adequate external financing should

support entrepreneurship. According to Čihák et al. (2012), financial access quantifies the extent to which the general population can obtain financial services. By decreasing their reliance on social networks to obtain credit, for example, increased financial inclusion could benefit business owners by increasing the pool of available credit of prospective business owners . At the same time, it might make it easier for a larger pool of potential creditors to use the financial system. Third, the cost of facilitating credit is measured by financial efficiency; Greater financial efficiency indicates that the financial system moves more resources from creditors to business owners while maintaining less resources (for instance, in the form of fees) (Čihák et al., 2012). Higher financial efficiency, for example, may encourage entrepreneurship by increasing the likelihood that adequate financing will be accessible at fair rates. Fourth, financial stability is the state of the financial system being strong. For example, financial stability may boost creditors' confidence in the safety of long-term investments, which ought to promote entrepreneurship. There has been a vast amount of study done on entrepreneurship and financial efficiency. However, despite its importance no study has been done on the financial system's role in tourism. As a result, this study will focus on interactions between entrepreneurship and financial efficiency in the EU hotel industry.

Entrepreneurship is defined by Hunt and Bygrave (2005) as "all the functions, activities, and actions associated with the perception of opportunities and the formation of organizations to pursue them." But according to Bygrave and Zacharakis (2007), the process may be broken down into four stages: the idea or conception of the firm, the event that kickstarts operations, the activity implementation, and growth. Figure 1 shows the sequential steps that are taken. According to Hunt and Bygrave

(2005), each of these levels in the model includes critical components that contribute to the entrepreneurship growth of the firm. Personal characteristics, and social, organizational, and environmental influences influence and form the entrepreneurial features associated with the procedure (Uhlenbruck & Kang, 2006). Building on this framework, Baron (2008) claimed that the problem affects different parts of entrepreneurs' thinking and causes changes due to aspects of the entrepreneurial process.

Table 1: List of Definitions of Entrepreneurship through History

The first recorded references to entrepreneurship date back to Smith and Krueger (1776) and the study of economics, namely the nature and sources of profit. Classical economists believed that land, labor, and capital were the sources of all economic value.
According to Schumpeter (1934), "Enterprise refers to the carrying out of new combinations, and entrepreneurs are the people whose job it is to carry them out."
Draheim (1972) The act of starting a new business where none previously existed is known as entrepreneurship.
According to Vesper (1982), "The creation of new business enterprises by individuals or small groups is a loose definition of the overall field of entrepreneurship."
Vesper, Kent, and Sexton (1982) The definition of entrepreneurship is the establishment of new businesses by individuals or small groups, in which the entrepreneur takes on the role of society's primary change agent by starting the industrial advancement that eventually results in broader cultural changes.
Stevenson(1983), Stevenson and Jarillo(1985), and Stevenson (1983) "The pursuit of opportunity beyond the resources you currently control" is what entrepreneurship is all about. This concept considers the person as well as the society in which they are embedded.
Gartner (1988) The process of establishing new organizations is known as entrepreneurship.
Kao (1993) The process of doing something novel and distinctive in order to generate riches for oneself and improve society is known as entrepreneurship.
Dess and Lumpkin (1996) "The essential act of entrepreneurship is a new entity." "An EO [Entrepreneurial Orientation] refers to the processes, practices, and decision-making activities that lead to new entry."
Kellermanns and Chrisman (2015)The term "entrepreneurship" describes actions of organizational creation, renewal, or innovation that take place either inside or outside of an already-existing organization, while the term "corporate entrepreneurship" describes entrepreneurial activity carried out inside an already-existing organization.

Table 2: The Model of the Entrepreneurial Process

Step	Description
1. Innovation	• Considering the potential conceptually. • Collecting information and data. • Value analysis, viability, and market research for new ideas, goods, or services
2. Triggering the event:	• Providing the drive and judgment for company planning • Advancing with risk analysis, obtaining, and gathering required resources.
3. Implementation	• The launch and execution phase of a novel concept, business endeavor, good, or service. • Putting the company plan into practice. • Launching the new business using the predetermined plan
4. Growth	• The expansion of the creative concept, business endeavor, good, or service. • Maximizing profits • Constantly expanding the new business with a fresh chance

Bygrave and Zacharakis (2007); Hisrich and Peters (2001); Kang and Uhlenbruck (2006)

According to Henry (2014) From birth to death (business interruption or failure), five stages represent the life cycle hypothesis. Noting that the phases are not a continuum—Beyond a certain point, businesses can fail or never start, which is instructive. It's possible that input at any stage—including the prospective entrepreneurial stage—won't translate into a linear output at the next.

The scope and measurement of each entrepreneurial state's activities, as outlined below, are therefore necessary for sustained entrepreneurship in an economy:

- Potential entrepreneurs are those who dare to take on challenges and who think they have what it takes to investigate and seize both obvious and obscure business

possibilities. It's possible that these goals won't be accomplished. When they become genuine, they enter the embryonic stage, and when they don't, they stay as hopeful plans.

- The term "nascent entrepreneurs" refers to business owners whose ventures last fewer than three months after they transition from the planning to operation stages. Many fail at this point due to the relative difficulties of launching a new company.
- Startup Company Owners. The term "new business enterprise" refers to companies that make it past the initial three and a half years of operation. Indeed, the early years are the most difficult, and overcoming them is a sign of long-term durability, according to entrepreneurs. Total early entrepreneurial activities encompass all of the emerging and new business stages.
- Entrepreneurs who have been in business for four years or more and have achieved stability are considered established. The business has been founded, even though the owners may decide to stay or not. When their work is effectively done, some entrepreneurs go on to launch other new businesses.
- Discontinuity of entrepreneurship. Some businesses may close, and the promoters might go for paid employment, go it alone, team together to start a new business, or both. Failure is a necessary part of the entrepreneurial journey in every situation. It typically reenergizes aspiring entrepreneurs as they embark on their new ventures.

2.2 Role of Entrepreneurship in Business Sector

Entrepreneurial studies that are most important for understanding the macro-economy, according to Quadrini (2009), can be divided into three types. The first group investigates the elements that influence a person's choice of occupation. The macroeconomic effects of entrepreneurship, including a nation's economic

performance, total savings, investment, inequality, and the best design for fiscal and institutional policies, are of interest to the second and third groups of study. According to Evans and Jovanovic (1989), starting a new firm requires money. However, due to financial constraints, capital could only be partially financed externally. Therefore, the decision to start a business may be influenced by having less or more personal wealth. Studies by Holtz-Eakin, Joulfaian, and Rosen (1994) and Blanchflower and Oswald (1998) examined the impact of personal wealth derived from inheritance and gifts on the decision to launch a business. They concluded that an increase in wealth derived from inheritance and gifts will increase the likelihood of starting a business. According to their empirical calculations, one must consider personal wealth when choosing a profession.

According to Cuervo (2005), a nation's ability to innovate and produce wealth is dependent on the competitiveness of its firms, and the entrepreneur is best suited to identify, assess, and take advantage of entrepreneurial opportunities, such as previously untapped markets, new processes, raw materials, new products and services, and organizational forms and strategies (Shane & Venkataraman, 2000).

Depending on local cultural norms, market conditions, and economic situations, several tactics are utilized around the world to foster entrepreneurship. Entrepreneurs, who establish teams and launch firms, complete the entrepreneurial ecosystem by offering financial incentives and exit strategies for startups. The establishment of laws and regulations by the government encourages entrepreneurship. The starting and growth cash required to promote entrepreneurship is provided by angel and venture capital firms (Acs, 2006).

The entrepreneurial ecosystem's impact on economic growth varies across various nations and developmental stages. In countries that are resource-driven, the financial environment has a negative and severe impact on entrepreneurship. Furthermore, these nations' research and development efforts on the entrepreneurial process have not had a significant influence. These elements include administrative and bureaucratic processes, business infrastructure, physical and judicial infrastructure, and policies and programs of the government (Quadrini, 2009).

In nations that are creative and innovative, entrepreneurship has had a good and significant impact. Government laws, ecosystem variables include things like policies, taxes, bureaucracy, entrepreneurial education in elementary and secondary schools, development research transfer, infrastructure, market dynamics, and a conducive business environment. Economically creative and efficient nations have profited from the expansion of financial markets and the influence of policies on institutions, in contrast to resource-rich nations where these variables have had a negative influence on economic growth (Audretsch, Grilo, & Thurik, 2007).

Regional differences in entrepreneurial behavior are significant. The nations at the top of the entrepreneurial food chain are those that prioritize innovation. The least amount of entrepreneurship is found in countries that are factor-driven. (Khyareh, Khairandish, & Torabi, 2019).

2.3 Determinants of Entrepreneurship

Entrepreneurs employ specific strategies when looking for possibilities and starting up new businesses. These are the analytical skills necessary to apply the method, as well as the background knowledge and managerial abilities needed to address the recurrent

challenges associated with launching, expanding, and maximizing the potential of new companies (Gómez-Gras, Mira-Solves, & Martinez-Mateo, 2010).

The OECD-Eurostat Entrepreneurship Indicators Programme has established six categories of drivers into which indicators are categorized. The regulatory framework is the first indication. Administrative burdens (Entry and Growth), rules pertaining to bankruptcy, the court system and legal framework, labor and product laws, market regulations, income taxes, wealth/bequest taxes, capital and company taxes, and patent systems are all included. The state of the market is the second indication. It encompasses the level of public participation, private demand, and access to international markets. The third measure is financial accessibility. It involves having access to stock markets, venture money, and debt finance. The generation and dissemination of knowledge is the fourth indicator. It encompasses R&D, non-commercial knowledge transfer, firm collaboration, technology availability, and adoption. Capabilities for entrepreneurship make up the fifth indicator. The sixth indication is entrepreneurial culture, which is followed by immigration and entrepreneurship education. It covers high-status, prosperous entrepreneurship, the desire to work for oneself, views on entrepreneurs, fear of failing, the possibility of a business failing, and a second opportunity for entrepreneurs. This thesis will build on the third indicator and describe the relationship between entrepreneurship and financial efficiency.

2.4 Theories That Explain Entrepreneurship

Entrepreneurship theories are crucial for the field of entrepreneurship. Simpeh (2011) grouped entrepreneurial theories into various multidisciplinary, allowing for a more in-depth analysis. They look at six theories of entrepreneurship and their supporting

empirical research. Additionally, they claim that entrepreneurship has several intriguing and pertinent theories that are supported by actual study findings, spanning from opportunity- and resource-based to sociological, anthropological, psychological, and economic. Thus, it is possible to define entrepreneurial theories from the viewpoints of sociologists, psychologists, and economists. Many of the notions that have been condensed from the literature by different schools of thinking are the innovative Schumpeter's Theory and the Need for Achievement Leibenstein's X-efficiency Theory, the McClelland Theory, and the bearing Knight's theory The theories developed by Max Weber, Hagen, and Thomas Cochran on entrepreneurial growth, cultural values, The Economic Theory of Entrepreneurship, Theory of Change in Group Level Pattern, Political System Theory for Entrepreneurial Growth and Exposure Theory of Entrepreneurship. These theories provide different perspectives on entrepreneurship and help us understand the complex factors that influence entrepreneurial behavior, success, and the creation of new ventures. It's important to note that entrepreneurship is a multifaceted phenomenon, and these theories often intersect and complement each other rather than being mutually exclusive.

1. Opportunity Recognition Theory: According to this theory, entrepreneurship is fueled by the capacity to recognize and seize market opportunities. Entrepreneurs have a special set of abilities that enable them to identify market gaps or unmet requirements and develop ground-breaking solutions to fill them. They have an acute eye for spotting trends, consumer desires, and emerging technology, allowing them to seize opportunities and launch profitable businesses.
2. Resource-Based Theory: According to this theory this hypothesis holds that resource availability and use have an impact on entrepreneurship. Entrepreneurs

are often succeed if they possess and ability to utilize necessary resources including finance, people talent, networks, and technology. The theory places a strong emphasis on the necessity of resource allocation, strategic management, and resource acquisition in entrepreneurship.

3. Psychological Traits Theory: The focus of this theory is on the personality qualities and mental processes of entrepreneurs. It implies that successful entrepreneurs share several characteristics, including a predisposition for taking risks, self-assurance, creativity, resilience, and a drive for success. These psychological characteristics are essential for influencing entrepreneurial behavior, judgment, and the capacity to overcome obstacles and setbacks.
4. Social Network Theory: The significance of social networks and relationships in entrepreneurship is highlighted by Social Network Theory and is highlighted by this notion. It implies that having strong networks, contacts, and social capital increases an entrepreneur's likelihood of having access to helpful tools, knowledge, and support. Social networks give business owners chances for education, teamwork, and access to vital market information, all of which can have a big impact on how successful their companies are.
5. Institutional Theory: This theory places a strong emphasis on how external elements like cultural, social, and regulatory institutions affect entrepreneurship. It implies that the standards, principles, and laws of each society have an impact on entrepreneurs. Institutional factors influence the broader entrepreneurial ecosystem, including opportunities and entrepreneurial behavior. Entrepreneurs are more likely to succeed if they comprehend these institutional frameworks and can adjust to them.

6. **Effectuation Theory:** According to this theory, entrepreneurs base their choices on their available resources and objectives in a non-predictive, iterative manner. Entrepreneurs begin with their current resources, competencies, and networks and iteratively explore possibilities and co-create chances rather than starting with a preset goal and looking for ways to achieve it. The ability of the entrepreneur to be adaptable, flexible, and responsive to the dynamic nature of the entrepreneurial journey is emphasized by effectuation theory.
7. **Innovation Theory:** The relevance of innovation in entrepreneurship is highlighted by this notion. It implies that business owners add value by bringing fresh concepts, items, options, or operating procedures. Entrepreneurial ability to recognize and apply new or existing knowledge in a novel way is what drives innovation, which can be disruptive or incremental. By developing and disseminating innovations, entrepreneurship in this setting catalyzes societal advancement, competitiveness, and economic prosperity.

2.5 Entrepreneurship in Tourism Industry

Tourism entrepreneurship may boost economies via the establishment of fresh tourist and hospitality businesses. Entrepreneurial activity may be impacted by the macroeconomic environment (Tleuberdinova et al., 2021).

Research on small and medium-sized enterprises (SMEs) in the hospitality sector is generally positive. Still, a wide range of potential research areas need to be looked into. Prior studies on small- to medium-sized hotel entrepreneurs (SMHEs) have been carried out (Glancey, McQuaid, & Campling, 2000; Teljevic & Doorne, 2000; Formica & McCleary, 2000).. Nevertheless, a comprehensive review of the literature reveals a paucity of studies on small enterprises and tourism entrepreneurship (Dewhurst &

Horobin, 1998; Lynch & MacWhannell, 2000). Dewhurst and Horobin's (1998) key discovery is that entrepreneurs in the tourism sector are not driven by the desire to maximize financial gain. Entrepreneurs in the tourism industry are therefore not driven by growth or profit (Ateljevic & Doorne, 2000; Jaafar et al., 2011).

The difficulties small and medium hotel entrepreneurs confront in achieving success have also been the subject of several studies on the hotel sector. Many SMEs fail during their first five years of existence. Internal variables expressed by the researchers include a lack of abilities (Mckercher, 1998) as well as external ones including a lack of resources and a welcoming environment (Karim & Sakdan, 2019). There are lots of chances for entrepreneurial growth in the tourism industry (Britton, 1991). By encouraging the establishment of sustainable firms, the integration of tourism-related sectors with other industries can promote economic development and raise the quantity and value of successful businesses (Ritchie & Crouch, 2003). According to Piñeiro-Chousa et al. (2020), the primary drivers of the tourism industry's expansion on a regional and international level are innovation and entrepreneurship. Entrepreneurship is becoming more and more common in the tourism industry (Getz & Petersen, 2005). The involvement of tourist entrepreneurs is essential for the development of several attractive locations (Koh & Hatten, 2002).

According to a number of studies, one of the primary goals of the development of the tourism sector is employment generation, and entrepreneurship is a key factor in this (Mike Peters, Frehse, & Buhalis, 2009). Encouragement of entrepreneurship in the field results in lower unemployment, more worker productivity, and ultimately higher incomes for the community (Samiei & Akhoondzadeh, 2014). For tourism and hospitality businesses to survive, tourism entrepreneurship is a requirement. This is

due to the ongoing changes in traveler choices and motives, the continuous evolution of tourism trends, the growth in demand for new travel-related goods and services, the improvement in the number of new visitors, and ultimately the intensifying degree of industry competitiveness (Pinar & Bulut, 2012).

The tourist and hospitality sector was noted for its low level of entrepreneurial activity in contrast to other industries (Koh & Hatten, 2002). Over the past ten years, entrepreneurship has become a typical practice for both SMEs and large international tourism chains. Previously, these unusual entrepreneurial cases were largely observed in small- to medium-sized family-run tourism businesses.. SMEs that focus on ethnic niche tourism in rural areas, where local cultural expertise is essential for tourist development, are also extremely likely to have entrepreneurial tendencies. SME entrepreneurship is especially crucial during the early phases of regional urban tourism development when major hotel chains and franchisees are hesitant to make investments in these undeveloped regions (Chang, 2011).

2.6 Financial Efficiency

Henry (2014) claims that Schumpeter's theory of economic progress is predicated on the notion of "creative destruction," which inspires innovators to upend the existing quo. He made a connection between the financial industry's function and the process of evolutionary growth between capitalists and banks and entrepreneurs by means of risk-sharing. As Van den Berg (2012) noted, John Hicks (1969) asserted that the industrial revolution would not have been possible without the concurrent expansion of the banking and financial markets. Financing is perhaps one of the biggest obstacles to business. The degree to which the economy has developed its financial system usually determines the sources of funding. Due to the funding backing they got in the

early and late 20th centuries, a few organizations are said to have grown from the germ of unproven technical innovation to Fortune 500 status (Henry, 2014).

Studies show that start-ups with angel funding have a lower failure rate than those with other types of first funding (Kerr, Lerner, & Schoar, 2014). Angel investors are said to have financed 60% of all start-ups in America (Shane, 2008). Because of this, angel investing is important for economic development, and further research is needed to address the debate over the causal relationship between private equity firms' existence and innovation and economic development. To sum up, anecdotal data suggests that less developed economies lack these kinds of funding arrangements.

Economic development has become a vibrant and forward-thinking field of study within macroeconomics in recent years. Economists are attempting to pinpoint the variables that support long-term growth and may enable higher levels of per capita income and welfare in diverse nations by using both theoretical models and empirical data. Recent research has highlighted financial efficiency as one of these possible growth drivers (Sánchez-Robles, 1997).

Financial efficiency is the capacity of a company, organization, or person to maximize their financial resources and make the most use of them. It is a gauge of how effectively financial resources, such as money, assets, and investments, are used to produce the intended results with the least amount of waste possible. In short, financial efficiency is the process of achieving the greatest outcomes while reducing costs, expenditures, and risks. It entails using sound financial decisions, wise resource allocation, and optimizing return on investment (ROI) (Northcott, 2004).

Financial development has received a lot of attention since the introduction of the endogenous growth theory since it is an essential and necessary part of the economic process. Due to a study finding that connected financial exclusion to poverty in the early 2000s, the use of formal financial services, or financial inclusion, is an aspect of financial development that has garnered a lot of public attention and scholarly interest (Babajide, Adegboye, & Omankhanlen, 2015). According to Hussain *et al.* (2020) financial efficiency's main components are as follows:

- **Cost optimization:** Effective financial management calls for the detection of cost-saving possibilities, the elimination of pointless expenditures, and the simplification of processes to increase profitability.
- **Utilization of Assets:** Efficient businesses make good use of their resources to make sure they produce income or advance the overall objectives of the company.
- **Debt Management:** Maintaining an acceptable debt-to-equity ratio and responsible debt management are crucial for financial efficiency since too much debt can force a company to pay exorbitant interest rates.
- **Return On Investment:** A high ROI on investments shows that financial resources are being allocated to initiatives or endeavors that produce significant returns.
- **Profitability:** Increased financial efficiency results in better profitability, where sales are higher than costs resulting in a positive bottom line.
- **Cash Flow Management:** Effective cash flow management ensures that sufficient funds are available to cover operational costs and investments without putting undue strain on the company's finances.
- **Risk management:** It's essential to preserve financial efficiency by mitigating financial risks and making informed decisions to prevent unnecessary losses.

Financial efficiency requires more than just reducing costs; it also entails making wise investments and directing funds to initiatives or endeavors that are most likely to provide the desired outcomes. For long-term financial sustainability, finding the correct ratio between risk and return is crucial. For every firm to maintain and enhance its financial efficiency, regular financial analysis, performance assessment, and continuous improvement are critical strategies.

The growth and prosperity of a country's economy are significantly influenced by the stability and development of its financial system. Financial innovation, rising economic monetization, expanding financial sector size, and growing financial development are all indicative of the expansion and evolution of the financial sector (Sawyer, 2015). It has been known for decades that the financial sector is important and stable for the actual economy and society (Bradford, 1874). The critical role that the financial industry plays illustrates how important it is. Its financial markets and intuitions serve as middlemen, transferring funds from institutional investors and consumers, who are savers, to businesses. While the latter needs financial resources for ongoing economic development, the former is designed to make profitable investments. Investment capacity is impacted by financial development (Zhang & Lei, 2014).

To discuss some contradicting views, even though the financial sector's size and impact have changed over time and throughout history, its significance because the real economy has consistently maintained the finance-growth relationship as one of the most appealing connections in economics research. The ability of businesses to be entrepreneurial is significantly influenced by the financial markets. It consists of a variety of organizations and systems, including banks, venture capital companies,

stock exchanges, and other financial intermediaries that give entrepreneurs money to launch, run, and grow their businesses. However, financial markets, such as those for stock, debt, and derivatives, make it easier to allocate and price financial assets and give investors a way to direct money to companies.

The availability and cost of capital, the risk-return profile of investments, the unequal access to information between investors and entrepreneurs, and the regulatory and legal frameworks that oversee financial activities are a few of the different ways that the effects of the financial markets on entrepreneurship can be examined (Mishkin, 2014). By facilitating access to funding at affordable rates, enabling risk-sharing and diversification, and facilitating the discovery and valuation of new opportunities, a healthy financial system can improve entrepreneurial abilities and foster business innovation and growth (Cumming, Meoli, & Vismara, 2021).

For instance, venture capital companies might give promising entrepreneurs early-stage investments if they have restricted access to bank loans or the public markets (Keuschnigg & Nielsen, 2003). Equity markets can offer liquidity to established companies looking to obtain money for mergers and acquisitions or expansion (Smimou, 2015). Debt markets may provide organizations in diverse industries with a range of financing choices, from short-term operating capital to long-term project funding.

The financial system may also be a barrier to entry, a source of incentives that are distorted, and a source of bubbles and crises that have an impact on the actual economy. All of these things can offer dangers and obstacles to entrepreneurship. For example, excessive risk-taking and speculation in the financial markets can divert

funds away from profitable ventures and produce systemic risks that have an impact on the stability of the financial system and the larger economy. Inadequate or biased regulations can also obstruct entrepreneurship by favoring established players, restricting competition, or restricting access to capital or knowledge (Klimas *et al.*, 2021). Therefore, to encourage entrepreneurial skills, policymakers should work to establish a stable and balanced financial system as well as financial markets that foster social welfare, economic development, and innovation while minimizing risks and externalities. This may entail raising financial literacy, increasing accountability and transparency, fostering diversity and inclusion, encouraging financial technology innovation, strengthening prudential regulations and supervisory frameworks, and coordinating financial incentives with social and environmental objectives over the long term.

According to Dutta and Meierrieks (2021) analysis of the relationship between financial development and entrepreneurship, there is a direct correlation between the two. Gregory (2019) on the other hand, discovers a detrimental relationship between financial restrictions and entrepreneurship.

The current study intends to investigate the influence of financial markets on entrepreneurship trends in the instance of European Union (27) nations since the financial system is important for entrepreneurial trends, as noted in the pertinent literature. As of 2023, the E.U.'s 27 member nations come from diverse institutional, economic, and financial origins. Each member country has a distinct economic climate, and the size, sophistication, and depth of its financial markets vary. To better understand how financial market features affect entrepreneurship in various economic

circumstances, it would be useful to analyze the impact of financial markets in fostering entrepreneurial talents in the EU.

Chapter 3

TOURISM ENTREPRENEURSHIP IN THE EUROPEAN UNION

This chapter presents tourism entrepreneurship in the European Union. In this chapter, tourism entrepreneurship indicators are also listed and discussed.

3.1 Tourism Entrepreneurship

The creation and management of tourist-related businesses is referred to as tourism entrepreneurship. It involves identifying opportunities, coming up with innovative ideas, and taking measured risks in order to start companies that serve the needs and interests of tourists. The European Agenda for Tourism 2030, which aims to make tourism more digital, sustainable, and environmentally friendly, was established at the end of 2022 and serves as the focal point of European tourism policy ("European Tourism Agenda 2030: Commission welcomes the commitment of EU countries to make tourism greener, more digital and resilient," 2022).

Due to its ability to integrate a variety of subjects, such as technology innovation, economic geography, and cultural change, tourism entrepreneurship is a popular research topic.

In general, it refers to the tourism industry's application of creativity, risk-taking, and initiative (Ratten, 2018).

Early published studies on tourism and entrepreneurship viewed it as a process occurring within the lifestyle sector and tended to employ a case study methodology (Nikraftar & Hosseini, 2016). This approach has been employed over the past ten years to verify that the main sources of tourist entrepreneurship are small- and medium-sized enterprises engaged in sustainability, eco-tourism, or agriculture (Tham & Huang, 2019). A large amount of study on tourist entrepreneurship, according to Mike Peters, Kallmuenzer, and Buhalis (2019), focuses on lifestyle features, which is important for entrepreneurs who emphasize enhancing their quality of life through their business enterprises. Researchers have focused on the quality of life in relation to small family hotel businesses, but they have also emphasized that these entrepreneurs need education and training in order to remain competitive in the market (M Peters & Buhalis, 2004).

The majority of the current study is on small-scale tourism entrepreneurs, with large-scale tourism providers being overlooked in corporate and international entrepreneurship (Mike Peters *et al.*, 2009; Reinhold, Zach, & Krizaj, 2017). Therefore, this leads us to research on a larger scale as it is recommended in the literature.

The expansion and development of the tourism industry are fundamentally dependent on tourism entrepreneurship. Entrepreneurs in this industry are in charge of seeing, generating, and grabbing chances to offer tourists cutting-edge goods and services. While customer satisfaction, market knowledge, and innovation are essential components of a successful tourism business, financial efficiency also has a big impact on the long-term viability and profitability of tourism businesses.

The ability of tourist business owners to efficiently manage and utilize financial resources to get the best results is referred to as financial efficiency. It requires making wise financial decisions, allocating money carefully, and putting productivity- and profit-boosting initiatives into action. Financial efficiency in the context of tourism entrepreneurship includes a variety of aspects, such as cost control, revenue generation, investment choices, and financial risk mitigation.

It is impossible to overstate the significance of financial effectiveness in the tourism industry. Entrepreneurs who practice efficient financial management can effectively allocate resources, reduce operating expenses, and make good investment decisions. They can do this to make their companies more competitive, create sustainable growth, and take advantage of emerging market opportunities.

Additionally, financial efficiency enables business owners in the tourism industry to react quickly to changes in the market and adjust to shifting consumer needs. Improved profitability and overall business performance are a result of effective cost management strategies including monitoring spending, negotiating favorable supplier contracts, and putting in place lean operational procedures. Entrepreneurs may weather economic downturns and invest in innovation and expansion when market circumstances improve by keeping a strong financial position.

Additionally, getting external funding and investment is greatly aided by financial efficiency. Tourism businesses that exhibit excellent financial management practices, such as accurate financial reporting, open governance, and a proven track record of success, are more likely to receive assistance from potential investors and lenders. Adequate financial efficiency not only fosters trust among external stakeholders but

also makes it easier for business owners to acquire financing, allowing them to finance expansion plans, modernize infrastructure, and raise the standard of their tourism services.

In conclusion, a key component of tourism entrepreneurship is financial efficiency. Successful tourism business owners are aware of the significance of good financial management in fostering expansion, profitability, and sustainability. Entrepreneurs in the tourism industry can position themselves for success in a constantly changing and competitive market by maximizing resource allocation, managing costs, producing revenue, and avoiding financial risks.

Tourism entrepreneurship indicators are essential tools that provide insights into the performance, competitiveness, and sustainability of tourism ventures. These indicators aid in measuring and evaluating many facets of entrepreneurial activity in the travel and tourism sector. Here are some crucial indicators that are frequently used to assess tourist business performance.

1. **Number of New Tourism Enterprises:** This indicator captures the level of entrepreneurship in the travel and tourism industry. It counts the number of recently opened tourist attractions over a given time frame. A higher score denotes a thriving entrepreneurial environment and the possibility for industry expansion.
2. **Employment Generation:** This indicator gauges how much job growth is facilitated by tourism entrepreneurship. It evaluates the number of jobs produced by tourism businesses, including those in lodging, food and beverage, transportation, and other tourism-related industries.

3. **Revenue and Profitability:** These indicators measure the financial success of tourism-related businesses. Profitability assesses the capacity to make a profit after deducting costs and expenses, whereas revenue represents the overall income derived from tourism-related activities. The long-term viability of tourism entrepreneurship depends on increasing income and keeping sustainable profitability.

3.2 Tourism Entrepreneurship in the EU

The tourism sector has the capacity to generate more employment than other industries due to its labor-intensive production structure. Due to its backward and forward links, the industry has an indirect impact on employment in addition to its direct one. The development and maintenance of tourism facilities, the cost of essential infrastructure like energy, telecommunication, and environmental services, and the creation of inputs from manufacturing, agriculture, and other supporting industries are all examples of backward linkages. The industries that provide services for tourism consumption are known as forward linkages, and they primarily include banking, retail, telecommunication, leisure, health care, and hospitality (Bolukoglu & Gozukucuk, 2024). The tourism industry has an impact on employment in addition to its direct and indirect benefits. This is because beneficiaries of tourism revenue spend their money on both durable and nondurable items (Dwyer, Forsyth, & Dwyer, 2020).

The European Union is the world's most visited region, accounting for more than 37% of all international visitor arrivals in 2019. Consequently, tourism represents a substantial economic sector in the European Union, accounting for 11.6% of all jobs and 9.9% of GDP in 2019.. The COVID-19 epidemic has had an extraordinary and

drastic effect on the travel and tourist industry, drastically lowering visitor numbers and, therefore, the earnings of companies in the industry.

Beyond this initial shock, the tourist industry is dealing with longer-term issues about its competitiveness, sustainability, and resilience, as well as its green and digital transformation.

When it comes to tourism policy, the EU plays a supporting and coordinating role with the Member States. During the years 2014–2020, there was no specific EU budget allocated to tourism. Various EU programs might offer financial help to the tourist industry. For the years 2021–2027, this remains the case.

After the COVID-19 outbreak, the EU's tourist industry has experienced an unparalleled shock. The European Commission has proposed policies and strategies aimed at lessening the crisis' effects on the travel and tourist sector inside the EU.

It is therefore advised that the Commission: develop a new strategy for the EU tourism ecosystem that specifically aims to support investments that lead to a more sustainable type of tourism; and urge Member States to implement selection processes for tourism investments funded by the European Regional Development Fund to support this new strategic direction ("EU Support to tourism. Need for a fresh strategic orientation and a better funding approach," 2021).

Chapter 4

DATA AND METHODOLOGY

4.1 Data

The panel data used in this study spans the years 1995–2017. The era is determined by accessible tourism data for EU member states. The European Union (EU-27) member nations make up the study sample. Table 3 presents a complete description and the sources for each variable.

The Adult Population Survey (APS) is a thorough survey that is given to at least 2000 persons in each GEM nation. Its purpose is to gather in-depth data on respondents' views, aspirations, and entrepreneurial activities. Entrepreneurial Behaviour and Attitudes indicators measured via the Adult Population Survey (APS) are listed below:

- Perceived Opportunities Rate: percentage of people between the ages of 18 and 64 (excluding those engaged in any stage of entrepreneurship) who believe there are strong chances to start a business in their community.
- Perceived Capabilities Rate: The proportion of people aged 18 to 64 who think they have the necessary knowledge and abilities to start a business (those engaged in any stage of entrepreneurship excluded).
- Fear of Failure Rate: percentage of people in the 18–64 age range (those engaged in any stage of entrepreneurship not included) who say they would never start a business because they are afraid of failing

- Entrepreneurial Intentions Rate: percentage of people between the ages of 18 and 64 who are latent entrepreneurs and who plan to launch a business within three years (those engaged in any stage of entrepreneurial activity excluded)
- Total early-stage Entrepreneurial Activity (TEA) Rate: The proportion of the population aged 18 to 64 who are either owner-managers or in the early stages of starting their own business.
- Established Business Ownership Rate: The percentage of people between the ages of 18 and 64 who are currently owners or managers of well-established businesses—that is, businesses that are in operation and have been paying their owners salaries, wages, or other forms of compensation for more than 42 months.
- Entrepreneurial Employee Activity Rate: Employee participation rate in entrepreneurial endeavors, such as creating or introducing new products or services or establishing a new company division, location, or subsidiary.
- Motivational Index: The proportion of TEA participants who are motivated by opportunity and improvement, divided by the proportion of TEA participants who are necessarily motivated.
- Female/Male TEA Ratio: The percentage of women in the 18-64 age group who are either owner-managers or nascent entrepreneurs of a "new business," divided by the corresponding percentage of male workers.
- Female/Male Opportunity-Driven TEA Ratio: The percentage of female TEA participants who (i) say they are motivated by opportunity rather than by a lack of other options for employment, and (ii) who say that being independent or growing their income, rather than just sustaining it, is the primary reason for being involved in this opportunity, divided by the corresponding percentage for their male counterparts.

- High Job Creation Expectation Rate: TEA participants' percentage anticipates adding six or more jobs in five years.
- Innovation Rate: percentage of TEA participants who say that at least some of their clients are unfamiliar with their product or service AND that few or no other companies sell the same thing.
- Business Services Sector Rate: Representation of TEA Participants in the 'Business Services' sector (as defined by the ISIC 4.0 Business Type Codebook): Information and Communication, Financial Intermediation and Real Estate, Professional Services, or Administrative Services
- High Status to Successful Entrepreneurs Rate: The proportion of people aged 18 to 64 who concur that successful entrepreneurs in their nation have high status
- Entrepreneurship as a Good Career Choice Rate: the percentage of respondents (18–64 years old) who believe that starting a business is a desirable career route since most people in their country think so.

Entrepreneurial Framework Conditions (EFCs) dataset is also used in this thesis. The NES gathers information on the environment in which entrepreneurship occurs in a nation by distributing it to 36 "experts" in each GEM nation. The Entrepreneurship Framework Conditions (EFCs), which are nine elements of a nation's socioeconomic environment that are thought to have a major influence on national entrepreneurship, are described. The nine conditions identified by GEM that enhance (or hinder) new business creation in a given country, and provide the basis of the NES is listed below:

1. Entrepreneurial Finance: The accessibility of grants and subsidies, in addition to loans and equity, for small and medium-sized enterprises (SMEs)

2. Governmental Policies: Support and Significance: The extent to which entrepreneurship is promoted by public policy as a vital economic concern.
3. Government Policies: Taxes and Bureaucracy: The extent to which rules and regulations encourage new small and medium-sized enterprises (SMEs) or are size-neutral.
4. Government Entrepreneurship Programs: The availability and quality of programs at all levels of government (national, regional, and local) that expressly promote SMEs.
5. Entrepreneurial Education at School Stage: The extent to which primary and secondary education and training systems include lessons on founding or running small and medium-sized businesses.
6. Entrepreneurial Education at Post-School Stage: The extent to which business, college, and vocational education systems, as well as higher education institutions in general, incorporate training in the start-up and operation of small and medium-sized businesses (SMEs).
7. R&D Transfer: The extent to which SMEs have access to national research and development that will provide new commercial prospects.
8. Commercial and Legal Infrastructure: The accessibility of businesses and organizations that support or promote SMEs in the areas of property rights, business, accounting, and other legal and assessment elements
9. Internal Market Dynamics: The extent of yearly fluctuations in markets
10. Internal Market Burdens or Entry Regulation: The degree of latitude that new companies have to join well-established markets

11. Physical Infrastructure. availability of physical resources at a price that doesn't negatively impact SMEs, including land, space, utilities, transportation, and communication
12. Cultural and Social Norms: How much social and cultural norms support or permit behaviors that result in novel business practices or endeavors that have the potential to boost individual wealth and income

Table 3: Data Description

Variable	Measurement	Shortcut	Source
<u>Entrepreneurship Proxies</u>			
Financing for Entrepreneurs	% of Pop.	FINETR	GEM (2023)
Governmental Support and Policies		GOVSUP	
Taxes and Bureaucracy		TAXBUR	
Governmental Programmes		GOVPROG	
Basic School Entrepreneurial Education and Training		ENTEDU	
Post-School Entrepreneurial Education and Training		POSTENTEDU	
R&D Transfer		RDTRANSFER	
Commercial and Professional Infrastructure		COMPROFINF	
Internal Market Dynamics		INTMARK	
Physical and Services Infrastructure		PHYSERVINF	
Cultural and Social Norms		CULTRSOCNORM	
Perceived Opportunities		PERCOPP	
Perceived Capabilities		PERCCAP	
Fear of Failure Rate		FEAROFFAIL	
Entrepreneurial Intentions		ENTINT	
Total Early-Stage Entrepreneurial Activity (TEA)	%	TEA	
Established Business Ownership	%	EBO	
Entrepreneurial Employee Activity	Index	EEA	
Motivational Index	As % of GDP	MOTIND	
Female/ Male TEA	%	FEMTEA	
Female/Male Opportunity-Driven TEA	As %of GDP	FEMOPPTEA	

Table 3: Data Description (Continued)

Variable	Measurement	Shortcut	Source
<u>Financial System Proxies</u>			
Financial Development	Index	FD	IMF (2023)
Financial Institutions		F.I.	
Financial Institutions Access		FIA	
Financial Institutions Depth		FID	
Financial Institutions Efficiency		FIE	
Financial Markets		FM	
Financial Markets Access		FMA	
Financial Markets Depth		FMD	
Financial Markets Efficiency		FME	
<u>Control Variables</u>			
Gross Domestic Product (2015 = 100)	USD Prices	GDP	World Bank (2023)
Gross Capital Formation (as a percent of GDP)	Percentage	K	
Labor Force	Number	L	
Consumer Price Index (2015 = 100)	Index	CPI	
High Job Creation Expectations	%	HJCE	
Innovation	% of Pop.	INNO	
Business Services Sector		BSS	
High Status to Successful Entrepreneurs		HSSE	
Entrepreneurship as a Good Career Choice		EGCC	

4.2 Methodology

To calculate the impact of the financial system on entrepreneurship in the European Union, the current study suggests using the functional form of regression as follows.

$$E_t = f(FD_t, CV_i) \quad (1)$$

Where E_t stands for entrepreneurship proxy at time t , FD_t stands for financial development proxy at time t , and CV stands for control variables at time t under inspection.

The following regression form is estimated to capture the growth effects of the financial system on entrepreneurship:

$$\ln E_t = \beta_0 + \beta_1(\ln FD_t) + \beta_2(\ln CV_t) + \varepsilon_t \quad (2)$$

Where the term $\ln$ stands for the logarithmic form of series, β_0 is intercepted, β_1 is the elasticity coefficient of F.D., β_2 is the elasticity coefficient of the control variable, and ε is error disturbance at time t .

Cross-section dependency in panel data needs to be investigated before further analyses. Then, unit root tests are adopted using different approaches presented in Table 5, including trend and intercept specifications. Then after, the study estimates equation (2) by the system Generalized Method of Moments (GMM) approach, whose estimator is strongly consistent and asymptotically normal (Hansen, 1982).

Chapter 5

RESULTS

This chapter will present the results of the cross-section dependency test, panel unit root test, system Generalized Method of Movements

5.1 Results

Table 4 presents the results of cross-section dependency tests, which strongly confirm the existence of independence across E.U. countries. This is because the null hypothesis of cross-section dependency is rejected.

Table 4: Cross-Section Dependency Tests

Variables	Breusch-Pagan LM	Pesaran CD
lnFINETR	4287.135*	76.748*
lnPERCOPP	1865.457*	65.452*
lnPERCCAP	3689.745*	81.458*
lnFEAROFFAIL	2467.897*	92.457*
lnENTINT	6478.234*	35.451*
lnTEA	4578.524*	21.857*
lnEBO	3457.743*	36.478*
lnGDP	5229.881*	65.650*
lnK	1709.480*	25.198*
lnL	5494.721*	28.248*
lnCPI	7349.664*	85.526*
lnFD	2658.457*	63.456*
lnFI	3658.748*	56.758*
lnFIA	2478.253*	45.487*
lnFID	4257.986*	32.125*
lnFIE	3687.781*	25.563*
lnFM	3789.257*	21.112*
lnFMA	2987.456*	37.857*
lnFMD	1963.758*	23.568*
lnFME	2145.542*	34.458*

Notes: L.M. is a Lagrange multiplier, and CD is a cross-section dependency. * denote rejection of the null hypothesis at the 1% level.

H0: Dependent

H1: Independent

The null hypothesis of cross-section dependency is rejected which confirms the existence of independency across E.U countries.

Secondly, Table 5 presents unit root test results, revealing that all series are stationary at levels with trend and intercept. This is because the null hypothesis of a unit root is rejected, and its alternative of no unit root is accepted at levels, and they are integrated of order zero, I (0).

Table 5: Panel Unit Root Tests

Variables	Levels		
	LLC	IPS	PP χ^2
lnFINETR	-6.506*	-1.291***	84.893*
lnPERCOPP	-16.213*	-2.686*	84.622*
lnPERCCAP	-8.041*	-1.494***	79.002*
lnFEAROFFAIL	-10.682*	-2.967*	162.670*
lnENTINT	-52.358*	-1.939**	80.212*
lnTEA	-9.593*	-2.426*	94.619*
lnEBO	-25.858*	-3.460*	154.247*
lnGDP	-3.883*	-4.368*	76.724*
lnK	-9.511*	-6.994*	72.601**
lnL	-4.908*	-2.127**	31.767*
lnCPI	-12.912*	-3.313*	40.127*
lnFD	-8.457*	-1.776**	32.047*
lnFI	-9.425*	-4.115*	45.116*
lnFIA	-11.011*	-2.056**	52.332*
lnFID	-7.869**	-3.768*	38.567*
lnFIE	-12.016*	-4.116*	41.136*
lnFM	-19.758*	-5.045*	37.536*
lnFMA	-14.045*	-1.996**	78.452*
lnFMD	-24.568*	-3.325*	116.265*
lnFME	-24.457*	-2.027**	84.654*

Note: LLC stands for Levin, Lin & Chu test statistic, IPS for Im, Pesaran, & Shin, and P.P. for Phillips & Perron Fisher type chi-square test statistic. All the statistics are from models with trend and intercept options. *, **, and *** denote rejection of the null hypothesis at the 1%, 5%, and 10% levels respectively.

Table 6 presents the GMM results for equation (2), which mainly reveal the significant effects of the financial system on entrepreneurial trends in the E.U. Results demonstrate that changes in the financial markets will precede significant changes in

entrepreneurial trends. However, the direction of these effects is mixed depending on the type of financial instruments and entrepreneurial activity across countries. Diagnostic test results in Table 6 reveal that there doesn't appear to be any econometric deficiency in model estimations; thus, results are said to be robust.

H0: Unit root (nonstationary)

H1: No unit root (stationary)

The null hypothesis of a unit root is rejected, and its alternative of no unit root is accepted at levels and they are integrated of order zero, $I(0)$.

Table 6: SYSTEM GMM Results for Entrepreneurship

Models	lnFin ETR	LnPER COPP	LnPER CCAP	LnFEARO FFAIL	LnEN TINT	LnT EA	LnE BO
Dependent Var. _{t-1}	0.188	0.683*	0.645*	0.746*	0.724*	0.69 7*	0.74 6*
	0.104 ***	0.023				- 0.02	- 0.05
lnGDP			-0.001	-0.018	-0.008	3	4
	- 0.104	-0.124				- 0.13	- 0.02
lnK			0.126*	0.070***	-0.098	8**	2
	- 0.104	-0.033				0.02 7	0.07 2
lnL	***		0.021	0.031	-0.002		
	- 0.023	0.268**	0.144**	0.158**	0.280* **	0.26 5**	0.21 3
lnCPI						0.37	0.52
lnFD	0.170	-0.170	-0.06	-0.436***	0.290	1	3***
	0.109	1.516			- 1.726* *	- 0.68 9	- 0.15 6
lnFI		- 0.632** *	0.087	0.008		0.10 4	- 0.05 0
lnFIA	0.173		-0.000	0.131	0.570* *		
	0.006	-0.248				0.19 1	- 0.04
lnFID			-0.019	0.082	0.489* *		0.28 5
	- 0.050	0.509** *				0.17 4	0.28 5
lnFIE			0.058	0.063	0.435* **		
lnFM	- 0.209	0.067	0.060	0.287**	0.463* **	0.13 9	0.14 2
	0.079 **	0.002				- 0.05	- 0.03
lnFMA			0.027	-0.049***	0.180* -	6	5
	0.150 **	-0.100	- 0.087**	-0.055	0.254* *	- 0.16 1***	- 0.21 4**
lnFMD						- 0.07	- 0.05
lnFME	0.022	0.041	-0.004	-0.022	0.128* -	2**	3
	- 0.492 ***	- 0.160** *				- 0.19 7**	- 0.37 3*
AR (1)			-0.114	-0.240*	0.146* **		
Adj. R ²	0.631	0.566	0.618	0.502	0.678	0.57 0	0.48 9
S.E. of Regr.	0.089	0.304	0.106	0.144	0.265	0.22 6	0.34 4
DW	1.967	2.145	1.514	1.997	1.796	1.94 6	1.86 1
Instrument Rank	42	29	29	29	29	29 29	29 29
J-prob.	0.262	0.365	0.200	0.762	0.040	0.81	0.05 9
Obs.	150	220	220	220	209	220	220

Note: *, **, *** indicate that coefficient is significant at the 1%, 5%, and 10% level respectively.

Table 6: SYSTEM GMM Results for Entrepreneurship (Continued)

Models	LnEE A	LnMOTI ND	infecte d	LnFEMOPPT EA	lnHJC E	lnINN O
Dependent						
Var. _{t-1}	0.964*	0.842	0.372*	0.514***	0.735*	0.625*
lnGDP	-0.029	-0.150	-	-0.070	0.076	0.100*
lnK	0.177	-0.221	-0.063	-0.139	-	**
lnL	0.052	0.167	0.129*	0.073	0.092	0.121
lnCPI	-0.151	0.449	0.172*	0.273	0.097	-
lnFD	1.072	0.082	**	0.753	0.168	0.104*
lnFI	0.787	1.039	0.021	0.349	-	**
lnFIA	-0.547	-0.698	-0.143	-0.223	0.319	-0.044
lnFID	-				0.305	-0.229
lnFIE	0.755*	-0.269	-0.123	-0.157	-	0.946
lnFM	**	-0.314	-0.044	0.129	0.016	-0.155
lnFMA	-0.513	0.289	-0.179	0.106	0.032	-0.101
lnFMD	-0.169	-0.046	0.006	-0.006	-	-0.263
lnFME	0.024	-0.130	0.003	-0.256**	0.037	-0.087
AR (1)	0.080	-0.026	0.018	-0.055	-	0.062
Adj. R ²	-0.035	-0.427*	-	-0.596**	0.113	-0.024
S.E. of Regr.	-	0.642*	0.281*		-	0.020
DW	0.749	0.645	0.085	0.065	0.034	-
Instrument	0.291	0.397	0.238	0.153	0.034	0.524*
Rank	2.634	2.175	1.955	2.435	8*	
J-prob.	29	29	29	29	29	
Obs.	0.898	0.270	0.424	0.059	0.246	0.710
	48	100	220	47	220	84

Note: *, **, *** indicate that coefficient is significant at the 1%, 5%, and 10% level respectively.

Table 6: SYSTEM GMM Results for Entrepreneurship (Continued)

Models	lnBS S	lnHS SE	lnEG CC	LnGOV SUP	LnTAX BUR	LnGOVP ROG	lnENT EDU
Dependent	0.658	0.846	0.866			0.878*	0.692*
Var. _{t-1}	*	*	*	0.778*	0.789*		
lnGDP	0.078 **	0.026	- 0.014	0.039	0.055*	0.032*	0.037* **
lnK	0.126 **	0.014		-0.028	- 0.056** *	-0.007	0.007
lnL	- 0.074 ***	- 0.021		-0.033	- 0.049**	-0.029**	- 0.053* *
lnCPI	- 0.059	0.038	0.124 **	- 0.073**	- 0.101**	-0.071**	-0.002
lnFD	- 0.045	- 0.009	- 0.234	-0.384	0.167	0.028	0.034
lnFI	0.719	0.381	0.148	0.617	0.633** *	0.317	1.087*
lnFIA	- 0.209	- 0.164 ***	- 0.000	-0.162	- 0.286**	- 0.118***	- 0.433*
lnFID	- 0.185	- 0.122	0.010	-0.119	- 0.225**	-0.122**	- 0.282*
lnFIE	- 0.300 ***	- 0.112	0.022	-0.196	- 0.251**	-0.172	- 0.172* **
lnFM	- 0.118	0.056	0.172 ***	0.046** *	-0.076	-0.057	-0.049
lnFMA	0.061	- 0.002	- 0.033	0.002	0.000	0.010	0.004
lnFMD	0.000	- 0.043	- 0.045	0.052	0.012	0.040	-0.012
lnFME	0.059	7.92e -05	- 0.010	0.016	0.003	0.003	0.001
AR (1)	- 0.412 *	- 0.322 *	- 0.255 *	-0.353*	-0.278*	-0.316*	- 0.203* **
Adj. R ²	0.379	0.726	0.667	0.705	0.772	0.813	0.595
S.E. of Regr.	0.229	0.087	0.107	0.102	0.110	0.075	0.112
DW	2.011	1.708	1.873	1.976	2.086	2.09	1.938
Instrument						29	29
Rank	29	29	29	29	29		
J-prob.	0.896	0.077	0.365	0.557	0.985	0.744	0.482
Obs.	200	185	183	179	179	179	176

Note: *, **, *** indicate that coefficient is significant at the 1%, 5%, and 10% level respectively.

Table 6: SYSTEM GMM Results for Entrepreneurship (Continued)

Models	LnPOSTENTE DU	lnRDTRANSFE R	lnCOMPROFINF	lnINTMARK	lnPHYSERVINF	lnCULT RSOCN ORM
Dependent Var. _{t-1}	0.782*	0.612*	0.661*	0.672*	0.664*	0.859*
lnGDP	0.011	0.050*	0.061*	-0.035**	0.030**	0.016
lnK	0.027	-0.038	-0.036***	0.024	0.003	-0.023
lnL	-0.012	-0.050*	-0.059*	0.028	-0.030***	-0.016
lnCPI	0.003	-0.031	-0.052**	0.178*	0.027	-0.000
lnFD	-0.059	-0.226	-0.083	-0.016	-0.258	0.076
lnFI	0.185	0.682**	0.129	-0.243	-0.051	0.392
lnFIA	-0.051	-0.208**	-0.029	0.056	0.028	-0.145
lnFID	-0.046	-0.184**	-0.045	0.068	0.056	-0.115
lnFIE	-0.043	-0.191**	-0.011	0.116	0.088	-0.083
lnFM	0.006	0.014	0.028	0.019	0.015	-0.015
lnFMA	-0.001	0.006	-0.026**	0.019	0.002	-0.007
lnFMD	0.024	0.054***	0.017	0.001	0.047	-0.004
lnFME	-0.002	0.011	-0.015**	-0.003	0.007	-0.007
AR (1)	-0.394*	-0.148	-0.263*	-0.229**	-0.253*	- 0.282*
Adj. R ²	0.378	0.645	0.608	0.520	0.480	0.685
S.E. of Regr.	0.082	0.075	0.065	0.107	0.090	0.086
DW	2.106	2.050	2.160	2.140	2.343	2.072
Instrument Rank	29	29	29	29	29	29
J-prob.	0.515	0.237	0.612	0.863	0.724	0.209
Obs.	165	179	179	179	179	171

Note: *, **, *** indicate that coefficient is significant at the 1%, 5%, and 10% level respectively.

Chapter 6

CONCLUSION

In this chapter, we will present the findings on how the financial system affects business developments in the EU.

6.1 Summary of the Major Findings

Findings reveal the significant effects of the financial system on entrepreneurial trends in the E.U. Results also demonstrate that changes in the financial markets will precede significant changes in entrepreneurial trends. However, the direction of these effects is mixed depending on the type of financial instruments and entrepreneurial activity across countries.

The findings support the financial system's considerable but variable influence on entrepreneurial activities. Numerous factors, including (1) limited access to capital due to obstacles (Beck & Demircuc-Kunt, 2006), (2) high cost of capital (Dutta & Meierrieks, 2021), (3) short-term focus of the financial system to have short-term profits, (4) risk aversion, and (5) numerous regulatory barriers, can be blamed for the financial system's negative effects on entrepreneurship. And advantageous outcomes may be linked to the following factors: (1) simpler access to finance, (2) effective resource allocation, (3) improved risk management, (4) improved market knowledge, and (5) networking possibilities (Dutta & Meierrieks, 2021).

The null hypothesis can change depending on some factors. Some are positively affected while others are negatively. In Table 6 it is wise to mention some significant relationships between dependent variables which are the financial system variables and independent entrepreneurship variables.

LnGrossDomesticProduct and LnFinancingforEntrepreneurs: there is an indication that the coefficient is significant at the 10% level. This means the availability of financial resources—equity and debt—for small and medium enterprises (SMEs) (including grants and subsidies) is positively correlated with gross domestic product which is the monetary value of final goods and services.

LnFinancial institutions and LnENTINTentions: Percentage of the 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years. There is an indication that the coefficient is significant at the 5% level. Financial institutions are negatively correlated with entrepreneurial intentions. while financial institutions can provide essential support for entrepreneurship, factors such as stringent lending criteria, high costs, limited access to capital, bureaucratic processes, and lack of tailored support can create barriers that negatively impact entrepreneurial intentions. Addressing these issues requires a concerted effort to make financial systems more inclusive and supportive of new ventures.

LnFinancialInstitutionsAccess and LnEntrepreneurialIntentions: There is an indication that the coefficient is significant at 5% level. Financial institutions' access is positively correlated with entrepreneurial intentions. Access to financial institutions positively influences entrepreneurial intentions by providing crucial funding,

increasing confidence, offering business development support, enhancing credibility, and reducing financial risks. These factors create a more favorable environment for entrepreneurs, encouraging them to pursue their business ideas and contribute to economic growth.

LnFinancialMarketsDepth and LnTotalEarlystageEntrepreneurialActivity: There is an indication that the coefficient is significant at 10% level. The positive correlation exists because deep financial markets provide the necessary infrastructure, access to capital, and risk management tools that are essential for early-stage entrepreneurial ventures to thrive.

LnFinancialDevelopment and LnEstablishedBusinessOwnership: There is an indication that the coefficient is significant at 10 % level. Financial development supports established business ownership by providing better access to financing, improved financial services, risk management tools, liquidity, and a stable business environment. These factors collectively contribute to the growth, stability, and sustainability of established businesses.

6.2 Research Limitation

Limitations of this research could be mentioned as data not existing for some years and some countries. The research may be limited by its temporal scope, particularly if it relies on cross-sectional data. Understanding the long-term impacts of financial efficiency on entrepreneurship requires longitudinal studies, which may not be fully feasible within the study's timeframe.

6.3 Policy Implications and Future Research

Future studies might focus on (1) the relationship between access to finance and new business creations, (2) the relationship between different types of financing and the success of new businesses, and (3) the effects of different financing models on entrepreneurship outcomes and new businesses.

For tourism entrepreneurs in the EU, understanding and navigating the financial landscape is crucial. They must leverage the opportunities provided by positive market conditions while mitigating the risks associated with financial instability. Strategies might include diversifying funding sources, focusing on niche markets, and building resilience to economic fluctuations.

Policy Implications for Tourism Industry

Enhanced Financial Management Practices: This research provides insights into effective financial management practices tailored for the tourism sector. By understanding how financial efficiency impacts entrepreneurial success, tourism businesses can adopt strategies that optimize resource allocation, reduce costs, and improve overall financial health, leading to increased profitability and sustainability.

Improved Access to Funding: Findings may highlight the role of financial efficiency in enhancing the ability of tourism entrepreneurs to secure funding. Understanding the connection between financial practices and funding success can guide entrepreneurs in preparing more robust business plans and financial statements, thus improving their chances of attracting investors or obtaining loans.

Strategic Cost Management: The study's insights into cost management will be crucial for tourism enterprises facing high operational expenses and fluctuating demand. By identifying best practices in financial efficiency, businesses can develop more effective cost control measures, leading to better management of seasonal variations and economic downturns.

Adaptation to Regional Variations: Given the diverse economic conditions and regulatory environments across the EU, the research will shed light on how financial efficiency strategies can be adapted to different regional contexts. Tourism businesses can use this information to tailor their financial practices to local market conditions and regulatory requirements, enhancing their competitiveness in various EU regions.

Technology Integration: The study's exploration of the impact of technological advancements on financial efficiency will offer guidance on leveraging technology for better financial management. Tourism businesses can use these insights to integrate new technologies that streamline financial processes, improve data accuracy, and enhance decision-making.

Policy and Regulatory Insights: Understanding how different regulatory frameworks affect financial efficiency will provide valuable information for policymakers and tourism industry stakeholders. The research can inform the development of policies and regulations that support financial efficiency and entrepreneurial growth in the tourism sector.

Sustainable Business Practices: Insights into long-term financial sustainability will help tourism entrepreneurs adopt practices that ensure the longevity and resilience of

their businesses. By focusing on financial efficiency, businesses can better navigate economic uncertainties and position themselves for sustainable growth.

Best Practices for Entrepreneurial Success: The research will identify key financial practices that contribute to entrepreneurial success in the tourism industry. These best practices can serve as a benchmark for new and existing businesses, guiding them towards effective financial management and strategic planning.

Training and Development Needs: The study's findings may reveal gaps in financial literacy and skills among tourism entrepreneurs. This can lead to the development of targeted training programs and resources to enhance financial management capabilities within the industry.

Competitive Advantage: By applying the insights gained from the research, tourism businesses can gain a competitive edge through improved financial efficiency. This advantage can help them outperform competitors, attract more customers, and achieve higher levels of success in the increasingly competitive tourism market.

These implications are crucial for helping tourism businesses navigate challenges, capitalize on opportunities, and achieve long-term success.

Positive Implications of Financial Markets on Tourism Industry

Access to Capital:

Enhanced Funding Opportunities: Vibrant financial markets provide entrepreneurs with various funding options, including venture capital, private equity, and loans. This access to capital can be crucial for starting and scaling tourism-related businesses.

Investment in Innovation: Entrepreneurs can secure funding for innovative projects, such as sustainable tourism initiatives or tech-driven solutions, which can enhance the attractiveness of destinations and create new market segments.

Economic Growth and Stability:

Boosting Consumer Spending: Strong financial markets can lead to increased economic stability and consumer confidence, resulting in higher disposable income and spending on travel and tourism.

Increased Demand for Tourism Services: Economic prosperity often translates into more people traveling, both within the EU and internationally, benefiting tourism businesses.

Expansion of Tourism Infrastructure:

Improved Infrastructure Investments: Financial markets can support investments in infrastructure, such as transportation and hospitality facilities, which can enhance the overall tourism experience and attract more visitors.

Support for Niche Markets:

Development of Niche Tourism: Financial markets can facilitate funding for niche tourism markets, such as eco-tourism or cultural tourism, diversifying the range of tourism products available and catering to specific interests.

Negative Implications of Financial Markets on Tourism Industry

Economic Volatility:

Impact of Financial Crises: Financial market instability or crises can lead to reduced access to capital, decreased consumer spending, and a drop in tourism demand, negatively impacting tourism businesses and entrepreneurship.

Risk Aversion:

Economic downturns can lead to risk aversion among investors, making it more difficult for new or small tourism businesses to secure funding.

Investment Inequality:

Focus on High-Return Projects: Investors may prioritize high-return projects, potentially neglecting smaller or less conventional tourism ventures that might offer long-term benefits but are seen as riskier.

Regional Disparities: Investment may be concentrated in more developed or popular regions, leading to imbalances and underdevelopment in less well-known or emerging destinations.

Market Fluctuations:

Unpredictable Funding Environment: Fluctuating financial markets can create an unpredictable environment for securing investment, making it challenging for entrepreneurs to plan and execute long-term projects.

Impact on Business Planning: Uncertainty in financial markets can affect business planning and forecasting, leading to potential disruptions in tourism ventures.

Increased Competition:

Heightened Competition for Resources: A strong financial market might attract more entrepreneurs to the tourism sector, leading to increased competition and potentially saturated markets in popular destinations.

Additionally, policymakers and financial institutions can play a role in fostering a supportive environment for tourism entrepreneurship by providing targeted support and encouraging balanced regional development.

Looking at the findings we recommend future work also focus on positively correlated data on why it is positively correlated. Future research can find out why it positively and negatively correlated and what can the reasons be.

Last but not least, entrepreneurship is not only affected by the financial system but also energy dependency and this is highly interrelated with foreign trade volume. Therefore, it is wise to work with developing countries and find out how they are affected and what interactions they have with each other

REFERENCES

- Acs, Z. (2006). How is entrepreneurship good for economic growth. *innovations*, 1(1), 97-107.
- Aghion, P., Dewatripont, M., & Rey, P. (1999). Competition, financial discipline and growth. *The Review of Economic Studies*, 66(4), 825-852.
- Ajide, F. M., & Ojeyinka, T. A. (2022). Financial development and entrepreneurship: insights from Africa. *Journal of Financial Regulation and Compliance*, 30(5), 596-617.
- Alvarez, S. A., & Busenitz, L. W. (2001). The entrepreneurship of resource-based theory. *Journal of management*, 27(6), 755-775.
- Ateljevic, I., & Doorne, S. (2000). 'Staying within the fence': Lifestyle entrepreneurship in tourism. *Journal of sustainable tourism*, 8(5), 378-392.
- Audretsch, D. B., Grilo, I., & Thurik, A. R. (2007). Explaining entrepreneurship and the role of policy: a framework. *The handbook of research on entrepreneurship policy*, 1-17.
- Babajide, A. A., Adegboye, F. B., & Omankhanlen, A. E. (2015). Financial inclusion and economic growth in Nigeria. *International Journal of economics and financial issues*, 5(3), 629-637.

- Barney, J. B. (2001). Is the resource-based “view” a useful perspective for strategic management research? Yes. *Academy of management Review*, 26(1), 41-56.
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of management Review*, 33(2), 328-340.
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & finance*, 30(11), 2931-2943.
- Blanchflower, D. G., & Oswald, A. J. (1998). What makes an entrepreneur? *Journal of labor Economics*, 16(1), 26-60.
- Bolukoglu, A., & Gozukucuk, T. (2024). Tourism development and women employment: A study on the European union countries. *Tourism Economics*, 30(2), 442-456.
- Bozkurt, Ö., & Erdurur, K. (2013). Girişimci kişilik özelliklerinin girişimcilik eğilimindeki etkisi: potansiyel girişimciler üzerinde bir araştırma. *Girişimcilik ve Kalkınma Dergisi*.
- Bradford, G. (1874). Lombard street. a description of the money market. In: JSTOR.
- Britton, S. (1991). Tourism, capital, and place: Towards a critical geography of tourism. *Environment and planning D: society and space*, 9(4), 451-478.

- Brockhaus, R., & Horwitz, P. (2002). The psychology of the entrepreneur. *Entrepreneurship: critical perspectives on business and management*, 260, 260-279.
- Busenitz, L., West, G., Shepherd, D., Nelson, T., Chandler, G., & Zacharakis, A. (2003). Entrepreneurship in emergence: Fourteen years of entrepreneurship research in management journals. *Journal of management*, 29(3), 285-308.
- Bygrave, W. D., & Zacharakis, A. (2007). *Entrepreneurship* (1 ed.): Wiley & Sons.
- Chandler, G. N., & Hanks, S. H. (1994). Market attractiveness, resource-based capabilities, venture strategies, and venture performance. *Journal of business Venturing*, 9(4), 331-349.
- Chang, J. (2011). Introduction: Entrepreneurship in tourism and hospitality: The role of SMEs. *Asia Pacific Journal of Tourism Research*, 16(5), 467-469.
- Chittenden, F., Hall, G., & Hutchinson, P. (1996). Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation. *Small business economics*, 8, 59-67.
- Chrisman, J. J., & Kellermanns, F. W. (2015). Entrepreneur. *Wiley Encyclopedia of Management*, 1-2.

- Čihák, M., Demirgüç-Kunt, A., Feyen, E., & Levine, R. (2012). Benchmarking financial systems around the world. *World Bank policy research working paper*(6175), 1-58.
- Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: do we have a new theory of the firm? *Journal of management*, 17(1), 121-154.
- Cuervo, A. (2005). Individual and environmental determinants of entrepreneurship. *The International Entrepreneurship and Management Journal*, 1, 293-311.
- Cumming, D., Meoli, M., & Vismara, S. (2021). Does equity crowdfunding democratize entrepreneurial finance? *Small business economics*, 56(2), 533-552.
- Degryse, H., Kim, M., & Ongena, S. (2009). *Microeconometrics of Banking: Methods, Applications, and Results*: Oxford University Press, USA.
- Dewhurst, P., & Horobin, H. (1998). Small business owners. *The management of small tourism and hospitality firms*, 19-38.
- Draheim, K. P. (1972). Factors influencing the rate of formation of technical companies. In *Proceedings of the Technical Entrepreneurship: a symposium*, Milwaukee Centre for Venture Management.

Dutta, N., & Meierrieks, D. (2021). Financial development and entrepreneurship. *International Review of Economics & Finance*, 73, 114-126.

Dwyer, L., Forsyth, P., & Dwyer, W. (2020). *Tourism Economics and Policy* (Vol. 5): Channel View Publications.

EU Support for Public Projects in the Tourism Sector. (2020). Retrieved from https://www.eurosai.org/handle404?exporturi=/export/sites/eurosai/.content/documents/AP_Tourism_EN.pdf

EU Support to tourism. Need for a fresh strategic orientation and a better funding approach. (2021). Retrieved from <https://op.europa.eu/webpub/eca/special-reports/eu-support-in-tourism-27-2021/en/>

European Tourism Agenda 2030: Commission welcomes the commitment of EU countries to make tourism greener, more digital and resilient. (2022). Retrieved from <https://shorturl.at/7vJTM>

Evans, D. S., & Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of political economy*, 97(4), 808-827.

Formica, S., & McCleary, K. (2000). Professional-development Needs in Ital: Hotelers Identify the Management Skills that Require Improvement. *Cornell Hotel and Restaurant Administration Quarterly*, 41(2), 72-78.

- Gartner, W. B. (1988). "Who is an entrepreneur?" is the wrong question. *American journal of small business*, 12(4), 11-32.
- Gartner, W. B., & Shane, S. A. (1995). Measuring entrepreneurship over time. *Journal of business Venturing*, 10(4), 283-301.
- Getz, D., & Carlsen, J. (2000). Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism management*, 21(6), 547-560.
- Getz, D., & Petersen, T. (2005). Growth and profit-oriented entrepreneurship among family business owners in the tourism and hospitality industry. *International journal of hospitality management*, 24(2), 219-242.
- Glancey, K., McQuaid, R., & Campling, J. (2000). *Entrepreneurial economics*: Springer.
- Gómez-Gras, J. M., Mira-Solves, I., & Martinez-Mateo, J. (2010). Determinants of entrepreneurship: an overview. *International Journal of Business Environment*, 3(1), 1-14.
- Gregory, R. P. (2019). Financial openness and entrepreneurship. *Research in international business and finance*, 48, 48-58.
- Guide to EU Funding 2023 Edition. (2023). Retrieved from https://www.europarl.europa.eu/EPRS/Funding_Guide.pdf

- Hall, G. C., Hutchinson, P. J., & Michaelas, N. (2004). Determinants of the capital structures of European SMEs. *Journal of Business Finance & Accounting*, 31(5-6), 711-728.
- Henry, A. O. (2014). Entrepreneurship, Financial, And Economic Development: A Literary Review. 19(6), 86-119.
- Hisrich, R. D., & Peters, M. P. (2001). *Entrepreneurship with PowerWeb* (5 ed.). New York, NY: McGraw-Hill/Irwin.
- Holtz-Eakin, D., Joulfaian, D., & Rosen, H. S. (1994). Sticking it out: Entrepreneurial survival and liquidity constraints. *Journal of political economy*, 102(1), 53-75.
- Hunt, S. A., & Bygrave, W. D. (2005). Global Entrepreneurship Monitor: 2004 Financing Report. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.
- Hussain, H. I., Kot, S., Kamarudin, F., & Wong, C. M. (2020). The nexus of competition freedom and the efficiency of microfinance institutions. *Journal of Competitiveness*, 12(2), 67.
- Jaafar, M., Abdul-Aziz, A. R., Maideen, S. A., & Mohd, S. Z. (2011). Entrepreneurship in the tourism industry: Issues in developing countries. *International journal of hospitality management*, 30(4), 827-835.

- JS Ramalho, J., & da Silva, J. V. (2009). A two-part fractional regression model for the financial leverage decisions of micro, small, medium and large firms. *Quantitative Finance*, 9(5), 621-636.
- Kang, E., & Uhlenbruck, K. (2006). A process framework of entrepreneurship: From exploration, to exploitation, to exit. *Academy of Entrepreneurship Journal*, 12(1), 47.
- Kao, R. W. (1993). Defining entrepreneurship: past, present and? *Creativity and innovation management*, 2(1), 69-70.
- Karim, K. M., & Sakdan, F. S. (2019). Peranan Sektor Awam dalam Pembangunan: Kajian di Pulau Pelancongan di Malaysia. *Journal of Tourism, Hospitality and Environment Management*, 4(15), 57-65. doi:10.35631/JTHEM.415006
- Kent, C. A., Sexton, D. L., & Vesper, K. H. (1982). *Encyclopedia of Entrepreneurship*. Urbana-Champaign, IL: University of Illinois.
- Kerr, W. R., Lerner, J., & Schoar, A. (2014). The consequences of entrepreneurial finance: Evidence from angel financings. *The Review of Financial Studies*, 27(1), 20-55.
- Keuschnigg, C., & Nielsen, S. B. (2003). Tax policy, venture capital, and entrepreneurship. *Journal of Public economics*, 87(1), 175-203.

- Khyareh, M. M., Khairandish, M., & Torabi, H. (2019). Macroeconomic effects of entrepreneurship: Evidences from factor, efficiency and innovation driven countries. *International Journal of Entrepreneurship*, 23(1), 1-21.
- Kirzner, I. M. (2009). The alert and creative entrepreneur: A clarification. *Small business economics*, 32, 145-152.
- Klimas, P., Czakon, W., Kraus, S., Kailer, N., & Maalaoui, A. (2021). Entrepreneurial failure: A synthesis and conceptual framework of its effects. *European Management Review*, 18(1), 167-182.
- Koh, K. Y., & Hatten, T. S. (2002). The tourism entrepreneur: The overlooked player in tourism development studies. *International Journal of Hospitality & Tourism Administration*, 3(1), 21-48.
- Li, R., & Qian, Y. (2021). How does entrepreneurship influence the efficiency of household portfolios? *The European Journal of Finance*, 27(13), 1282-1302.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Lynch, P., & MacWhannell, D. (2000). Home and conceptualizing hospitality. *In search of hospitality: Theoretical perspectives and debates*, 1965-1982.

McCormick, J. (2015). 2 What Is the European Union? In E. Z. Eleanor & B. P. Ellen (Eds.), *The European Union and the Member States* (pp. 17-36). Boulder, USA: Lynne Rienner Publishers.

Mckercher, B. (1998). The effect of market access on destination choice. *Journal of travel research*, 37(1), 39-47.

Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small business economics*, 12, 113-130.

Mishkin, F. S. (2014). *Economics of Money, Banking, and Financial Markets* (11 ed.). Mississauga, Ontario: Pearson International.

Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial economics*, 5(2), 147-175.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.

Nikraftar, T., & Hosseini, E. (2016). Factors affecting entrepreneurial opportunities recognition in tourism small and medium sized enterprises. *Tourism Review*, 71(1), 6-17.

Northcott, C. A. (2004). Competition in banking: A review of the literature. 1-35.

- Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic management journal*, 14(3), 179-191.
- Peters, M., & Buhalis, D. (2004). Small family hotel businesses: The need for education and training. *Journal of education and training*, 46(8), 406-416.
- Peters, M., Frehse, J., & Buhalis, D. (2009). The importance of lifestyle entrepreneurship: A conceptual study of the tourism industry. *Pasos. Revista de turismo y patrimonio cultural*, 7(3), 393-405.
- Peters, M., Kallmuenzer, A., & Buhalis, D. (2019). Hospitality entrepreneurs managing quality of life and business growth. *Current Issues in Tourism*, 22(16), 2014-2033.
- Piñeiro-Chousa, J., López-Cabarcos, M. Á., Romero-Castro, N. M., & Pérez-Pico, A. M. (2020). Innovation, entrepreneurship and knowledge in the business scientific field: Mapping the research front. *Journal of Business Research*, 115, 475-485.
- Pirnar, I., & Bulut, C. (2012). Turizm sektorunde girisimcilik ve girisimci ozellikleri. *Girisimcilik İklimi*, 1(2), 32-34.
- Psillaki, M., & Daskalakis, N. (2009). Are the determinants of capital structure country or firm specific? *Small business economics*, 33, 319-333.

- Quadrini, V. (2009). Entrepreneurship in macroeconomics. *Annals of Finance*, 5, 295-311.
- Ratten, V. (2018). Entrepreneurial intentions of surf tourists. *Tourism Review*, 73(2), 262-276.
- Reinhold, S., Zach, F. J., & Krizaj, D. (2017). Business models in tourism: a review and research agenda. *Tourism Review*, 72(4), 462-482.
- Ritchie, J. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*: Cabi.
- Rumelt, R. P. (1984). Towards a strategic theory of the firm. *Competitive strategic management*, 26(3), 556-570.
- Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the sustainable development goals. *Nature sustainability*, 2(9), 805-814.
- Samiei, S., & Akhoondzadeh, M. (2014). The role of entrepreneurship in tourism industry development. *European Online Journal of Natural and Social Sciences*, 2(3 (s)), pp. 1423-1430.
- Sánchez-Robles, B. (1997). Financial efficiency and economic growth: The case of Spain. *International Advances in Economic Research*, 3(4), 333-351.

- Sawyer, M. (2015). *Financialisation, financial structures, economic performance and employment*. Retrieved from
- Schumpeter, J. A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge, MA: Harvard University Press
- Shahbaz, M., Nasir, M. A., & Lahiani, A. (2022). Role of financial development in economic growth in the light of asymmetric effects and financial efficiency. *International Journal of Finance & Economics*, 27(1), 361-383.
- Shane, S. (2008). *Fool's Gold?: The Truth Behind Angel Investing in America*: Oxford University Press.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management Review*, 25(1), 217-226.
- Simpheh, K. N. (2011). Entrepreneurship theories and Empirical research: A Summary Review of the Literature. *European journal of business and management*, 3(6), 1-8.
- Smimou, K. (2015). Regional equity market conditions and cross-border mergers and acquisitions (M & A) Evidence from the BRIC, Eastern Europe, and Africa. *International Journal of Emerging Markets*, 10(3), 535-559.

- Smith, A., & Krueger, A. B. (1776). *The wealth of nations (Bantam Classics)*: Bantam Cla edition.
- Sogorb-Mira, F. (2005). How SME uniqueness affects capital structure: Evidence from a 1994–1998 Spanish data panel. *Small business economics*, 25, 447-457.
- Somoye, R. O. C. (2013). The theoretical models of financial acceleration in entrepreneurship development. *Business and Entrepreneurship Journal*, 2(2), 1-16.
- Stevenson, H. H. (1983). *A Perspective on Entrepreneurship* (Vol. 13): Harvard Business School Cambridge, MA.
- Stevenson, H. H., & Gumpert, D. E. (1985). The heart of entrepreneurship: Harvard business review. Retrieved from <https://hbr.org/1985/03/the-heart-of-entrepreneurship>
- Stevenson, H. H., & Jarillo, J. C. (1990). A paradigm of entrepreneurship: Entrepreneurial management. In *Entrepreneurship: Concepts, theory and perspective* (pp. 155-170): Springer.
- Szirmai, A., Naudé, W., & Goedhuys, M. (2011). *Entrepreneurship, innovation, and economic development*: Oxford University Press.
- Tham, A., & Huang, D. (2019). Game on! A new integrated resort business model. *Tourism Review*, 74(6), 1153-1166.

- Tleuberdinova, A., Shayekina, Z., Salauatova, D., & Pratt, S. (2021). Macro-economic factors influencing tourism entrepreneurship: The case of Kazakhstan. *The Journal of Entrepreneurship*, 30(1), 179-209.
- Toma, S.-G., Grigore, A.-M., & Marinescu, P. (2014). Economic development and entrepreneurship. *Procedia economics and finance*, 8, 436-443.
- Van den Berg, H. (2012). *Economic Growth and Development* (2 ed.): World Scientific Publishing Company.
- Van der Veen, M., & Wakkee, I. (2004). Understanding the entrepreneurial process. *Annual Review of Progress in Entrepreneurial Research*, 2(2), 114-152.
- Vesper, K. H. (1982). Introduction and summary of entrepreneurship research. *Encyclopedia of entrepreneurship*, 31-38.
- Wolfram, K., Brigitte, L., & Morten, R. (2008). The History of the European Union: Origins of a Trans-and Supranational Polity 1950-1972, Abingdon. In: Routledge.
- Zhang, J., & Lei, H. (2014). Financial structure, productivity, and risk of foreign direct investment. *Journal of Comparative Economics*, 42(3), 652-669.

APPENDIX

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The Role of the Financial System in Entrepreneurship Trends in the European Union

ABSTRACT

The current study examines the effects of financial systems and instruments on entrepreneurship trends and activities in the European Union member states. Results from panel data econometric procedures exhibit that financial markets and instruments exert statistically significant effects on the volume of entrepreneurial activities in the union. Results show that in some member countries, entrepreneurial trends are negatively linked to the financial system, which might be due to the lack of access to finance and regulatory barriers among the others, which are outlined at the end of this study.

Keywords: Entrepreneurship; Financial System; Regulatory Barriers; Panel Data; European Union.

1. INTRODUCTION

The financial markets are crucial in influencing entrepreneurship capabilities in the business sector. It includes a range of institutions and mechanisms, such as banks, venture capital firms, stock markets, and other financial intermediaries, that provide funds to entrepreneurs to start, operate, and expand their ventures. On the other hand, financial markets, including equity, debt, and derivative markets, facilitate the allocation and pricing of financial assets and enable investors to channel funds to businesses.

The effects of the financial markets on entrepreneurship can be analyzed from different angles, including the availability and cost of capital, the risk-return profile of investments, the information asymmetry between investors and entrepreneurs, and the regulatory and legal frameworks that govern financial activities (Mishkin, 2014). A well-functioning financial system can enhance entrepreneurship capabilities and foster business innovation and growth by providing access to funding at reasonable costs, enabling risk-sharing and diversification, and facilitating the discovery and valuation of new opportunities (Cumming et al., 2021). For example, venture capital firms can provide early-stage funding to promising startups that may have limited access to bank loans or public markets (Keuschnigg & Nielsen, 2003). Equity markets can provide liquidity to established businesses that seek to raise capital for expansion or mergers and acquisitions (Smimou, 2015). Debt markets can offer various financing options, from short-term working capital to long-term project finance, to businesses in different sectors.

The financial system can also pose challenges and risks to entrepreneurship by creating barriers to entry, distorting incentives, or creating bubbles and crises that affect the real economy. For instance, excessive risk-taking and speculation in financial markets can divert resources from productive investments and create systemic risks that affect the stability of the financial system and the broader economy. Regulatory failures or biases can also impede entrepreneurship by favoring incumbents, limiting competition, or hindering access to funding or information (Klimas et al., 2021). Therefore, to promote entrepreneurship capabilities, policymakers should aim to create a balanced and resilient financial system and financial markets that support innovation, growth, and social welfare while mitigating risks and externalities. This can involve improving financial literacy, enhancing transparency and accountability, promoting diversity and inclusion, fostering innovation in financial technologies, strengthening prudential regulations and supervisory frameworks, and aligning financial incentives with long-term sustainability and social goals.

Dutta & Meierrieks (2021) analyze the effects of financial development on entrepreneurship and find that a higher level of financial development leads to higher levels of entrepreneurial activity. On the other hand, Gregory (2019) finds that financial controls are negatively linked to entrepreneurial activity.

Since the financial system is crucial for entrepreneurial trends, as documented in the relevant literature, the current study aims to explore the effects of financial markets on entrepreneurship trends in the case of European Union (27) countries. The E.U.-27 member states, as of 2023, have different economic, financial, and institutional backgrounds. Each member state has its unique economic environment, and its

financial markets differ in size, depth, and maturity. Therefore, studying the role of financial markets in promoting entrepreneurship capabilities in the E.U. could provide valuable insights into how financial market characteristics influence entrepreneurship in different economic contexts.

The study is organized as follows: Section 2 describes data and methodology, section 3 provides results and discussions, and section 4 concludes the study.

2. DATA & METHODOLOGY

1.1 Data

The current study uses panel data for the 1995-2017 period. The study sample comprises member countries of the European Union (EU-27). Full description and source information for all variables are presented in Table 1.

"Place Table 1 about here."

1.2 Methodology

The current study proposes the following functional form of regression to estimate the effects of the financial system on entrepreneurship in the E.U.:

$$E_t = f (FD_t, CV_i) \quad (1)$$

Where

E_t stands for entrepreneurship proxy at time t , FD_t stands for financial development proxy at time t , and CV stands for control variables at time t under inspection. The following regression form is estimated to capture the growth effects of the financial system on entrepreneurship:

$$\ln E_t = \beta_0 + \beta_1 (\ln FD_t) + \beta_2 (\ln CV_t) + \varepsilon_t \quad (2)$$

Where the term $\ln$ stands for the logarithmic form of series, β_0 is intercept, β_1 is the elasticity coefficient of F.D., β_2 is the elasticity coefficient of the control variable, and ε is error disturbance at time t .

Cross-section dependency in panel data needs to be investigated before further analyses. Then, unit root tests are adopted using different approaches presented in Table 3, including trend and intercept specifications. Then after, the study estimates equation (2) by the system Generalized Method of Moments (GMM) approach, whose estimator is strongly consistent and asymptotically normal (Hansen, 1982).

3. RESULTS

Table 2 presents the results of cross-section dependency tests, which strongly confirm the existence of independency across E.U. countries. This is because the null hypothesis of cross-section dependency is rejected.

"Place Table 2 about here"

Secondly, Table 3 presents unit root test results, revealing that all series are stationary at levels with trend and intercept. This is because the null hypothesis of a unit root is rejected, and its alternative of no unit root is accepted at levels; and they are integrated of order zero, $I(0)$.

"Place Table 3 about here"

Table 4 presents the GMM results for equation (2), which mainly reveal the significant effects of the financial system on entrepreneurial trends in the E.U. Results demonstrate that changes in the financial markets will precede significant changes in entrepreneurial trends. However, the direction of these effects is mixed depending on the type of financial instruments and entrepreneurial activity across countries. Diagnostic test results in Table 4 reveal that there isn't appear to be any econometric deficiency in model estimations; thus, results are said to be robust.

4. CONCLUSION

This study investigates the effects of the financial system on entrepreneurial trends in the E.U. Results confirm the significant but mixed effects of the financial system on entrepreneurial activities. Negative influences of the financial system on entrepreneurship can be attributed to several factors, such as (1) lack of access to capital owing to difficulties (Beck & Demirguc-Kunt, 2006), (2) high cost of capital (Dutta & Meierrieks, 2021), (3) short-term focus of the financial system to have short-term profits, (4) risk aversion, and (5) several regulatory barriers (Fan & Zhang, 2017). And positive effects can be attributed to (1) easier access to capital, (2) efficient allocation of resources, (3) better risk management, (4) better market information, and (5) networking opportunities (Dutta & Meierrieks, 2021).

Future studies might focus on (1) the relationship between access to finance and new business creations, (2) the relationship between different types of financing and the success of new businesses, and (3) the effects of different financing models on entrepreneurship outcomes and new businesses.

REFERENCES

- Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30, 2931–2943.
- Cumming, D., Meoli, M., & Vismara, S. (2021). Does equity crowdfunding democratize entrepreneurial finance?. *Small business economics*, 56, 533-552.
- Dutta, N., & Meierrieks, D. (2021). Financial development and entrepreneurship. *International Review of Economics & Finance*, 73, 114-126.
- Fan, Z., & Zhang, R. (2017). Financial Inclusion, entry barriers, and entrepreneurship: Evidence from China. *Sustainability*, 9, 203.
- GEM (2022), Global Entrepreneurship Monitor, <https://www.gemconsortium.org/data/> (Retrieved on November 05, 2022).
- Gregory, R. P. (2019). Financial openness and entrepreneurship. *Research in International Business and Finance*, 48, 48-58.
- Hansen, Lars Peter (1982). "Large Sample Properties of Generalized Method of Moments Estimators". *Econometrica*. 50 (4): 1029–1054.
- IMF (2023), International Monetary Fund: Financial Development Index, [Financial Development - F.D. index map - IMF Data](#) (Retrieved on March 12, 2023).
- Keuschnigg, C., & Nielsen, S. B. (2003). Tax policy, venture capital, and entrepreneurship. *Journal of Public economics*, 87(1), 175-203.
- Mishkin, F. (2014), *Economics of Money, Banking and Financial Markets, The* (The Pearson Series in Economics), 11th Edition, Pearson International.
- World Bank (2023), World Development Indicators, <https://databank.worldbank.org/source/world-development-indicators> (Retrieved on March 12, 2023).

Table 1. Data Description

Variable	Measurement	Shortcut	Source
<u>Entrepreneurship Proxies</u>			
Financing for Entrepreneurs	% of Pop.	FINETR	GEM (2023)
Governmental Support and Policies		GOVSUP	
Taxes and Bureaucracy		TAXBUR	
Governmental Programmes		GOVPROG	
Basic School Entrepreneurial		ENTEDU	
Education and Training			
Post School Entrepreneurial		POSTENTEDU	
Education and Training			
R&D Transfer		RDTRANSFER	
Commercial and Professional		COMPROFINF	
Infrastructure			
Internal Market Dynamics		INTMARK	
Physical and Services Infrastructure		PHYSERVINF	
Cultural and Social Norms		CULTRSOCNORM	
Perceived Opportunities		PERCOPP	
Perceived Capabilities		PERCCAP	
Fear of Failure Rate		FEAROFFAIL	
Entrepreneurial Intentions		ENTINT	
Total Early-Stage Entrepreneurial	%	TEA	
Activity (TEA)			
Established Business Ownership	%	EBO	
Entrepreneurial Employee Activity	Index	EEA	
Motivational Index	As % of GDP	MOTIND	
Female/ Male TEA	%	FEMTEA	
Female/Male Opportunity-Driven	As %of GDP	FEMOPPTEA	
TEA			
High Job Creation Expectation	%	HJCE	
Innovation	% of Pop.	INNO	
Business Services Sector		BSS	
High Status to Successful		HSSE	
Entrepreneurs			
Entrepreneurship as a Good Career		EGCC	
Choice			

Table 1. Data Description (Continued)

Variable	Measurement	Shortcut	Source
<u>Financial System Proxies</u>			
Financial Development	Index	FD	IMF (2023)
Financial Institutions		F.I.	
Financial Institutions Access		FIA	
Financial Institutions Depth		FID	
Financial Institutions Efficiency		FIE	
Financial Markets		FM	
Financial Markets Access		FMA	
Financial Markets Depth		FMD	
Financial Markets Efficiency		FME	
<u>Control Variables</u>			
Gross Domestic Product (2015 = 100)	USD Prices	GDP	World Bank (2023)
Gross Capital Formation (as a percent of GDP)	Percentage	K	
Labor Force	Number	L	
Consumer Price Index (2015 = 100)	Index	CPI	

Table 2. Cross-Section Dependency Tests

Variables	Breusch-Pagan LM	Pesaran CD
lnFINETR	4287.135*	76.748*
lnPERCOPP	1865.457*	65.452*
lnPERCCAP	3689.745*	81.458*
lnFEAROFFAIL	2467.897*	92.457*
lnENTINT	6478.234*	35.451*
lnTEA	4578.524*	21.857*
lnEBO	3457.743*	36.478*
lnGDP	5229.881*	65.650*
lnK	1709.480*	25.198*
lnL	5494.721*	28.248*
lnCPI	7349.664*	85.526*
lnFD	2658.457*	63.456*
lnFI	3658.748*	56.758*
lnFIA	2478.253*	45.487*
lnFID	4257.986*	32.125*
lnFIE	3687.781*	25.563*
lnFM	3789.257*	21.112*
lnFMA	2987.456*	37.857*
lnFMD	1963.758*	23.568*
lnFME	2145.542*	34.458*

Notes: *L.M.* is a Lagrange multiplier, and *CD* is a cross-section dependency. * denote rejection of the null hypothesis at the 1% level.

Table 3. Panel Unit Root Tests

Variables	LLC	Levels	
		IPS	PP χ^2
lnFINETR	-6.506*	-1.291***	84.893*
lnPERCOPP	-16.213*	-2.686*	84.622*
lnPERCCAP	-8.041*	-1.494***	79.002*
lnFEAROFFAIL	-10.682*	-2.967*	162.670*
lnENTINT	-52.358*	-1.939**	80.212*
lnTEA	-9.593*	-2.426*	94.619*
lnEBO	-25.858*	-3.460*	154.247*
lnGDP	-3.883*	-4.368*	76.724*
lnK	-9.511*	-6.994*	72.601**
lnL	-4.908*	-2.127**	31.767*
lnCPI	-12.912*	-3.313*	40.127*
lnFD	-8.457*	-1.776**	32.047*
lnFI	-9.425*	-4.115*	45.116*
lnFIA	-11.011*	-2.056**	52.332*
lnFID	-7.869**	-3.768*	38.567*
lnFIE	-12.016*	-4.116*	41.136*
lnFM	-19.758*	-5.045*	37.536*
lnFMA	-14.045*	-1.996**	78.452*
lnFMD	-24.568*	-3.325*	116.265*
lnFME	-24.457*	-2.027**	84.654*

Note:

LLC stands for Levin, Lin & Chu test statistic, *IPS* for Im, Pesaran, & Shin, and *P.P.* for Phillips & Perron Fisher type chi-square test statistic. All the statistics are from models with trend and intercept options. *, **, and *** denote rejection of the null hypothesis at the 1%, 5%, and 10% levels respectively.

Table 4. SYSTEM GMM Results for Entrepreneurship

Models	lnFinETR	LnPERCOPP	LnPERC CAP	LnFEAROF FAIL	LnENTINT	LnTEA	LnEBO
Dependent Var. _{t-1}	0.188	0.683*	0.645*	0.746*	0.724*	0.697*	0.746*
lnGDP	0.104***	0.023	-0.001	-0.018	-0.008	-0.023	-0.054
lnK	-0.104	-0.124	0.126*	0.070***	-0.098	-0.138**	-0.022
lnL	-0.104***	-0.033	0.021	0.031	-0.002	0.027	0.072
lnCPI	-0.023	0.268**	0.144**	0.158**	0.280***	0.265**	0.213
lnFD	-0.170	-0.170	-0.06	-0.436***	0.290	0.371	0.523***
lnFI	0.109	1.516	0.087	0.008	-1.726**	-0.689	-0.156
lnFIA	-0.173	-0.632***	-0.000	0.131	0.570**	0.104	-0.050
lnFID	0.006	-0.248	-0.019	0.082	0.489**	0.191	-0.045
lnFIE	-0.050	-0.509***	0.058	0.063	0.435***	0.174	0.285
lnFM	-0.209	0.067	0.060	0.287**	0.463***	0.139	0.142
lnFMA	0.079**	0.002	0.027	-0.049***	-0.180*	-0.056	-0.035
lnFMD	0.150**	-0.100	-0.087**	-0.055	-0.254**	-0.161***	-0.214**
lnFME	0.022	0.041	-0.004	-0.022	-0.128*	-0.072**	-0.053
AR (1)	-0.492***	-0.160***	-0.114	-0.240*	-0.146***	-0.197**	-0.373*
Adj. R ²	0.631	0.566	0.618	0.502	0.678	0.570	0.489
S.E. of Regr.	0.089	0.304	0.106	0.144	0.265	0.226	0.344
DW	1.967	2.145	1.514	1.997	1.796	1.946	1.861
Instrument Rank	42	29	29	29	29	29	29
J-prob.	0.262	0.365	0.200	0.762	0.040	0.81	0.059
Obs.	150	220	220	220	209	220	220

Note: *, **, *** indicates that coefficient is significant at the 1%, 5%, and 10% level respectively.

Table 4. SYSTEM GMM Results for Entrepreneurship (Continued)

Models	LnEEA	LnMOTIND	lnFEMTEA	LnFEMOPPTA	lnHJCE	lnINNO
Dependent Var. _{t-1}	0.964*	0.842	0.372*	0.514***	0.735*	0.625*
lnGDP	-0.029	-0.150	-0.113*	-0.070	0.076	0.100***
lnK	0.177	-0.221	-0.063	-0.139	-0.099	0.121
lnL	0.052	0.167	0.129*	0.073	-0.092	-0.104***
lnCPI	-0.151	0.449	0.172***	0.273	0.097	-0.044
lnFD	1.072	0.082	0.504	0.753	0.168	-0.229
lnFI	0.787	1.039	0.021	0.349	-0.918	0.946
lnFIA	-0.547	-0.698	-0.143	-0.223	0.319	-0.155
lnFID	-0.755***	-0.269	-0.123	-0.157	0.305	-0.101
lnFIE	-0.513	-0.314	-0.044	0.129	-0.016	-0.263
lnFM	-0.169	0.289	-0.179	0.106	0.032	-0.087
lnFMA	0.024	-0.046	0.006	-0.006	-0.037	0.062
lnFMD	0.080	-0.130	0.003	-0.256**	-0.113	-0.024
lnFME	-0.035	-0.026	0.018	-0.055	-0.016	0.020
AR (1)	-0.642*	-0.427*	-0.281*	-0.596**	-0.0348*	-0.524*
Adj. R ²	0.749	0.645	0.085	0.065	0.427	0.384
S.E. of Regr.	0.291	0.397	0.238	0.153	0.361	0.200
DW	2.634	2.175	1.955	2.435	2.139	2.080
Instrument Rank	29	29	29	29	29	29
J-prob.	0.898	0.270	0.424	0.059	0.246	0.710
Obs.	48	100	220	47	220	84

Note: *, **, *** indicates that coefficient is significant at the 1%, 5%, and 10% level respectively.

Table 4. SYSTEM GMM Results for Entrepreneurship (Continued)

Models	lnBSS	lnHSSE	lnEGCC	LnGOVSUP	LnTAXBUR	LnGOVPROG	lnENTEDU
Dependent Var. _{t-1}	0.658*	0.846*	0.866*	0.778*	0.789*	0.878*	0.692*
lnGDP	0.078**	0.026	-0.014	0.039	0.055*	0.032*	0.037***
lnK	0.126**	0.014	0.040	-0.028	-0.056***	-0.007	0.007
lnL	-0.074***	-0.021	0.015	-0.033	-0.049**	-0.029**	-0.053**
lnCPI	-0.059	0.038	0.124**	-0.073**	-0.101**	-0.071**	-0.002
lnFD	-0.045	-0.009	-0.234	-0.384	0.167	0.028	0.034
lnFI	0.719	0.381	0.148	0.617	0.633***	0.317	1.087*
lnFIA	-0.209	-0.164***	-0.000	-0.162	-0.286**	-0.118***	-0.433*
lnFID	-0.185	-0.122	0.010	-0.119	-0.225**	-0.122**	-0.282*
lnFIE	-0.300***	-0.112	0.022	-0.196	-0.251**	-0.172	-0.172***
lnFM	-0.118	0.056	0.172***	0.046***	-0.076	-0.057	-0.049
lnFMA	0.061	-0.002	-0.033	0.002	0.000	0.010	0.004
lnFMD	0.000	-0.043	-0.045	0.052	0.012	0.040	-0.012
lnFME	0.059	7.92e-05	-0.010	0.016	0.003	0.003	0.001
AR (1)	-0.412*	-0.322*	-0.255*	-0.353*	-0.278*	-0.316*	-0.203***
Adj. R ²	0.379	0.726	0.667	0.705	0.772	0.813	0.595
S.E. of Regr.	0.229	0.087	0.107	0.102	0.110	0.075	0.112
DW	2.011	1.708	1.873	1.976	2.086	2.09	1.938
Instrument Rank	29	29	29	29	29	29	29
J-prob.	0.896	0.077	0.365	0.557	0.985	0.744	0.482
Obs.	200	185	183	179	179	179	176

Note: *, **, *** indicates that coefficient is significant at the 1%, 5%, and 10% level respectively.

Table 4. SYSTEM GMM Results for Entrepreneurship (Continued)

Models	LnPOSTENTEDU	lnRDTRANSFER	lnCOMPROFINF	lnINTMARK	lnPHYSERVINF	lnCULTRSOCNORM
Dependent Var. _{t-1}	0.782*	0.612*	0.661*	0.672*	0.664*	0.859*
lnGDP	0.011	0.050*	0.061*	-0.035**	0.030**	0.016
lnK	0.027	-0.038	-0.036***	0.024	0.003	-0.023
lnL	-0.012	-0.050*	-0.059*	0.028	-0.030***	-0.016
lnCPI	0.003	-0.031	-0.052**	0.178*	0.027	-0.000
lnFD	-0.059	-0.226	-0.083	-0.016	-0.258	0.076
lnFI	0.185	0.682**	0.129	-0.243	-0.051	0.392
lnFIA	-0.051	-0.208**	-0.029	0.056	0.028	-0.145
lnFID	-0.046	-0.184**	-0.045	0.068	0.056	-0.115
lnFIE	-0.043	-0.191**	-0.011	0.116	0.088	-0.083
lnFM	0.006	0.014	0.028	0.019	0.015	-0.015
lnFMA	-0.001	0.006	-0.026**	0.019	0.002	-0.007
lnFMD	0.024	0.054***	0.017	0.001	0.047	-0.004
lnFME	-0.002	0.011	-0.015**	-0.003	0.007	-0.007
AR (1)	-0.394*	-0.148	-0.263*	-0.229**	-0.253*	-0.282*
Adj. R ²	0.378	0.645	0.608	0.520	0.480	0.685
S.E. of Regr.	0.082	0.075	0.065	0.107	0.090	0.086
DW	2.106	2.050	2.160	2.140	2.343	2.072
Instrument Rank	29	29	29	29	29	29
J-prob.	0.515	0.237	0.612	0.863	0.724	0.209
Obs.	165	179	179	179	179	171

Note: *, **, *** indicates that coefficient is significant at the 1%, 5%, and 10% level respectively.