



Article

A Business Acceleration Program Supporting Cross-Border Enterprises: A Comparative Study

Paraskevi Giourka ^{1,*}, Pavlos Kilintzis ², Elpida Samara ³, Giorgos Avlogiaris ⁴, Polytimi Farmaki ⁵ and Yiannis Bakouros ³

- Department of Production and Management Engineering, Democritus University of Thrace, Vasilissis Sofias 12, 67132 Xanthi, Greece
- Department of Mechanical Engineering, University of Western Macedonia, Bakola & Sialvera, 50132 Kozani, Greece; pkilintzis@uowm.gr
- Department of Regional and Cross-Border Development, University of Western Macedonia, 50100 Kozani, Greece; esamara@uowm.gr (E.S.); ylb@uowm.gr (Y.B.)
- Department of Statistical and Insurance Science, University of Western Macedonia, 50132 Kozani, Greece; avlo2000@yahoo.gr
- Department of Accounting and Finance, University of Western Macedonia, 50132 Kozani, Greece; pmfarmaki@gmail.com
- * Correspondence: pgiourka@pme.duth.gr

Abstract: Acceleration programs can have an effect on business advancement prospects by offering access to mentors and information, capacity building, connections and networks with corporates and startups, all of which contribute to increasing the chances of entrepreneurial success. This study explores the effectiveness of an acceleration program, implemented in the cross-border region of Greece–Albania, where there are limited similar business support initiatives. The survey conducted among participants in the acceleration program aimed at identifying key elements that can contribute to shaping entrepreneurial potential in the cross-border region offering preliminary insight to policy makers in designing relevant business support measures. There is common consensus among both cross-border populations that the acceleration program has helped them develop their business ideas. The study reveals the different types of business weaknesses the acceleration program helped to address in the two populations and key criteria perceived to be contributing to business development. However, acceleration programs effectiveness is affected not only by criteria internal to business and the markets but also by the entrepreneurial ecosystem conditions pertaining. In this respect, business acceleration program designs should be tailored to address particularities in the entrepreneurial environment so as to be effective and contribute to business growth.

Keywords: business acceleration; international business; transboundary water; innovation; key performance indicators



Citation: Giourka, P.; Kilintzis, P.; Samara, E.; Avlogiaris, G.; Farmaki, P.; Bakouros, Y. A Business Acceleration Program Supporting Cross-Border Enterprises: A Comparative Study. J. Open Innov. Technol. Mark. Complex. 2021, 7, 152. https://doi.org/ 10.3390/joitmc7020152

Received: 19 April 2021 Accepted: 7 June 2021 Published: 9 June 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Exploration of innovation, as pointed out by scholars [1,2], requires going deeper than the organizational level to the systematic level by linking actors and allowing knowledge to diffuse across national, local, regional or sectoral boundaries. The idea of open innovation promotes valuable ideas which come from either inside or outside the organization and reach the market [3]. Seeking innovation within intra-organizational networks and adopting open innovation tactics can be used as a strategic resource, capitalizing on relationships with professionals and external organizations, sharing resources and knowledge, and establishing alliances and partnerships increasing SMEs competitiveness and growth [4,5]. Public policy initiatives are attempting to facilitate inter-firm knowledge networks and encourage the linkage between business and science actors [6] through business support initiatives that also include business acceleration and incubation processes [7].

Modern business acceleration frameworks have gradually evolved over time. Starting from being simplistic informative tools containing general information on how to support a business, they have been transformed to multifactorial acceleration programs. They now include several elements which may help both existing firms and nascent ventures mature their business concepts, develop sustainable business models, explore appropriate fundraising options and connect with business angels, and venture capital as well as corporate funding entities. A business accelerator's design pattern typically includes training and mentorship programs for participants guided by a wide variety of mentors who can be former entrepreneurs, venture capitalists, business angels or business executives. While startup accelerators often conclude with a public pitch event, often called "Demo Day" during which the participating start-ups pitch their business ideas to potential investors [8], corporate acceleration is mainly a growth-hacking tactic helping firms gain exposure to startups, engage with them and employ open innovation. Corporate acceleration programs are designed to accelerate existing business and enhance a firm's capacity to innovate, developing "firm-level ambidexterity" [9]. Existing ventures, which are accelerated in corporate accelerations, aim to either absorb innovations or gain early access to potentially disruptive ventures. As the economy progresses, business acceleration programs become more specialized and industry-focused, with various forms of ownership, complex financing structures and evolvement into franchise models [10].

Nowadays, acceleration programs are implemented by individual entrepreneurs, private companies and public organizations leveraging considerable financial resources. Accelerators support start-up creation and venture establishment through the provision of specific services tailored to an existing firm or startup's own characteristics, sector of operation, market trends and competition in the sector, technological excellence as well as general marketing, human resources management and sustainable development approaches, over an intensive program which usually lasts for a few months [11]. However, previous research has not extensively investigated the effect of the accelerators on the accelerated businesses [12], while the effectiveness of acceleration programs is still highly debatable, especially regarding the expected returns on entrepreneurship [8]. Too little research attention is also paid to the resulting outcomes of corporate acceleration processes [13,14].

Apart from the research gap concerning the effect of acceleration programs on the accelerated businesses survival rate, academic literature often quotes contradictory findings, specifically regarding the effects on business development. For instance, Hallen et al. [15], in their comparison of accelerated and non-accelerated ventures, quote that effective acceleration programs can accelerate the time horizon for achieving important milestones such as time to raise funds, attract customers and exit by acquisition. However, they conclude that several acceleration programs do not accelerate, in practice, the overall start-up development. On the contrary, other researches certify that ventures participating in top accelerators may in fact receive their first installment of follow-up financing much sooner than non-accelerated busines, resulting in a quicker acquisition or failure [16].

Shankar and Shepherd [13], in their study on corporate accelerators, indicate that corporate acceleration results in "corporate nurturing" either by increasing the absorption of innovations or by gaining access to startups enhancing competitiveness and responsiveness to market developments employing open innovation principles. Outcomes of corporate acceleration programs may also involve investing in incremental changes that keep businesses updated due to the insight gained from access to information on new perspectives that can help reduce cost structures or improve customer-supplier relationships.

This study attempts to fill the research gap on how acceleration programs affects business development, taking into consideration the environmental context conditions. It analyzes the findings obtained by the implementation of a financial support mechanism INTERREG IPA CBC Project (ACCEL), translating policy initiatives to form inter-firm and open innovation opportunities for SMEs applying a business acceleration program in the cross-border region of Greece–Albania. The primary scope of the research is twofold. It

initially attempts to investigate the effectiveness of the acceleration program implemented in the cross-border region of Greece-Albania. This is primarily done by exploring criteria, for which the literature presents evidence that they may have a key contributing role in shaping entrepreneurial potential and can be facilitated through business acceleration. For example, accelerated firms consider the investments caused, as one of the most useful types of support of acceleration programs [17,18]. Mentoring is also found to help accelerated firms rationalize and focus their ideas rather than develop entirely new products or services [17]. Gaining new customers is also seen as one of the key benefits of accelerators, largely supported by accelerators that facilitate open innovation at a cross-border level [19]. Help with team formation is also associated with a greater likelihood of advancing the innovation output. Secondly, the research attempts to increase understanding of participants' perceptions regarding how the program has helped them in developing their ideas and how important they consider financial resources, business's technical and technological competences, professional skills, customer networks and business models [17,20]. The study also reveals information regarding the strengths and weaknesses of the firms located in the cross-border area, indirectly revealing the context conditions of two entrepreneurship ecosystems of the two regions.

This paper is structured as follows. We begin by delineating entrepreneurship support mechanisms, starting from the early appearance of incubators and the evolvement of accelerators. We identify business skills that play a key role in entrepreneurial growth. Then, we explore the entrepreneurship ecosystem conditions of the two countries, Greece and Albania, to inform our survey results. Our research goal is to investigate the impact of a business acceleration program implemented within different context conditions, those of the cross-border region of Greece and Albania, which both still lack related business support initiatives [21,22]. We argue that the design of business support initiatives should not be studied independently of its entrepreneurship ecosystem [23] context and relevant policy initiatives should be adapted accordingly. Finally, we discuss how further research designs and methods could contribute to a better understanding of how to design appropriate context-based business acceleration programs.

The remainder of the paper is organized as follows. In Section 2, we focus our attention on entrepreneurship support mechanisms and entrepreneurial skills that support business creation and growth, and we provide the context conditions of business support mechanisms of the two countries. In Section 3, we present the acceleration program that was implemented in the cross-border region of Greece and Albania. In Section 4, we lay out the research design, our data, and the methods used for analysis. In Section 5, we present the results and discuss the empirical evidence that has emerged from our analyses. Section 6 provides the conclusions and implications for future research.

2. Literature Review in Entrepreneurship Support Mechanisms and Entrepreneurship Traits

From the perspective of dynamic capabilities theory, a main theme for SMEs is access to inter-firm knowledge networks as a strategic resource that can facilitate innovation and provide competitive advantages [24,25]. Business support mechanisms, such as acceleration programs, are found to be positively associated with business survival and have positive spillover effects on the wider business ecosystem [17]. The central research question guiding this explorative study is the following: can a business acceleration program that brings together SMEs and startups support entrepreneurship potential and facilitate open innovation at a cross border level of a region that is characterized by low entrepreneurship ecosystem dynamics? The result of this analysis provides information to help academics, policymakers, governments and business owners with a more in-depth understanding of the practical mechanisms that can boost open innovation and entrepreneurial growth in less competitive entrepreneurship ecosystems.

2.1. Entrepreneurship Support Mechanisms: Accelerator vs. Incubator Services and University Level Support Mechanisms

Supporting mechanisms of ventures in the form of incubators have existed since the 1960s [26]. Their main aim is to support a company to survive and grow in the early stages of entrepreneurship through offering affordable office space, services in financial and legal aspects and advice from mentors towards maturing the business concept aspects or raising funds [11]. When incubators lack the resources such as specialized technical expertise, they focus on fostering business connections among the incubates and outside the incubator with other firms, government agencies and other commercially relevant stakeholders [27]. However, incubators often do not strictly limit the time a company can remain in the incubation program. Therefore, if this period is prolonged, this may result in incubators retaining companies from failing fast, which is against the fail fast mindset proposed by agile approaches and the lean start up principles [28]. Having noted that, scholars recognize the incubators' contribution to employment and business income at a local level [29].

Accelerators which grew substantially since 2005 with the launch of Y-Combinator [26], on the other hand, are fast track, usually lasting for a three-month period, and they are business support programs that aim to help startups but also existing firms to network and increase their knowledge and competitiveness through training in business related aspects and pursue funding opportunities while being intensively mentored and coached, with the overall aim of growing relatively fast or failing fast and safely [30]. Corporate acceleration programs are a relatively recent phenomenon which started back in 2011. Corporate accelerators provide information about the business environment changes, how to boost sales and change to more innovative marketing, and attract collaboration and partnerships, creating a more entrepreneurial culture. Corporate accelerators provide the services offered by other acceleration programs but also aim to help the corporate employees to create new business [27]. Accelerator services aim to quickly help startups and existing firms move from one stage to the next, whereas incubation services aim to advance entrepreneurs to more mature, self-sustaining business [26].

In a local context, however, such business support mechanisms are not always well established and they lack strong support networks consisting of startups and venture capitals [31]. In this context, local universities often supplement the different entrepreneurship support services, especially in those underdeveloped economic environments [7]. Academic acceleration programs, incubators and other services, often supported by government funds, are seen as important instruments for increasing local entrepreneur's business growth opportunities, and play a role in knowledge transfer within academic-industry cooperation and the commercialization of new products and services [32].

2.2. Open Innovation in SMEs

Despite the fact that open innovation benefits are widely recognized [33,34], SMEs, remain introverted, developing internally and without benefiting from external collaborations, knowledge and expertise [25]. In contrast to large enterprises, which more systematically search for new opportunities, design corporate acceleration programs and engage in knowledge transfer, SMEs often lack resources and the required organizational learning mechanisms and are more reluctant to engage in open innovation activities [35]. They also struggle to redefine themselves from "problem-solver" to "solution-seeker" [36], while they also fear that competitors will have access to internal to the SME knowledge when sharing problems i.e., in the context of a business acceleration program [37]. However, scholars emphasize the value of interfirm relationships and open innovation as a crucial element for growth and competitiveness of regions [25]. Hence, policy makers are looking for ways to effectively increase collaboration through intermediaries for enabling innovation between firms, entrepreneurs, research institutions and the public sector in a way that is accessible and beneficial for SMEs [25].

2.3. Business Skills

Scholars [38–40] have explored various entrepreneurial skills that are considered important in successful day-to day business operations. Professional and technical skills enable efficient financial management, such as managing finances and forecasting cash flows and sales as well as monitoring profits and losses. Technical know-how and the ability to apply new technologies requires technical skills and knowledge, which have a strong impact on enterprise performance [41]. Leadership skills, such as strategic thinking, planning and vision, as well as Human Resource management, persuasion and influence, are key skills for setting and achieving goals and for guiding and inspiring other people [39]. Networking and communication skills are also essential for establishing relationships with other organizations and potential clients. Managing time effectively and delegating responsibilities allows for concentrating on more important tasks, which is reportedly a critical factor [42]. The role of the team is also pivotal both in nascent ventures and in corporate entrepreneurship. In nascent ventures, where limited resources are available, larger founder teams collectively have more resources and can develop external networks and linkages, which can facilitate the innovation process [43]. In corporate entrepreneurship, executives' tacit knowledge can prove critical in the capacity of business to innovate which can lead entrepreneurial performance [44]. Research findings also show that the ability to create networks and linkages is interrelated to the capacity to develop a customer portfolio, which requires a dynamic and ongoing process instead of a static one, building on the relationships between the business and the clients [45].

2.4. The Greek Entrepreneurial Ecosystem

In 2008 and 2009 the Greek economy suffered severely from fiscal and economic environmental deterioration. In 2016, Greece lost over one fourth of its GDP while unemployment rate rose 16 percentage points. Severe taxation policies resulted in many businesses struggling to remain financially sustainable. A large brain drain phenomenon during this period caused approximately one hundred and thirty nine thousand graduates from universities and higher technological institutes to seek career opportunities abroad [46]. Significant progress has been made since the sovereign debt crisis in 2010 with the implementation of a bold economic and structural adjustment program, which has eliminated the root causes of the Greek crisis [47,48]. The unemployment rate, though still high, fell to 15.8% in 2020 from 27.8% in 2013 [49]. Today there are initiatives such as Rebrain Greece [50], designed to reverse the brain drain phenomenon, while the country has a highly educated talent pool i.e., 25% of 25-to-64- year-olds hold a bachelor's degree (the OECD average is 16%), with one fourth of this percentage holding a degree in science, technology, engineering or mathematics (the OECD average is 22%) [51]. Situated at the crossroads of Europe, Asia and Africa, Greece is surrounded by major markets, while being part of the European Union's €16.4 trillion market [52,53]. The country has appealing living conditions i.e., work-life balance, health status, mild temperatures, a low crime rate and affordable housing. However, Greece still ranks 79th in the World Bank 2020 ease-of-doing-business list, one of the lowest of the OECD countries. Over the past several years it has implemented important measures towards a steadily growing business support ecosystem with: (a) the creation of incubators supporting startups in high-potential industries, supported with seed funding, strategic partnerships and innovation-thematic clusters; (b) the operation of coworking spaces enabling entrepreneurs to network and collaborate in affordable office spaces; (c) the establishment of VCs dedicated to support early and growth stage startups, R&D tax credits for business angels; (d) access to debt financing with special loans such as innovation grants; and (e) through dedicated policies and measures implemented through the National Strategic Reference Framework [22]. The current obstacles to entrepreneurship recognized in the Greek entrepreneurship ecosystem are the limited access to the right talent, the poorly developed collaborative networks, and a still "largely unfriendly business environment and market structure", especially in the rural areas [22].

2.5. The Albanian Entrepreneurial Ecosystem

After almost three decades since the collapse of communism in Albania, and although the country proceeded in a series of structural reforms towards its accession to the European Union, Albania still struggles to create an environment that fosters innovation and supports business growth [21]. Government financial resources are limited, hindering the implementation of national entrepreneurial policies, which can provide the necessary support such as advice, training, technology transfer and public grants, and facilitate the development of an entrepreneurship supportive environment. The country still struggles to attract foreign investments, which would facilitate its economic transformation. Albania ranks 82nd in the World Bank 2020 ease-of-doing-business list and its start-up sector has had no significant growth in the last few decades as there are very limited corporate funds that could support them. In addition, the Albanian universities are also receiving low government funds, limiting their ability to conduct high quality research or actively support the creation of new ventures resulting from research outcomes [54]. Collaboration opportunities between universities and industry are remaining unexplored while ninety per cent of SMEs are operating in traditional sectors such as agriculture, forestry, fishing, accommodation and food services.

Entrepreneurship support organizations lack a systematic governmental or other support mechanism, and management of potential grants are mainly working towards keeping those organizations in business, lessening the focus of creating a sustainable innovation and entrepreneurship support mechanism. As such, those entrepreneurship support organizations struggle to build the necessary skills and competences for supporting in an impactful way business creation and growth, while considering the local or regional characteristics and the cross-border opportunities.

2.6. Transnational Trade Routes

Another aspect that can foster cross-border business collaborations are the transnational routes, which include road and water routes. It worth noting that throughout history, water trade routes were connecting production to places of commerce [55]. Nowadays, inland water transport (IWT) in transboundary water has brought growth and significant investments to cross-border trade, as transportation is a fundamental element of the global economy. In the ACCEL project, the available routes that can be used for translational business activity between Greece and Albania were also explored as a means of facilitating trade and synergies.

3. The ACCEL Acceleration Program

This research presents a hybrid acceleration program where the principles of acceleration and incubation services are combined with the notion of open innovation to bring together SMEs and startups for increasing the potential of realizing business ideas, creating a supportive environment and the conditions for innovation, collaborations and advancement of entrepreneurial skills that can all facilitate business growth.

The cross-border region of Greece-Albania suffers from high unemployment on the Albanian side due to long-standing inadequate economic activity and absence of sustainable business support institutions, and on the Greek side due to the 10-year fiscal crisis. As unemployment causes many social problems such as poverty, social exclusion, public health deterioration, etc., a prerequisite for the alleviation of these problems is the "re-start" of the local economies. The aim of the ACCEL project was to condition an environment where business can increase their potential to grow while forming new collaboration networks. The ACCEL project, taking into consideration the two countries' entrepreneurship ecosystems, was committed to: a) the deployment of an innovative business support mechanism that nurtures the innovative skills of both existing firms and nascent ventures, and b) linking those two groups to increase collaborations facilitating entrepreneurship at the cross-border level. The goal pursued during the project was to support, in parallel, the inherent skills and capacities of business ideas to grow and create the mutually beneficial

conditions necessary for networking existing firms with startups, promoting open innovation. ACCEL aligned its activities with the strategies and implementation modalities of the cross-border area as well as the regional entrepreneurship context, and built on the smart specialization strategies identifying different stakeholders/interest groups, hidden champions among existing enterprises or people aspiring to be entrepreneurs, and created through an acceleration program the conditions for increasing the potential for cooperation between the different groups.

The Business Acceleration program implemented in the cross-border area of Greece and Albania is inspired by corporate acceleration programs [13] and startup acceleration programs, while the participants were offered access to incubation services after the acceleration completion. A sector agnostic business acceleration program was developed with the aim to increase entrepreneurial and innovation ambidexterity [56] of both existing firms and startups, and increase collaboration opportunities through open innovation or cross border operational expansion. The program was designed to be fully tailored to the needs of each participant.

Business ideas had the chance to grow within the acceleration program and participants were supported by experienced mentors and coaches, who worked alongside the businesses on a one-to-one basis to define and meet their goals, leading to upgrading their innovation potential. Training seminars provided the theoretical knowledge basis for the development of the business ideas. Training seminars covered various entrepreneurship topics such as: understanding and clarifying the core business concept, forming effective teams, creating and assessing business models, designing and validating prototypes i.e., products or services, learning and refining pitching techniques, networking and outreach, understanding where and how to find funding sources, understanding IP and patenting, public relations and branding, developing social media strategies and legal business structure, raising funding, developing an adequate business network, increasing operational efficiency through lean principles, and understanding sales and marketing for international business. The primary hypotheses of the statistical analysis of this research deals with the Acceleration Program itself as well as the business development key criteria that accrue from the accelerator, according to participants' perceptions of the two countries involved. More specifically, the hypotheses investigate whether there are differences in the key accelerator effectiveness indicators compared to the country participants and also whether there are differences in each key criterion according to the country participants.

4. Materials and Methods

4.1. Sample

The research design is quantitative and is focused on a population of fifty small companies located in the cross-border region of Greece-Albania (Kastoria, Florina, Gjirokastra and Korca). The selection of the population was based on the pool of companies representing perhaps the only established companies ever being accelerated in the cross-border region, since similar business acceleration initiatives are, even today, scarce or non-existent, especially for the cross border Albania region [21]. The companies engaged were selected primarily according to the level of innovativeness of business ideas they proposed. The participating businesses are either established ventures that intended to put forward specific innovations or early-stage start-ups trying to mature their business concepts. The data collection was carried out through a structured questionnaire, which is used as the primary analysis tool. The questionnaire was designed in order to investigate the acceleration program effectiveness, the participant satisfaction, business skills obtained due to the participation in the acceleration program, and criteria contributing to business development. The questionnaire used in the research was directed to managers or directors of SMEs that participated in the business acceleration program. The fieldwork was carried out from January to March 2020. Finally, data on a total of 50 companies were collected.

4.2. Characteristics of SMEs

In this section, the main characteristics of the 50 companies that participated in the study are described in detail. For this purpose, the sector to which companies operate, the gender of the manager, and the manager's educational level and experience are presented.

Most of the Greek companies that participated in the acceleration program operate in the agri-food sector, followed by companies operating in the trade and processing sectors. The Albanian companies are primarily engaged in the trade sector, followed by companies operating in the ICT and agri-food sectors. Regarding the gender, there were many more males than female managers in both regions. Table 1 shows the types of companies and the gender of the managers.

| Country | Sector | Gender |
|---------|---|-------------------------|
| Greece | 24% Agrifood 16% Trade 16% Processing | 56%, Male 44% Female |
| Albania | 20% Trade 16% ICT 16% Agrifood | 24% Female 76%, Male |

Table 1. Sector of operation of surveyed companies, and gender.

Regarding the level of education, in Greece most SME managers (84%) have a university degree (graduate or postgraduate), and another 16% have completed high school or technical level education. In Albania most SME managers (60%) have a university degree while the rest 40% have completed high school or technical education.

4.3. Measurement Variables

The variables used in the research were measured through binary variables and multidimensional variable constructs (see questionnaire in Appendix A). The acceleration program had a twofold scope: (a) rejuvenate established business and equip them with increased capacities to innovate, while promoting cross border collaborations and access to new ideas employing open innovation and (b) help potential start-ups mature their business ideas within a program that connects them to established business, and create, in a systematic way, opportunity for collaboration and open innovation. Both established business and startups could build opportunities from the dynamics in such an environment. For established business the focus was on increasing their innovation potential and their entrepreneurial ambidexterity, while having the opportunity to develop collaborations with other businesses in the cross-border area but also gain access to novel business ideas nurtured in their region. For startups the focus was on maturing their business concepts while taking feedback from experienced entrepreneurs operating in the same region and forming partnerships.

In order to determine whether or not participants benefited from the business acceleration program, a range of variables in three dimensions were assessed. The dimensions included: (a) acceleration program effectiveness; (b) participant satisfaction; (c) business skills; and (d) business development key criteria. The variables for each dimension are presented below, while the questionnaire is provided in the Appendix A.

4.3.1. Acceleration Program Effectiveness

This reflective construct on acceleration effectiveness was measured in a multidimensional way considering acceleration program effectiveness aspects. The questions of this dimension were adapted from [17,18]. The construct was made up of four questions related to:

 Investment occurred towards developing a new strategy or idea after the business accelerator.

- New customers gained due to the new strategic approach the business applied or new product/service introduced in the market.
- Intention to operate in the second country i.e., Greece/Albania after the implementation of the project.
- Intention to work with the other members of the team with which the business participated during the ACCEL program.

4.3.2. Participants Satisfaction on the Contribution of Experience Gained

This reflective construct on participant's satisfaction was measured in a unidimensional way. The construct considers how the experience gained from the program has contributed to the development of the participant's business idea. To measure it, three questions were structured, adapted from [17,18], and were related to:

- The experience from the program has helped participants develop their business idea.
- The experience from the program has contributed to the development of a different business idea from the original one.
- The experience from the program has contributed to the development of more than one business ideas.

4.3.3. Business Skills

This reflective construct, on business skills, aimed to provide insight on how the participation in the acceleration program contributed to the development of the participant's business skills and capacity to address weaknesses. To measure it, three questions were structured, adapted from [11,17,18,39], and were related to:

- Participation in the program helped in developing knowledge and skills to create/develop: a marketing plan, an integrated business model, a human recourse management plan, a financial plan.
- Improved strategy in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting.

4.3.4. Business Development Key Criteria

This reflective construct, on key criteria enabling business development, was measured considering the availability of key criteria contributing to entrepreneurship development. The questions of this dimension were adapted from [17,18,20,57]. The construct was made up of five questions related to:

- Availability of the necessary financial resources for the implementation of a business idea.
- Holding the necessary technical and technological knowledge related to the implementation of the idea.
- Existence of a working group with executives who have specific professional skills regarding the implementation of the business idea.
- Existence of an existing customer network in the implementation of the business idea.
- Existence of a complete and detailed business model for the implementation of the business idea.

4.4. Methods of Analysis

The analysis is divided into two parts. The first part of the analysis consists of the frequencies and descriptive statistics of variables that indicate a) the acceleration program effectiveness, and b) participants satisfaction with the acceleration program. The second part includes the statistical comparison of the significance of the criteria contributing to entrepreneurship development for the two populations. The statistical method used is the Mann-Whitney U Test. In addition, the two populations are compared to reveal any differences in the effectiveness of the acceleration program i.e., identify potential

differences on how the accelerator affected investments, or new customer acquisition, etc. The mathematical formulas for Mann-Whitney U Tests are shown below:

$$U_{GR} = R_{GR} - \frac{n_{GR}(n_{GR}+1)}{2}$$
 $U_{AL} = R_{AL} - \frac{n_{AL}(n_{AL}+1)}{2}$

where: R_{GR} , R_{AL} = sum of the ranks for the Greek, Albanian populations.

More specifically, for the second part of the analysis, the participants' perception regarding the criteria: (a) availability of 'Financial Resources'; (b) Technological/Scientific Knowledge of the entrepreneurs and key staff; (c) Professional Skills of the entrepreneurs/organizational members regarding their business experience and knowledge of specific professional competences regarding their idea; (d) existence of an adequate Customer Network, and (e) the design and implementation of a structured Business Model, were investigated. Initially, those five criteria were tested to see whether their significance is differentiated, or they are considered as equally important. Considering the very different backgrounds of the business environments of Greece and Albania, the findings of the analysis highly contribute on uncovering the basic challenges that entrepreneurs and start-up founders face in the two business environments. Since data collected is not normally distributed and the variables are ordinal (5-point Likert-scale), the Mann Whitney non-parametric test was used. The basic hypotheses for the Mann Whitney, for the five criteria, are formulated as follows:

Hypothesis 1 (H1). There are not differences in each key criterion according to the countries' participants

Hypothesis 2 (H2). There are differences in each key criterion according to the countries' participants

In order to investigate the statistical tendency of the two populations on the accelerator effectiveness' indicators, a Chi-square Test of Independence was conducted. The purpose of those tests is to investigate how effective the accelerator was, according to the perceptions of the two populations on specific accelerator's indicators. The general hypothesis test conducted for the accelerator's effectiveness is:

Hypothesis 3 (H3). *There are not differences in the accelerator effectiveness 'indicators compared to the country participants*

Hypothesis 4 (H4). There are differences in the accelerator effectiveness 'indicators compared to the country participants

Five particular Chi-square tests have been conducted, regarding the general hypothesis H3–H4. The aim of the Test 1 is to detect whether the participants of each country are differentiated on whether they have made investments towards developing a new strategy or idea, after the business accelerator. With this test, the effectiveness of the accelerator is investigated separately on each population. Test 2 investigates if the accelerator has contributed towards acquiring new customers, according to the participants' perceptions. The goal of Test 3 is to detect the actual accelerator's effectiveness on addressing organizational weaknesses between the two nationalities. Test 4 is amongst the most significant controls conducted for this research. Since the program is about cross-border business acceleration, the intention of the participating entrepreneurs to actually invest in the second country of the program (Albanian entrepreneurs invest in Greece and vice versa) is considered an important performance indicator. Test 5 is about investigating the level of professional partnerships and business synergies obtained after the completion of the program. Possible business partnerships and recruitments amongst ACCEL team members is a clear indication of long-term business acceleration and cross-border development.

5. Results

5.1. Frequencies and Derscriptive Statistics

The analysis of the effectiveness of the business accelerator in terms of investments implemented after the acceleration program, new customers acquired due to the new business approaches applied after the program, participants' intention to internationalise and operate in the second country of the project's implementation (i.e., in Greece for the Albanian participants and in Albania for the Greek participants), and collaboration aspects, are presented in Table 2.

Table 2. Acceleration program effectiveness.

| Anadam Car Danaman Effection | Gre | eece | Alb | ania |
|--|-----|------|-----|------|
| Acceleration Program Effectiveness — | Yes | No | Yes | No |
| Investments occurred towards developing a new strategy or idea after the business accelerator | 68% | 32% | 60% | 40% |
| New customers gained due to the new strategic approach that the business applied, or new product/service introduced in the market | 64% | 36% | 68% | 32% |
| The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting. | 92% | 8% | 96% | 4% |
| Acceleration program | | | | |
| Intention to operate in the second country i.e., Greece/Albania after the implementation of the project. (cross-border aspect) | 68% | 32% | 72% | 28% |
| Intention to work with the other members of the team with which the business participated during the ACCEL program (collaboration aspect) | 88% | 12% | 68% | 32% |

The analysis reveals that the majority of the participating business in both regions proceeded to some kind of investment after the program completion (Greece: 68%, Albania: 60%) showing that the business acceleration program had a positive effect in terms of triggering investments towards developing a new strategy of idea after the business accelerator. Similarly, business from both cross border areas answered affirmatively as to whether their ventures have acquired new customers (Greece: 64%, Albania: 68%) and on whether the accelerator helped them address their organization's weaknesses (Greece: 92%, Albania: 96%). In the question related to the intention of the participants to operate in the second country (i.e., Albanian entrepreneurs invest in Greece and Greek entrepreneurs invest in Albania) answers were positive (Greece: 68%, Albania: 72%), showing that the acceleration program facilitated the consideration of transnational activity. This contributed to one of the major aims of the ACCEL project, which was to boost entrepreneurship levels and business collaborations between the two cross-border regions. A slightly different result was obtained for the collaboration aspect. This question was designed to test the level of business collaborations achieved between the members of each working team. The collaboration aspect includes either business partnerships or recruitment of a team member i.e., a startup founder being recruited to an existing venture. The Albanian participants seem to be slightly more reluctant to cooperate with their teammates (Albania: 68%) in comparison to the Greek participants (Greece: 88%).

In the contigency Table 3, the absolute and relative frequencies of the variables of Table 1 are presented, indicating the absolute number of times that participants from both nationalities responded to every dichotomous variable.

 Table 3. Contigency Table.

| | | | | Variables | | | | |
|----------|---------|--|--|--|--|---|--|--|
| | - | Acceleration Program Effectiveness | | | | | | |
| | - | Investments occurred towards developing a new strategy or idea after the business accelerator | New customers gained due to the new strategic approach that the business applied, or new product/service introduced in the market | The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting. | Intention to operate in the second country i.e., Greece/Albania after the implementation of the project. (cross-border aspect) | Intention to work with the other members of the team with which the business participated during the ACCEL program (collaboration aspect) | | |
| | | | | Absolute Frequencies | | | | |
| 3/ | Greece | 17 | 16 | 23 | 17 | 22 | | |
| Yes | Albania | 15 | 17 | 24 | 18 | 17 | | |
| N.T. | Greece | 8 | 9 | 2 | 8 | 3 | | |
| No | Albania | 10 | 8 | 1 | 7 | 8 | | |
| | | | | Relative Frequencies | | | | |
| V | Greece | 0.68 | 0.64 | 0.92 | 0.68 | 0.88 | | |
| Yes | Albania | 0.60 | 0.68 | 0.96 | 0.72 | 0.68 | | |
| NI- | Greece | 0.32 | 0.36 | 0.08 | 0.32 | 0.12 | | |
| No | Albania | 0.4 | 0.32 | 0.04 | 0.28 | 0.32 | | |

Regarding the participant's satisfaction on the contribution of the acceleration program to the experience gained for the development of the business idea (Figure 1), sixteen per cent (16%) of the Greek participants found their participation as 'not important: 1' or "slightly important: 2". Fifty-six per cent (56%) considered their experience 'important: 4" or "very important: 5". Only twenty-eight per cent (28%) of the Greek participants found their experience to be 'moderately important: 3' towards developing the business idea. The Albanian participants appear even more positive to the contribution of the experience gained during the business acceleration program, as the majority of respondents (76%) replied that the business acceleration program helped them develop their business idea. Regarding the contribution of the experience gained during the acceleration program to the development of a different business idea (Figure 2), the answers between the two populations appear highly differentiated. The results of the Albanian participants show that most of them did not develop a different business idea compared to their initial one. Only a minor 12% reply that their experience is "important: 4" in developing a different business idea than the original one, while there is no indication (0%) that the program was "very important: 5" towards changing their ideas. On the contrary, according to study findings, the acceleration program had a different impact on the Greek participants and the development of a completely different business idea during the program. The majority (56%) of the Greek participants replied that their experience in the business acceleration program helped them develop a completely different idea than the original one, while only a minor 16% replied that their experience was either 'not important: 1' or "slightly important: 2", in developing a different business idea. Similarly, in the question about how the experience from the acceleration program helped in developing more than one business ideas (Figure 3), again, the Greek participants appear to be more willing to implement more than one business idea after their participation to the acceleration program (44%), while thirty-two percent (32%) considered their experience moderately important in developing more than one business idea. On the contrary, only a minor twelve per cent (12%) of the Albanian participants replied that the experience gained from the acceleration program helped them towards implementing more than one business idea.

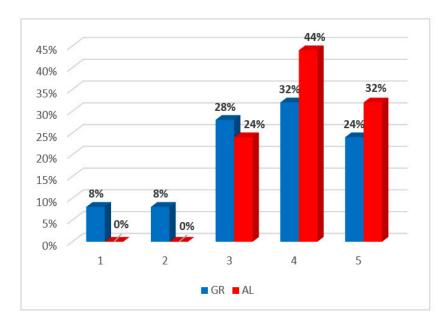


Figure 1. Contribution of the experience gained in the business acceleration program to the development of the participant's business idea.

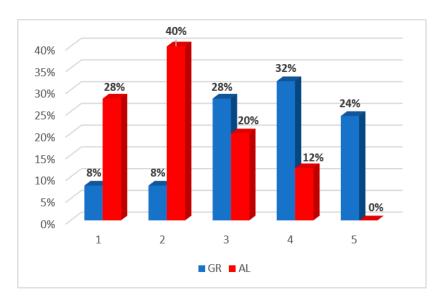


Figure 2. Contribution of the experience gained in the business acceleration program to the development of a different business idea, than the original one.

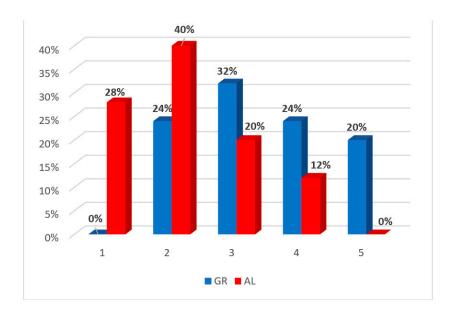


Figure 3. Contribution of the experience gained in the business acceleration program to the development of more than one business ideas.

The results on how the business acceleration program helped the participants to improve their business skills show that the majority of the Greek participants (56%) consider that the business acceleration program helped them improve all of the listed [11,17] business skills, i.e. business modelling, human resources management, financial planning, marketing planning, while fifty two per cent (52%) of the Albanian entrepreneurs consider that they were helped in mainly improving their marketing skills, followed by the business modelling and financial planning skills (Figure 4). The acceleration program also helped businesses in the cross-border area to address some of their organizational weaknesses (Figure 5) [39]. The analysis show that the Greek entrepreneurs (60%) were assisted in overcoming "resistance to change", as one of the primary weaknesses identified, followed by overcoming "lack of vision" and "lack of organization". On the contrary, the Albanian participants were mainly assisted in their capacity to get organized better (84%) and in being less resistant to change (40%), while improving trust to others (36%).

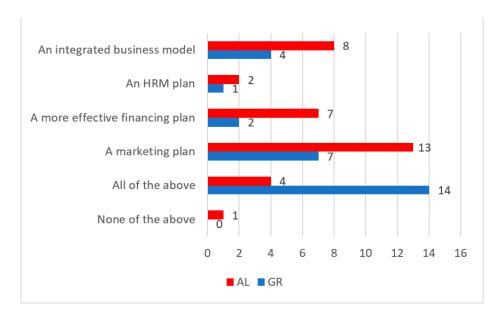


Figure 4. Business acceleration program effectiveness on strengthening organizational skills.

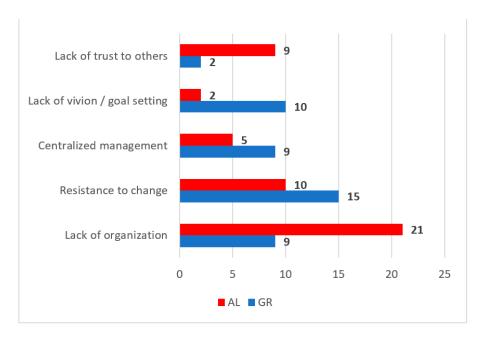


Figure 5. Business acceleration program contribution on improving organizational weaknesses.

5.2. Non-Parametric Analysis

Table 4 presents the average scores for each one of the five criteria contributing to business development along with the standard errors of means, and the standard deviations, while Table 5 presents the mean ranks. Table 5 presents the Mann-Whitney U test results for each factor, including Mann-Whitney values, Wilcoxon W values and significance levels. Table 2 indicates the differences of the two populations' perceptions over which factor they consider significant in developing a business idea and to what extent. The criteria are availability of 'Financial Resources', Customer Network and the Business Model. Greek participants consider Financial Resources, Customer Network and Business Model significantly more important than the Albanian participants, while the Professional Skills and the Technological/Scientific Knowledge criteria are considered equally important for the two populations. This is accrued from the significantly higher mean ranks of the Greek population in comparison to the Albanian, regarding those specific criteria.

Table 4. Means, standard error of means, and standard deviations.

| Key Criteria | Nationality | Mean | Std. Error of Mean | Std. Deviations |
|------------------------------------|-------------|--------|--------------------|-----------------|
| P'acces' I D | Albanian | 4.0400 | 0.14697 | 0.73485 |
| Financial Resources | Greek | 4.6000 | 0.12910 | 0.64550 |
| Technological/Scientific Knowledge | Albanian | 4.2000 | 0.18257 | 0.91287 |
| | Greek | 4.3600 | 0.12754 | 0.63770 |
| | Albanian | 4.0800 | 0.19933 | 0.99666 |
| Professional Skills | Greek | 4.4400 | 0.13013 | 0.65064 |
| | Albanian | 3.4000 | 0.14142 | 0.70711 |
| Customer Network | Greek | 3.9200 | 0.21541 | 1.07703 |
| P : W 11 | Albanian | 2.7200 | 0.21229 | 1.06145 |
| Business Model - | Greek | 4.4800 | 0.16452 | 0.82260 |

Table 5. Mean Ranks of key criteria contributing to business development.

| Key Criteria | Nationality | N | Mean Rank | Sum of Ranks |
|------------------------------------|-------------|----|-----------|--------------|
| | Albanian | 25 | 20.26 | 506.50 |
| Financial Resources | Greek | 25 | 30.74 | 768.50 |
| | Total | 50 | | |
| | Albanian | 25 | 24.80 | 620.00 |
| Technological/Scientific Knowledge | Greek | 25 | 26.20 | 655.00 |
| - | Total | 50 | | |
| | Albanian | 25 | 23.30 | 582.50 |
| Professional Skills | Greek | 25 | 27.70 | 692.50 |
| - | Total | 50 | | |
| | Albanian | 25 | 21.52 | 538.00 |
| Customer Network | Greek | 25 | 29.48 | 737.00 |
| - | Total | 50 | | |
| | Albanian | 25 | 15.68 | 392.00 |
| Business Model | Greek | 25 | 35.32 | 883.00 |
| | Total | 50 | | |

In Table 6, the Mann-Whitney U statistic is presented. This value indicates the comparison of the sum or rankings with the expected value, considering that the two populations came from the same distribution. The formula for the Mann-Whitney U test is the sum of the ranks $-N \times (N+1)/2$. Thus, for the Albanian population the Mann-Whitney U Financial Resources test is $506.5 - 25 \times (25+1)/2 = 181.5$. The tests for the rest of the criteria are calculated accordingly. The U test that is chosen for the two populations for each criterion is the one with the lower value. Wilcoxon W statistic is the maximum of the sum of ranks, already used for Mann-Whitney U test. Another way to interpret Mann-Whitney U test is by converting to a normal score. This can be done by subtracting its mean and dividing it by its standard error in the Z row. Regarding the criteria significance we see that in the cases of Financial Resources (p-value (FR) = 0.006), Customer Network (p-value (CN) = 0.041) and Business Model (p-value (BM) = 0.000), we have a p-value < 0.05, indicating that the null hypothesis is rejected and there are differences in those specific criteria according to the countries' participants.

| | Financial Resources | Technological/Scientific Knowledge | Professional Skills | Customer Network | Business Model |
|---------------------------|------------------------|---------------------------------------|------------------------|---------------------|----------------|
| Mann-Whitney U | 181.5 | 295 | 257.5 | 213 | 67 |
| Wilcoxon W | 506.5 | 620 | 582.5 | 538 | 392 |
| Z | -2.775 | -0.369 | -1.159 | -2.048 | -4.923 |
| Asymp. Sig. (2-tailed) | 0.006 | 0.712 | 0.246 | 0.041 | 0.000 |
| | | a. Grouping Variable: N | lationality | | |

Table 6. Mann Whitney test statistics for key criteria contributing to business development.

Out of the five specific Chi-square Hypothesis Tests conducted for investigating how effective the accelerator was according to perceptions of the two populations (regarding general Hypothesis Tests H3–H4), only Test 4 showed a clear statistical significance. The hypotheses for this test were:

Hypothesis 5 (H5). There is no difference between the nationality of the participants and their intention to operate in the second country after the implementation of the project

Hypothesis 6 (H6). There is a difference between the nationality of the participants and their intention to operate in the second country after the implementation of the project

A statistical significance on the dependence between the two variables (χ^2 = 6.65 m p-value = 0.01 < 0.05) was identified, linking the nationality of the participants and their actual intention to investigate investments in the second country of the acceleration implementation. This finding (Table 7) indicates a difference between the Albanian participants' intention to invest in Greece and the Greek participants' intention to invest in Albania. The findings suggest that the majority of the Albanian entrepreneurs appeared to be ready for starting operations in the other country after the implementation of the project, while the Greek entrepreneurs were a bit more reluctant towards starting operations in Albania.

Table 7. Hypothesis 4 Chi-Square Test.

| Test | Value | df | Asymptotic Significance (2-Sided) |
|--------------------|--------------------|----|-----------------------------------|
| Pearson Chi-Square | 6.650 ^a | 1 | 0.01 |

^a 0 cells have expected count less than 5. The minimum expected count is 10.50.

6. Discussion

The aim of this study was to analyze the effects of a business acceleration program designed to boost entrepreneurship and open innovation in two bordering regions, namely Greece and Albania. The study analyzed and compared the survey responses of entrepreneurs that participated in the program and operate or plan to operate their ventures in the cross-border region. The comparison between the Greek and the Albanian population regarding the accelerator effectiveness on both populations revealed the key business criteria that are important for each population. By doing so, the researchers attempted to identify the primary entrepreneurship boosters for each region, taking into consideration its unique characteristics offering new insights on how acceleration programs should be designed and implemented taking into consideration the different context conditions.

The survey was structured in order to reveal the participant's view on the knowledge obtained in entrepreneurial aspects such as marketing, business modelling, human resources management and financial management. Some key conclusions are that the fact that the majority of participants regarded the accelerator's effectiveness a positive outcome is recorded for both the Greek and Albanian entrepreneurs. The belief that the accelerator significantly helped them develop their business idea is common to both populations. In

Albania, entrepreneurs appear to be even more enthusiastic than the Greek participants, with the majority of them (76%) agreeing that the experience gained from their participation is important in developing their business ideas. Considering that the project was implemented in an identical way in both countries, the importance of the program to the Albanian participants may have recorded a higher number due to the relatively low levels of entrepreneurial support mechanisms offered from the central government authorities and Albanian universities [21].

The Albanian entrepreneurs appear to be determined to implement their original business idea in comparison to their Greek peers, whose answers indicated that they are more likely to pivot their idea and implement a different idea than the original one, or even implement more than one business idea. This particular finding may indicate that because of the particular entrepreneurial ecosystem conditions in Albania, which renders it in a still nascent position, the ability to recognize alternative business opportunities and ways to seize them is relatively low [58].

Analyzing the dichotomous variables of accelerator's effectiveness, we see that both populations share similar results towards implementation of investments, acquiring new customers and addressing companies' weaknesses, as the acceleration program seems to have helped them in these aspects. The same is true for the cross-border aspect, where entrepreneurs from both countries are planning to invest in the second country of the project's implementation (\approx 70% for both populations). This particular indicator is very important as one of the primary goals of the Interreg Europe Cross-Border ACCEL project has been the empowerment of the cross-border entrepreneurship collaborations, helping established ventures and start-ups develop their business ideas, and boosting entrepreneurial cross-border growth, confirming the literature that acceleration programs help business to scale [17].

There is a main difference observed between the Greek and the Albanian participants of the acceleration program regarding their intention to continue working with other members of the team with which the business participated in the program. Analysis showed that 88% of the Greek entrepreneurs intend to work with the other team members of their project work-teams, compared to 68% of the Albanian entrepreneurs who are willing to do the same. Although both populations seem to pursue new collaborations, the lower percentage on the Albanian side may be due to the business culture in Albania, which is still lacking in collaboration/synergies aspects, in comparison to the modern Asian or western cultures [59]. The Greek entrepreneurs seem more willing to continue the cooperation with their teammates, in terms of business partnerships or recruitment recognizing the competitive advantages of open innovation and collaborations [25,33].

Regarding the perceptions on what types of organizational skills the participants improved due to the acceleration program, there are also some differences observed between the two populations according to the research findings. While the majority of the Greek participants replied that the accelerator helped them improve all of the listed skills, the Albanian population was focused on the accelerator's contribution on business modelling and marketing confirming literature findings [11]. Habili [60] quotes that marketing levels in Albania are at considerably low levels, implying that the Albanian entrepreneurship community lacks effective marketing planning techniques.

The research findings revealed certain discrepancies between the two populations, regarding how the accelerator assisted entrepreneurs in coping with their organizational weaknesses. The major weakness that the acceleration program helped the Greek participants to address is their "resistance to change" and their "lack of vision". Albanian entrepreneurs considered that the "lack of organization" is the major weakness that the accelerator helped them improve. This finding might be another indication of the different current environmental conditions in the two entrepreneurial ecosystems of the two countries. Relevant studies concerning the Greek business environment have indicated that resistance to change may originate from the negative experiences that employees had on broken promises, affecting job satisfaction and organizational commitment, which in turn

may affect their desire to perform differently [61]. Regarding the Albanian participants, the literature indicates that the majority of Albanian managers have not yet fully understood the importance of a solid and effective organizational structure [62].

The second primary aim of this study was to reveal key criteria that entrepreneurs consider important for implementing a business idea in the cross-border area of Greece-Albania. By addressing those key criteria, the researchers offer a broader view of the business environment conditions in each country. Non-parametric analysis indicated that the availability of financial resources is not perceived equally important by the two populations. Greek entrepreneurs considered the availability of financial resources to be more significant in comparison to Albanian entrepreneurs. An explanation could be the harsh financial crisis that Greece had been through over the last decade, which might have affected local entrepreneurial perceptions over the importance of capital availability. In fact, capital availability is still a considerable challenge for the Greek business community as the banking sector is underfunding the private sector and national consumption levels are still degraded [63]. Likewise, the existence of an adequate customer network is not perceived as equally significant for Albanian entrepreneurs in comparison to Greeks. Greek entrepreneurs find the existence of a customer network more important, possibly due to the reasons described previously [24]. The cautious development of the Greek economy over that last year does not hide the inadequate consumer levels of the Greek market in comparison to the past, due to the ongoing consequences of the financial crisis. The highest significance levels of the differentiation of the mean ranking were found on the business model criterion. Albanian participants do not consider this criterion important, having a diametrically opposite view of the Greek entrepreneurs, which confirm the literature findings that evaluation of business models within an acceleration program is important as it leads to more cautious growth [17]. The Albanian economy has long been underdeveloped and today business model efficiency still does not seem to have a significant direct effect on the performance of an Albanian firm [64]. On the contrary, effective business modelling in Greece has shown significant effects on the innovation levels of the Greek firms [65]. Finally, the hypothesis tests investigating accelerators' effectiveness did not show any significant statistical differences between the two populations. An exception concerns the hypothesis test comparing the intention of the entrepreneurs of the two countries to invest in the second country of project's implementation. Albanian entrepreneurs showed a clear intention to invest in Greece while Greek entrepreneurs appear to be more hesitant to invest in Albania according to the study findings. The unstable business environment in Albania, along with the significantly lower GDP per capita levels in comparison to Greece, may constitute obvious causes behind that specific finding.

7. Conclusions

The ulterior aim of the study has been to compare two cross-border entrepreneurial populations in two ways. Firstly, to compare the accelerator's effectiveness in terms of practical results such as business investments in two countries and future business collaborations between the members of the projects' working groups. Secondly, to reveal the specific criteria that entrepreneurs from both countries consider crucial in developing a business idea.

The findings of this study have to be seen in light of some limitations. This study focused on investigating the impact of a business acceleration program, which was designed and implemented within the framework of the ACCEL project, supported by the INTERREG IPA CBC Programme, in the cross-border region of Greece-Albania. The study's sample included the firms, which participated in the ACCEL project and could not be differentiated. In addition, according to the literature [21,22], there are very limited similar initiatives such as an acceleration program implemented in the two cross-border regions rendering the ACCEL acceleration program as one of the very first initiatives for business acceleration, especially for the Albania side. Moreover, the inclusion of further indicators measuring accelerator's effectiveness and business development prospects could offer a

broader perspective on the conclusions about those aspects. As such, the results of this study can be supported by future research to improve the current state of knowledge, which could offer preliminary insight to policy makers for designing business support measures tailored to the specific region. Future research could also include businesses from countries with diversified business environment characteristics revealing further the types of tailored acceleration structures that are appropriate for the different contexts and entrepreneurial ecosystems. This would allow the adaptation and the design of acceleration programs to local conditions in order to further facilitate cross-border collaborations, open innovation and synergies.

In total, the implementation of ACCEL business acceleration program confirmed the relevant literature indications regarding the core elements of entrepreneurship that require knowledge and skills, in order to be able to increase their potential to mature innovations and implement a business idea. Furthermore, solid accelerator's effectiveness KPIs such as new investments, customer development framework, implementation of innovative business strategies in developing a business idea and operations in another country other than the country of origin were largely confirmed for both populations. Moreover, accelerator's effect on improving certain organizational strengths and improving distinct organizational weaknesses showed similar and significant effects for both the Greek and the Albanian populations. The study also confirmed the main entrepreneurial boosters (key criteria) that have to be given special attention by policy makers, in order to adequately support entrepreneurship at the cross-border level. Minor discrepancies have been noticed regarding the significance of specific key criteria contributing to business development between the two populations. While all participants consider certain professional skills and technological knowledge significantly important, other criteria such as financial resources and effective business modelling have been considered less important for the Greek population.

The economic sectors of operation by the businesses that participated in the program spanned from trade, agri-food, processing, ICT, construction and tourism, indicating that those sectors should be given particular attention at a policy making level so as to support the cross-border entrepreneurship. One of the inter-regional geographical characteristics is that besides the road network that connects the two regions, the Prespa transboundary park with two lakes is shared by three bordering countries: Greece, Albania and North Macedonia. Transboundary trade via water resources transportation especially requires distribution infrastructures and construction networks to accelerate enterprise collaborations in the cross-border region of Greece-Albania. However, an integrated legal and institutional framework relevant to an entrepreneurial support framework could provide a safe environment necessary to support sustainable development and foster innovative collaboration across borders, supporting trade and tourism activities. The study findings suggest that business acceleration programs should be designed in accordance with the specific environment conditions that pertain in each region and cross-border programs could create potential synergies and collaborations that may be applied between the business communities of two different countries, leading to entrepreneurial growth.

Author Contributions: Conceptualization, P.G. and P.K.; methodology, P.G. and P.K.; software, P.K.; validation, P.G. and P.K. and E.S.; formal analysis, P.K., P.G. and G.A.; investigation, P.G.; resources, P.G. and Y.B.; data curation, P.K.; writing—original draft preparation, P.G., P.K., P.F.; writing—review and editing, P.G., P.K.; visualization, P.K.; supervision, P.G.; project administration, Y.B.; funding acquisition, Y.B. and P.G. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Interreg IPA CBC Programme "Greece-Albania 2014–2020, "Corporate Acceleration for existing ventures", Subsidy Contract A2-2.2-7.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data supporting reported results can be found in the University of Western Macedonia and the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

| | old, □ 36–45 years | QUESTIONNAIRE |
|-------------------|--------------------|---|
| | old, □ 36–45 years | Block I |
| | old, □ 36–45 years | Gender: □ Male, □ Female |
| | • | Age Group: □ Under 25 years old, □ 26–35 years |
| uate level (Bache | | years old, □ Over 55 years old |
| | Education-Graduat | Education level: ☐ Secondary Education, ☐ Higher |
| | ster Degree) | lor Degree), □ Higher Education-Postgraduate level (Ma |
| | | Sector of Business operation |
| | | □ Trade |
| | | ☐ Agri-food |
| | | \square Processing |
| are) | tware & Hardware | ☐ Information and Communication Technologies (Sof |
| | | \Box Energy |
| | | \square Transportation |
| | | \square Constructions |
| | | ☐ Tourism |
| | | □ Services |
| | | \Box Other (please specify): |
| | | Block II |
| Authors | 1: Yes, 2: No | |
| [17,18] | Yes No | Acceleration program effectiveness |
| | | Investment occurred towards developing a new strategy or idea after the business accelerator. |
| | | New customers gained due to the new strategic approach you apply or the introduction of a |
| | | new product/service in the market. |
| | | |
| | | new product/service in the market. |
| | | new product/service in the market. The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of |
| | | new product/service in the market. The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting. |
| [19] | Yes No | new product/service in the market. The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of |
| [19] | Yes No | new product/service in the market. The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting. |
| [19] | Yes No Yes No | new product/service in the market. The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting. Acceleration program cross-border aspect Intention to operate in the second country i.e., Greece/Albania after the implementation of |
| _ | Yes No | new product/service in the market. The business strategy was improved in addressing business weaknesses due to the consultation process such as: lack of organization, lack of trust, inability/fear of accepting changes and new ideas, centralized management/inability to delegate tasks on others, lack of vision and goal setting. |

Block III

| | 1: N | ot Impor | tant, 5: V | ery Impo | ortant | Authors |
|---|------|----------|------------|----------|--------|-------------------|
| Experience from the program | 1 | 2 | 3 | 4 | 5 | [17] |
| has helped develop your idea | | | | | | |
| has contributed to the development of a different business idea from your original one | | | | | | |
| has contributed to the development of more than one business idea | | | | | | |
| Importance of the existence of | 1 | 2 | 3 | 4 | 5 | [17,18, 20,57] |
| the necessary financial resources in the implementation of the business idea | | | | | | |
| the necessary technical and technological knowledge about your idea, regarding its implementation | | | | | | |
| a working group with executives who have specific professional skills regarding the implementation of your idea | | | | | | |
| an existing customer network in the implementation of your idea? | | | | | | |
| a complete and detailed business model in the implementation of your idea | | | | | | |

| ate/ | Participation in the program helped in developing knowledge and skills to credevelop [17]: |
|-------|---|
| | a marketing plan an integrated business model a human resource management plan a plan to better manage your finances all of the above none of the above |
| in ac | The consultation process during the acceleration program has improved your strategy ddressing your business weaknesses [17]? \Box Yes, \Box No If yes, which ones? |
| | Lack of organization Lack of trust Inability/fear of accepting changes and new ideas Centralised management/inability to delegate tasks on others Lack of vision and goal setting |

References

- 1. Castellacci, F.; Grodal, S.; Mendonca, S.; Wibe, M. Advances and Challenges in Innovation Studies. *J. Econ. Issues* **2005**, *39*, 91–121. [CrossRef]
- 2. Shearmur, R.; Doloreux, D. How Open Innovation Processes Vary between Urban and Remote Environments: Slow Innovators, Market-Sourced Information and Frequency of Interaction. *Entrep. Reg. Dev.* **2016**, *28*, 337–357. [CrossRef]
- 3. Lopes, J.M.; Gomes, S.; Oliveira, J.; Oliveira, M. The Role of Open Innovation, and the Performance of European Union Regions. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 120. [CrossRef]
- 4. Valdez-Juárez, L.E.; Castillo-Vergara, M. Technological Capabilities, Open Innovation, and Eco-Innovation: Dynamic Capabilities to Increase Corporate Performance of SMEs. *J. Open Innov. Technol. Mark. Complex.* **2021**, 7, 8. [CrossRef]
- 5. Surya, B.; Menne, F.; Sabhan, H.; Suriani, S.; Abubakar, H.; Idris, M. Economic Growth, Increasing Productivity of SMEs, and Open Innovation. *J. Open Innov. Technol. Mark. Complex.* **2021**, 7, 20. [CrossRef]
- 6. Partanen, J.; Möller, K.; Westerlund, M.; Rajala, A. Social Capital in the Growth of Science-and-Technology-Based SMEs. *Ind. Mark. Manag.* **2008**, *37*, 513–522. [CrossRef]
- 7. Fini, R.; Grimaldi, R.; Santoni, S.; Sobrero, M. Complements or Substitutes? The Role of Universities and Local Context in Supporting the Creation of Academic Spin-Offs. *Res. Policy* **2011**, *40*, 1113–1127. [CrossRef]
- 8. Hochberg, Y.V. Accelerating Entrepreneurs and Ecosystems: The Seed Accelerator Model. *Innov. Policy Econ.* **2016**, *16*, 25–51. [CrossRef]

- 9. Basu, S.; Phelps, C.; Kotha, S. Towards Understanding Who Makes Corporate Venture Capital Investments and Why. *J. Bus. Ventur.* **2011**, *26*, 153–171. [CrossRef]
- 10. Ismail, A. A Framework for Designing Business-Acceleration Programs: A Case Study from Egypt. Entrep. Res. J. 2020, 10. [CrossRef]
- 11. Cohen, S.; Hochberg, Y. Accelerating Startups: The Seed Accelerator Phenomenon. SSRN Electron. J. 2014. [CrossRef]
- 12. Del Sarto, N.; Isabelle, D.A.; Di Minin, A. The Role of Accelerators in Firm Survival: An FsQCA Analysis of Italian Startups. *Technovation* **2020**, *90*–*91*, 102102. [CrossRef]
- 13. Shankar, R.K.; Shepherd, D.A. Accelerating Strategic Fit or Venture Emergence: Different Paths Adopted by Corporate Accelerators. *J. Bus. Ventur.* **2019**, 34, 105886. [CrossRef]
- 14. Mian, S.; Lamine, W.; Fayolle, A. Technology Business Incubation: An Overview of the State of Knowledge. *Technovation* **2016**, 50–51, 1–12. [CrossRef]
- 15. Hallen, B.; Bingham, C.; Cohen, S. Do Accelerators Accelerate? A Study of Venture Accelerators as a Path to Success? *Acad. Manag. Proc.* **2014**, 2014, 12955. [CrossRef]
- Smith, S.W.; Hannigan, T.J.; Gasiorowski, L. Accelerators and Crowdfunding: Complementarity, Competition, or Convergence in the Earliest Stages of Financing New Ventures? In Proceedings of the University of Colorado-Kauffman Foundation Crowd-Funding Conference, Boulder, CO, USA, 12–13 July 2013.
- 17. Bone, J.; Gonzalez-Uribe, J.; Haley, C.; Lahr, H. The Impact of Business Accelerators and Incubators in the UK. p. 125. Available online: http://oro.open.ac.uk/67380/ (accessed on 23 May 2021).
- 18. Roberts, P.; Lall, S.; Baird, R.; Eastman, E.; Davidson, A.; Jacobson, A. What's Working in Startup Acceleration: Insights from Fifteen Village Capital Programs. Available online: https://www.galidata.org/publications/whats-working-in-startup-acceleration/ (accessed on 23 May 2016).
- 19. Accathon Capital | New York | Cross-Border Accelerator VC. Available online: https://www.accathon.com/accelerator (accessed on 23 May 2021).
- 20. Kerr, W.R.; Lerner, J.; Schoar, A. The Consequences of Entrepreneurial Finance: Evidence from Angel Financings. *Rev. Financ. Stud.* **2014**, 27, 20–55. [CrossRef]
- 21. Hach, K.; Trenkmann, E. Entrepreneurial Ecosystem in Albania with Focus on Tirana. EU for Innovation, Instrument for Pre-Aceessiobn Assistance (IPAII) 2014–2020 for the Competitiveness and Innovation Sector. Project Number 2018/400-907. 2019. Available online: http://euforinnovation.al/wp-content/uploads/2019/12/Gap-Analysis_E-Publication.pdf (accessed on 23 May 2019).
- 22. Antoniades, V.; Kavounides, C.; Giakoumelos, M.; Petkakis, T.; Zacharias, Z. *Greece Startup Ecosystem*; Boston Consulting Group: Athens, Greece, 2018.
- 23. Tolstykh, T.; Gamidullaeva, L.; Shmeleva, N.; Woźniak, M.; Vasin, S. An Assessment of Regional Sustainability via the Maturity Level of Entrepreneurial Ecosystems. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 5. [CrossRef]
- 24. Huggins, R.; Johnston, A. Knowledge Flow and Inter-Firm Networks: The Influence of Network Resources, Spatial Proximity and Firm Size. *Entrep. Reg. Dev.* **2010**, 22, 457–484. [CrossRef]
- 25. Leckel, A.; Veilleux, S.; Dana, L.P. Local Open Innovation: A Means for Public Policy to Increase Collaboration for Innovation in SMEs. *Technol. Forecast. Soc. Chang.* **2020**, *153*, 119891. [CrossRef]
- 26. Dempwolf, C.; Auer, J.; Fabiani, M. Innovation Accelerators: Defining Characteristics among Startup Assistance Organizations. Available online: https://advocacy.sba.gov/2014/10/01/innovation-accelerators-defining-characteristics-among-startup-assistance-organization/ (accessed on 23 May 2021).
- 27. Hausberg, J.P.; Korreck, S. Business Incubators and Accelerators: A Co-Citation Analysis-Based, Systematic Literature Review. *J. Technol. Transf.* **2020**, *45*, 151–176. [CrossRef]
- 28. Ries, E. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*; Crown, 2011; Available online: https://www.amazon.com/Lean-Startup-Entrepreneurs-Continuous-Innovation/dp/0307887898 (accessed on 23 May 2011).
- 29. Ratinho, T.; Henriques, E. The Role of Science Parks and Business Incubators in Converging Countries: Evidence from Portugal. *Technovation* **2010**, *30*, 278–290. [CrossRef]
- 30. Hathaway, I. What Startup Accelerators Really Do. *Harvard Business Review*. Available online: https://hbr.org/2016/03/what-startup-accelerators-really-do (accessed on 23 May 2016).
- 31. van Rijnsoever, F.J. Meeting, Mating, and Intermediating: How Incubators Can Overcome Weak Network Problems in Entrepreneurial Ecosystems. *Res. Policy* **2020**, *49*, 103884. [CrossRef]
- 32. Lopes, J.; Farinha, L.; Ferreira, J.J.; Ferreira, F. Peeking beyond the Wall: Analysing University Technology Transfer and Commercialisation Processes. *Int. J. Technol. Manag.* **2018**, *78*, 107. [CrossRef]
- 33. Tucci, C.L.; Chesbrough, H.; Piller, F.; West, J. When Do Firms Undertake Open, Collaborative Activities? Introduction to the Special Section on Open Innovation and Open Business Models. *Ind. Corp. Chang.* **2016**, *25*, 283–288. [CrossRef]
- 34. Chesbrough, H.; Vanhaverbeke, W.; West, J. New Frontiers in Open Innovation; Oxford University Press: Oxford, UK, 2014.
- 35. Alexander, A.T.; Martin, D.P. Intermediaries for Open Innovation: A Competence-Based Comparison of Knowledge Transfer Offices Practices. *Technol. Forecast. Soc. Chang.* **2013**, *80*, 38–49. [CrossRef]
- 36. Dismantling Knowledge Boundaries at NASA: The Critical Role of Professional Identity in Open Innovation-Hila Lifshitz-Assaf. 2018. Available online: https://journals.sagepub.com/doi/full/10.1177/0001839217747876 (accessed on 15 May 2021).

- 37. Freel, M.; Robson, P.J. Appropriation Strategies and Open Innovation in SMEs. Int. Small Bus. J. 2017, 35, 578–596. [CrossRef]
- 38. Green, L. *The Entrepreneur's Playbook: More Than 100 Proven Strategies, Tips, and Techniques to Build. a Radically Successful Business;* American Management Association: New York, NY, USA, 2017.
- 39. Hatthakijphong, P.; Ting, H.-I. Prioritizing Successful Entrepreneurial Skills: An Emphasis on the Perspectives of Entrepreneurs versus Aspiring Entrepreneurs. *Think. Ski. Creat.* **2019**, *34*, 100603. [CrossRef]
- 40. Galanakis, K.; Giourka, P. Entrepreneurial Path: Decoupling the Complexity of Entrepreneurial Process. *Int. J. Entrep. Behav. Res.* **2017**, 23, 317–335. [CrossRef]
- 41. Gerli, F.; Gubitta, P.; Tognazzo, A. Entrepreneurial Competencies and Firm Performance: An Empirical Study. 2011. Available online: https://www.researchgate.net/profile/Paolo-Gubitta/publication/228314296_Entrepreneurial_Competencies_and_Firm_Performance_An_Empirical_Study/links/00463526e019fdfeb9000000/Entrepreneurial-Competencies-and-Firm-Performance-An-Empirical-Study.pdf (accessed on 15 May 2021).
- 42. Silveyra, G.; Herrero, Á.; Pérez, A. Model of Teachable Entrepreneurship Competencies (M-TEC): Scale Development. *Int. J. Manag. Educ.* **2021**, *19*, 100392. [CrossRef]
- 43. Herrmann, A.M.; Storz, C.; Held, L. Whom Do Nascent Ventures Search for? Resource Scarcity and Linkage Formation Activities during New Product Development Processes. *Small Bus. Econ.* **2020**. [CrossRef]
- 44. Kuratko, D.F.; Morris, M.H. Corporate Entrepreneurship: A Critical Challenge for Educators and Researchers. *Entrep. Educ. Pedagog.* **2018**, *1*, 42–60. [CrossRef]
- 45. La Rocca, A.; Perna, A.; Sabatini, A.; Baraldi, E. The Emergence of the Customer Relationship Portfolio of a New Venture: A Networking Process. *J. Bus. Ind. Mark.* **2019**, *34*, 1066–1078. [CrossRef]
- 46. Theodoropoulos, D.; Kyridis, A.; Zagkos, C.; Konstantinidou, Z. "Brain Drain" Phenomenon in Greece: Young Greek Scientists on Their Way to Immigration, in an Era of "Crisis". Attitudes, Opinions and Beliefs towards the Prospect of Migration. *JEHD* **2014**, 3. [CrossRef]
- 47. Bank of Greece Governor Report. Available online: https://www.bankofgreece.gr/ekdoseis-ereyna/ekdoseis/ekthesh-dioikhth (accessed on 2 April 2021).
- 48. Stournaras, Y. Yannis Stournaras: The Greek Economy 10 Years after the Crisis and Lessons for the Future Both for Greece and the Eurozone. 2019. Available online: https://www.bis.org/review/r190816e.htm (accessed on 2 April 2021).
- 49. Hellenic Statistical Authority. Available online: https://www.statistics.gr/en/home/ (accessed on 2 April 2021).
- 50. Michalopoulos, T. Rebrain Greece. Available online: https://medium.com/the-crowdpolicy-collection/rebrain-greece-portal-crowdsourcing-platform-crowdpolicy-d893d2c25ba (accessed on 2 April 2021).
- 51. OECD Education at a Glance. 2017. Available online: https://www.oecd.org/education/education-at-a-glance/ (accessed on 2 April 2017).
- 52. European Commission the Economy. Available online: https://europa.eu/european-union/about-eu/figures/economy_en (accessed on 3 April 2021).
- 53. Share of Member States in EU GDP. Available online: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20 170410-1 (accessed on 2 April 2021).
- 54. Kobicheva, A.; Baranova, T.; Tokareva, E. The Development of an Interaction Mechanism between Universities and Other Innovation System Actors: Its Influence on University Innovation Activity Effectiveness. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 109. [CrossRef]
- 55. Seland, E.H. Writ in Water, Lines in Sand: Ancient Trade Routes, Models and Comparative Evidence. *Cogent Arts Humanit*. **2015**, 2, 1110272. [CrossRef]
- 56. Priyono, A.; Idris, F.; Lim, S.B.A.H. Achieving Ambidexterity in Internationalization: Analysis of How SMEs Cope with Tensions between Organizational Agility–Efficiency. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 188. [CrossRef]
- 57. Lahr, H.; Mina, A. Venture Capital Investments and the Technological Performance of Portfolio Firms. *Res. Policy* **2016**, *45*, 303–318. [CrossRef]
- 58. Chaparro, X.A.F.; de Vasconcelos Gomes, L.A. Pivot Decisions in Startups: A Systematic Literature Review. *Int. J. Entrep. Behav. Res.* **2021**. [CrossRef]
- 59. Vajjhala, N.R.; Strang, K.D. Collaboration Strategies for a Transition Economy: Measuring Culture in Albania. *Cross Cult. Manag.* **2014**, 21, 78–103. [CrossRef]
- 60. Habili, M. Understanding Level of CSR and Marketing in Albania in 2020. IJMHRR 2021, 2, 35-42.
- 61. Tomprou, M.; Nikolaou, I.; Vakola, M. Experiencing Organizational Change in Greece: The Framework of Psychological Contract. *Int. J. Hum. Resour. Manag.* **2012**, *23*, 385–405. [CrossRef]
- 62. Shkurti, L. The Albanian Organization and Organizational Structure—The Challenges of the Adaptation to the Dynamic Reality. *J. Educ. Cult. Soc.* **2014**, 2014. [CrossRef]
- 63. Kolliopoulos, A. *Reforming the Greek Financial System: A Decade of Failure*; Hellenic Observatory Discussion Papers on Greece ans Southeast Europe; Hellenic Observatory, European Institute, LSE: London, UK, 2021.
- 64. Gerdoçi, B.; Bortoluzzi, G.; Dibra, S. Business Model Design and Firm Performance: Evidence of Interactive Effects from a Developing Economy. *Eur. J. Innov. Manag.* **2017**, *21*, 315–333. [CrossRef]
- 65. Kilintzis, P.; Samara, E.; Carayannis, E.G.; Bakouros, Y. Business Model Innovation in Greece: Its Effect on Organizational Sustainability. *J. Knowl. Econ.* **2020**, *11*, 949–967. [CrossRef]