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RESEARCHING ECONOMIC DEVELOPMENT
AND ENTREPRENEURSHIP IN TRANSITION ECONOMIES

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9th REDETE Conference 2022

“Present and Future Challenges in Regional
Development in the Adriatic-Ionian Region”

September 15-16, 2022
Ancona, Italy



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SUSTAINABLE DEVELOPMENT

Sustainable Development of the Islands and Services of General Interest. Monitoring and Evaluating through “Smart” Indicators.

Ioannis Katsounis¹

Maria Lekakou²

Georgios Remoundos³

Abstract

Sustainable development of the islands is indispensably connected to access of the local population to the services of general interest such as telecommunications, postal service, transport, energy, health – care, drinking water, waste or sewage management. The importance of availability, accessibility, affordability, and quality of services of general interest is acknowledged for social and territorial cohesion. The aim of this paper is to present a model of islands’ governance based on monitoring the performance of certain sectors of sustainable development. The monitoring mechanism is served through a set of “smart” indicators that can measure progress. The designation of the “smart” indicators is based on a literature review, while their evaluation and prioritization procedure are carried out by expert groups consisted mainly of stakeholders, through the implementation of public consultation techniques. Through these steps, a set of *key indicators* was selected as the most relevant by a group of stakeholders in a *participatory* workshop. Participants evaluated the area of “Health care” as the most important condition for the achievement of cohesion in small islands while the “Number of medical staff” was evaluated as the most important indicator. The second most significant topic, according to the participants’ perception, was the “Quality of life” where “Sense of security”, “Cultural activity” and “Transactions procedures” stood out as the most critical subtopics. “Education” was ranked as the third choice of participants in terms of importance, followed by “Employment”, “Transport” and “Environment”, respectively.

Keywords: islands, services of general interest, “smart” indicators, cohesion, sustainable development, public consultation

1. Introduction

The most important condition for the sustainable development of small islands, regarding their attractiveness, employment, business and living conditions, is the achievement of a satisfactory level of access to the services of general interest such as telecommunications, postal service, transport, energy, health – care, drinking water, waste and sewage management, as well as other activities related to the supply of public services. The fulfilment of this goal needs a comprehensive monitoring system to be established for supporting the objectives and targets of policy making.

Insularity is the connecting link and the common characteristic of all islands, regardless of their size, population, and level of development. Insularity expresses ‘objective’ and measurable

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characteristics, including small area size, small population (small market), isolation and remoteness, as well as unique natural and cultural environments (Spilanis et al, 2012). However, it also involves a distinctive “experiential identity”, which is a non-measurable quality variable, expressing the special characteristics that islands are connected to.

Insularity impacts upon the attractiveness of islands for both economic activities and permanent residence, along with other factors, internal (such as available resources) or external (such as the national economy and national governance and globalization) to the island. Besides low agglomeration economies and economies of scale, other examples of negative impacts of insularity to attractiveness come from public services, which on islands cost more to make and operate. But the most profound example of the negative influence of the geographical discontinuity of space is accessibility (Spilanis et al 2012). Other factors may be influenced positively, such as environmental and cultural assets of islands and the sense of security.

"Smart" indicators could be the backbone of a monitoring scheme towards the achievement of local, national, and regional goals. A sound indicator framework will turn general goals into a management tool to help islands to develop explicit strategies and allocate resources accordingly, as well as a report to measure progress towards sustainable development and as an accountability platform of all stakeholders supporting participatory planning. This evidence based decision-making process is serving also accountability and working for transparency. The decision making should be based in measurable, achievable, results-focused and time-bound indicators, built in the light of Sustainable Development Goals, for the services of general interest.

Continuous collection and exploitation of the data for the estimation of indicators and the relevant evaluation could serve to the formulation of policy and strategy proposals, identifying the crucial factors of intervention and their consequent impact upon environment, society, economy and governance.

The first step is the determination of a set of appropriate and representative "smart" indicators for monitoring the performance of sustainable development and the achievement of social, economic, and territorial cohesion in the case the islands in question. The above-mentioned set of appropriate "smart" indicators is emerged from the elaboration of primary data and the evaluation and prioritization procedure which is carried out by expert groups. The "smart" indicators are designed in such a way that can imprint the development process of the small islands, by a bottom-up approach. Particularly, the continuous collection and exploitation of the necessary data for the estimation of the related indicators, allow the formulation of the appropriate policy and strategy proposals, identifying the crucial factors of intervention and their impacts.

The structure of the paper is as follows: The present section explains the background and necessity of the study. The second section describes the problems of small islands, focusing on the Greek case, while the third section describes the methodology for the development of a "smart" indicators' system as a decision – making tool for the achievement of cohesion and sustainable development. The final section illustrates the results and the conclusions drawn by the study.

2. Sustainable development and cohesion of small islands

Small islands are in disadvantage in comparison with other regions of mainland, as their residents face problems related to insularity and seasonality that govern the most crucial activities. Another major problem that small islands face, especially those which are in remote and outermost areas, is accessibility (Karabella et al, 2014). Due to their size and geographical

location, the accessibility from and to the islands is difficult and in many cases is very expensive compared to destinations from and to the mainland. The residents of small islands are dependent on a high degree of the mainland or the neighboring islands to cover their basic needs, given that the provision of basic goods is carried out by sea throughout the year. The dependence of small islands on fuel and other goods and products (raw materials, packaging materials etc.), from the mainland is very high and their disposal is rather expensive due to the increased transport cost and the lack of competition.

The small islands' local economy is fragile, mainly because of the high level of dependence on seasonal activities such as tourism, fishery and agriculture. That situation is also reflected in the unemployment rates of island regions, which even though are generally lower compared to those of the mainland regions, vary considerably in terms of hiring and firing, following the pattern of seasonal entrepreneurship, such as tourism (Tsampra et al. 2017). The primary source of income for islanders is tourism (Hampton and Jeyacheya 2013), which is characterized by seasonality. As a result, the residents of small islands are out of work for most of the year, after the summertime period (Margaras, 2016). Fisheries and the agricultural sector in general, which are the most important sectors after tourism, are also essential components for the sustainability of the small islands, as they can ensure food supplies and income for the local populations, although they face significant problems, besides seasonality, such as the overfishing, the depletion of fish stocks and the limited natural resources.

The people of small islands have restricted access to lifelong learning while there are skill and labor shortages in human capital needs, particularly in specialized areas (e.g. in the Information Technology area). Therefore, the economy of small islands is vulnerable in unforeseeable downturns related to political and economic developments and changes in the natural environment.

The islands' ecosystems, and particularly the small ones are also fragile. The protection of the environment from pollution and the conservation of flora and fauna are major challenges. In that regard, the solid waste management, the sewage treatment and the recycling operations play an important role for the residents' and visitors' quality of life, the sustainable development of islands and the preservation of the natural resources and environment. In many islands, there are problems related to the adequacy of water, due to the lack of physical reserves, the seasonal fluctuations in consumption (tourist season) and the intensive use of natural resources (Wong et al, 2005). The availability of sufficient infrastructure, the proper management of the existing natural water sources, combined with the use of alternative water provision (desalination, ships, etc.), can contribute to reducing the problem of water shortage to rather feasible cost for the users. Regarding the energy needs of small islands, due to their climatic advantages, there is a good chance for exploiting renewable energy sources (i.e. sun and wind) entailing to a significant reduction of their dependence on the mainland electricity grid and hydrocarbons, with benefits for both the environment and the local communities.

The coastal erosion and the change in coastal geomorphology are other major issues in small islands. The preservation of the coastline is vital, both for the protection of natural resources of coastal areas, and for the coastal economic activities, such as tourism (Neumann et al., 2015). The coastal zone management and the spatial planning are crucial parameters for the coastal economic activities (e.g. tourism), the overexploitation of natural resources and the sustainable development in coastal and island regions in total. (Monioudi et al. 2017).

This study focuses on the case of Greek small islands. Greece is a country with a plethora of islands geographically scattered in Aegean and Ionian Seas, while more than 10% of its population live there. The islanders face many difficulties, such as insularity, especially during winter months. Their dependence on maritime transport is very strong, as the residents and

tourists travel from, and to, Greek mainland by sea (maritime transport is generally cheaper compared to air transport, vehicles are transported only by sea, while there are no airports in most of the small islands). Furthermore, the islands' supplies (food, consumer products, materials, machinery) are carried by Ro – Ro ships through an extensive and rather complex maritime network. Moreover, the aftermath of the last multi-year financial crisis in Greece has contributed to the understaffing of public services, particularly in the field of health. Many small islands have also limited access to financial services. All these factors, mentioned in section 2, jeopardize the cohesion and the sustainable development of these areas.

3. Methodology

The purpose of this study focuses on the identification, planning and monitoring of a "smart" indicators' system in order to evaluate the level of the islands' sustainable, economic, social and environmental cohesion and development, focusing on the case of the Greek small islands.

The most important condition for the attainment of sustainable development in small islands is the achievement of a satisfactory level of services of general interest, (Haase and Maier (2021) such as telecommunications, postal services, transport, energy, health care, potable water, waste and sewage management for the islanders. As mentioned in the introduction, the achievement of a satisfactory level of services of general interest and the improvement of the islanders' quality of life are vital for the cohesion and sustainable development of small islands. The competition in sectors which provide services of general interest has implications related to three key elements:

- the business strategies developed by the companies which provide these services,
- the regulatory framework in which they operate, and
- the citizens' access to those services.

The regulatory framework, the business strategies, but also the users' perception, are directly linked to the operation and the efficiency of a set of measurable indicators for the evaluation of the services provided. The depiction of the involved parties' role and their priorities, according to varying degrees of involvement of each of the participants are essential for the proper functioning of such indicators.

The method of calculating "smart" indicators is based on the Multi-Criteria Analysis (MCA) theory (Macharis et al, 2009). Multi-criteria analysis, as a tool for operational research, makes it possible to evaluate alternative policy options based on the assessment of different qualitative or quantitative criteria that make up the choice. In order to develop the above-mentioned multicriteria model, it is necessary to define the criteria and sub-criteria that make up the main policy areas as well as their weight ratios and their assessment indicators. Thus, a multicriteria method may be applied, using linear programming techniques based on a corresponding methodology proposed to assess the islands' transport connectivity level in relation to their transport needs (Lekakou, Remoundos, 2018). This method determines the value-added function $u(g)$ which corresponds to the assessment of the consistency of the application of an alternative policy to specific criteria g , according to the principles of the so called UTA (UTilités Additives) method proposed by Jacquet-Lagrezze and Siskos (1982).

$$u(g) = \sum_{i=1}^n p_i * u_i(g_i) \tag{1}$$

under the following conditions:

$$u_i(g_{i*}) = 0, u_i(g_i^*) = 1 \text{ and } \sum_{i=1}^n p_i = 1 \text{ (i = 1, 2, \dots, n),}$$

Where: u_i ($i = 1, 2, \dots, n$) are non-decreasing real valued functions, named marginal value or utility functions, which are normalized between 0 and 1, and p_i is the weight of u_i and g_i^* and g_i^* are respectively the most and less preferred value (grade) on the criterion i . Both the marginal and the global value functions have the monotonicity property of the true criterion.

In case where each individual criterion g_i , is defined by a family of sub-criteria g_{ij} ($i = 1, 2, \dots, n$ and $j = 1, 2, \dots, m$) the additive value function for criterion g_i may then be given, accordingly, by the following formula:

$$u_i(g_i) = \sum_{j=1}^m p_{ij} * u_{ij}(g_{ij}) \quad (2)$$

Where: u_{ij} , ($i = 1, 2, \dots, n$ and $j = 1, 2, \dots, m$), are also utility functions, which are normalized between 0 and 1, and p_{ij} is the weight of u_{ij} and g_{ij}^* and g_{ij}^* are the most and less preferred value (grade) on the sub-criterion j of criterion i , respectively.

Each u_{ij} value, corresponding to sub-criterion g_{ij} may then be estimated by a performance indicator, e_{ij} , or by a group of indicators, e_{ijk} , ($k = 1, 2, \dots, r$), where those indicators are normalized between 0 and 1. In the latter case, the sub-criterion g_{ij} is estimated taking into account the weight, p_{ijk} of each performance indicator, e_{ijk} , following a similar approach, considering e_{ijk} , as the performance indicators of the sub-sub-criteria g_{ijk} of the sub-criterion g_{ij} . Thus,

$$u_{ij}(g_{ij}) = \sum_{k=1}^r p_{ijk} * e_{ijk}(g_{ijk}) \quad (3)$$

In the case of small islands, the criteria correspond to the main areas of cohesion and sustainable development of the small islands, the sub-criteria to the parameters compiling the areas and the performance indicators to the indicative indicators for the assessment of the above parameters.

In the context of the study, a specialized questionnaire was structured to determine the most important parameters of the main areas related to the economic, social and environmental cohesion and sustainability in small islands an online survey has been filled in by 100 experts from several professional sectors. The main areas of cohesion and sustainable development for the small islands, as well as the individual parameters and the indicative indicators were evaluated and enriched by the experts, through the completion of the structured questionnaire.

In respect of the profile of the responders to the online questionnaire, 80% were men and 20% women, 30% of them were between 56 – 65 years old, while the large majority were higher education graduates (Table 1).

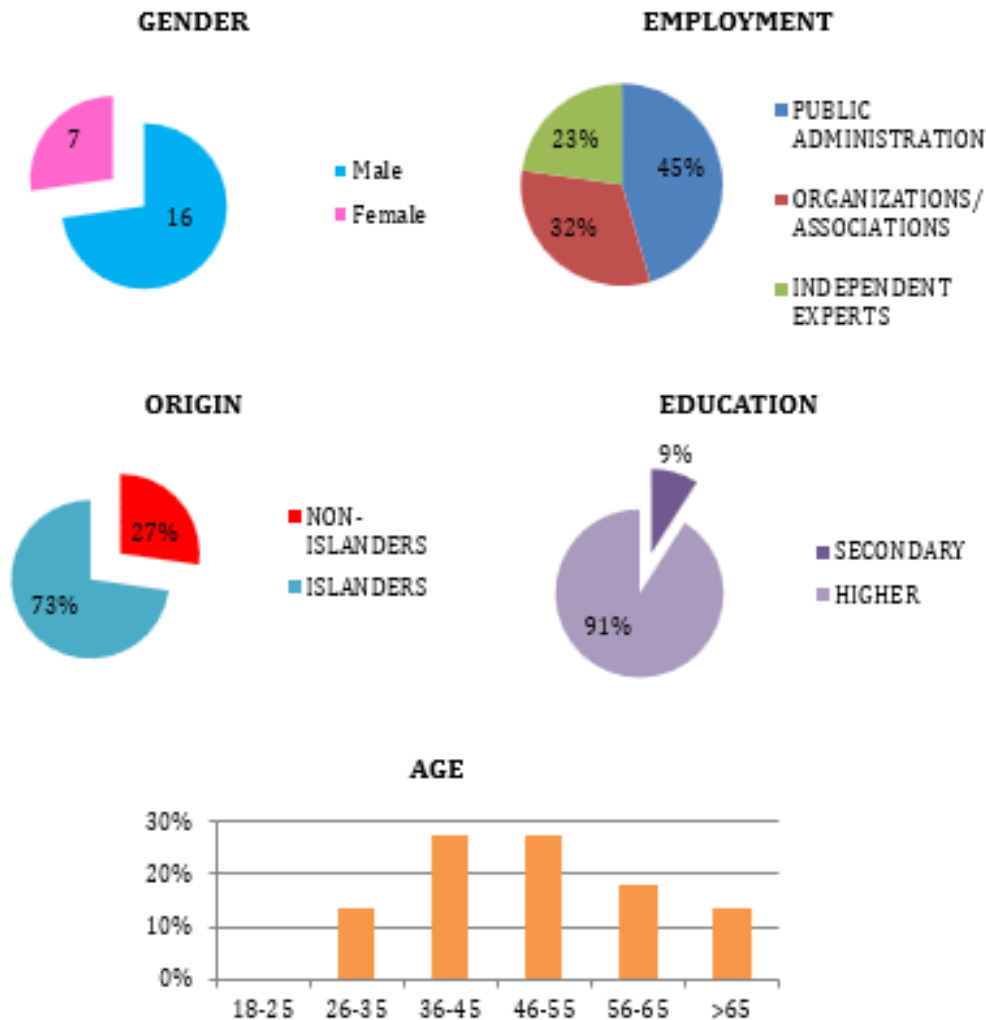
Table 1: Profile of the responders

Gender	Male: 80%
	Female: 20%
Age	18 – 25: 1%
	26 – 35: 7%
	36 – 45: 23%
	46 – 55: 28%
	56 – 65: 29%
	>65: 12%
Educational level	Primary education: 1%
	Secondary education: 17%
	Higher education: 82%

The findings raised by the analysis of these questionnaires have been reprocessed during a public consultation, where 23 experts took part.

The profile of the experts who participated in the public consultation is presented in Figure 1.

Figure 1: Profile of the consultaion participants



The participants, through the public consultation, were requested to evaluate the importance (weight) of the eight areas above which determine the cohesion and the sustainable development of the small islands. For that purpose, the research team designed specific questionnaires (pair wise comparison table) for the prioritization of the eight areas above, according to AHP. These questionnaires were distributed and completed by the experts, during the public consultation. The weights of the areas correspond to the significance levels assessed in the public consultation procedure using the Analytical Hierarchical Method (AHP), while the respective weights of their parameters and performance indicators were assessed using the Approving Voting (AV) method. AHP is a structured technique for organizing and analyzing complex decisions, based on mathematics and psychology, and has been extensively studied and refined since then. It has application in group decision making and is used around the world in a wide variety of decision situations (Saaty, 2008).

AV is a method of voting which may apply in cases where voters can vote for (“approve of”) as many options (e.g. candidates, policy alternatives) as they wish in a selection (e.g. elections, policy making), providing a rather sincere and strategy proof system for prioritization of given options (Brams, Fishburn, 1978). One of the objectives of the consultation was to reach a high level of consensus using the Delphi method, as a well-accepted tool for decision making. The Delphi technique was selected due to its ability to obtain expert input from individuals who were widely dispersed geographically. This technique has been used in a number of cases for long-term planning like, transportation, leisure activities and education, international affairs (McCampbell & Stewart, 1992). According to Delbecq et al (1975), Delphi method is a method for the systematic solicitation and collection of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses.

The normalized values of the indicators defined during the process, correspond to the estimators of the performance of the model indicators in order to be able to calculate the value-added function, i.e. the "smart" indicator of each area and parameter in terms of policy consistency for the cohesion and sustainable development of the islands. The indicators proposed, while unique, do not represent the absolute values of the performance of a particular area or parameter, but reflect its relative value compared to the corresponding alternative options. Consequently, the values obtained using the proposed indicators may be varied according to the sample of available alternatives examined each time. For example, the value of a "smart" indicator for a particular island for the year 2019 compared to the annual values of the last decade may differ from the corresponding value of the same island for the same year as compared to corresponding values of the last 20 years. Similarly, the attained values of a "smart" indicator for a particular island for a reference year may vary according to the islands and / or reference years considered as the sample of available alternatives.

The result of this process is a set of representative indicators, related to the social, economic and environmental cohesion of the Greek small islands, which arise from the elaboration of the primary data, as well as from an evaluation and ranking process which is carried out by representative experts of the involved parties.

In a first phase, these indicators are preliminary determined and assessed, on the basis of specific criteria/parameters using existing data, available from reliable sources (Council of Europe, 2005). In a second phase, the indicators may be further specified, standardized and tried as appropriate based on the acquired experience.

The synthesis of the appropriate indicators for small islands is based on the methodological guides and studies related to the social, economic and territorial cohesion, the Europe 2020 objectives, as well as the OECD (2009) and the global goals and targets for sustainable development, (SDGs) set by the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015 (United Nations, 2015). Taking into account the literature review and the research team’s experience, a comprehensive preliminary reference of the main areas and their contributing parameters, as well as a number of indicative indicators estimating those parameters, with regard to the cohesion and the sustainable development of small islands, is illustrated in Table 2.

Table 2: Criteria for Islands' Cohesion and Sustainable Development

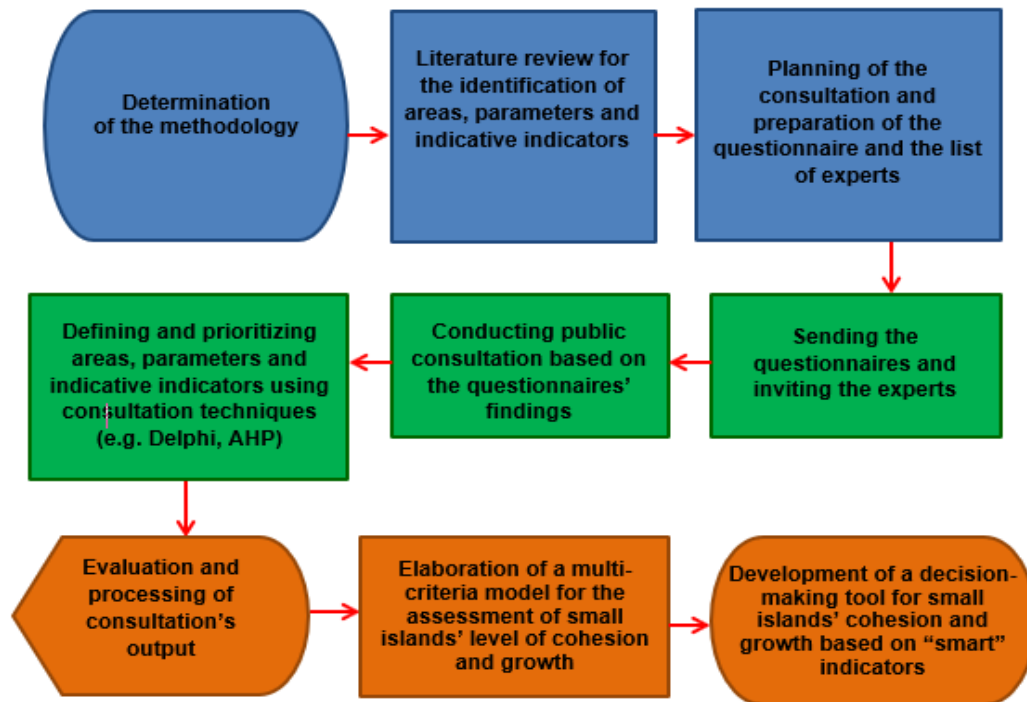
	AREAS		PARAMETERS	INDICATIVE INDICATORS
1	Employment	A	Non-seasonal work	<i>Long-term unemployment, unemployment rate, youth unemployment rate - NEETS⁴</i>
		B	Jobs with insurance cover	<i>Employees outside the welfare system (medical coverage, stamps)</i>
		C	Residence in the island for work throughout the year	<i>Permanent jobs</i>
		D	Income level	<i>Average income, number of residents living in poverty</i>
		E	Social mobility (status)	<i>Rate of per capita income change</i>
2	Health services	A	Medical and nursing staff capacity	<i>Number and specialization of medical and nursing staff</i>
		B	Capability of the infrastructure	<i>Adequacy of medical equipment, adequacy of health centres, adequacy of the number of hospital beds, number of pharmacies</i>
		C	Level of insurance cover	<i>Cost for public health services</i>
		D	Preventive health actions	<i>Medical examinations, public awareness campaigns</i>
		E	CSR programmes or NGOs activities	<i>Medical examinations, information campaigns</i>
3	Education and Training	A	Education structures (preschools, schools)	<i>Preschools, schools, number of persons who do not complete their compulsory education</i>
		B	Existence of Vocational Training Centers and Institutes of Lifelong Learning	<i>Continuing education and training, opportunities for people over 50s,</i>
		C	Competence of teaching staff	<i>Number and specialization of teaching staff</i>
		D	Educational and training activities (non-formal education, like living labs, entrepreneurship competitions and summer schools)	<i>Number of actions carried out</i>
4	Information – Communication	A	Existence of modern infrastructure in the IT and communication areas	<i>Public and household equipment (TV and computers)</i>
		B	Level of access to electronic information / communication	<i>Existence of public wi-fi spot, Households with Internet access</i>
		C	Level of access to printed information	<i>Number of newspapers and magazines, frequency of printed press procurement</i>
		D	Level of postal services	<i>Staffed post office, time for sending, and receiving documents and parcels</i>
5	Transport connection - Accessibility	A	Cost of coastal transport	<i>Ticket cost, transfer cost to port, onboard spending</i>
		B	Time of coastal transport	<i>Journey time, punctuality, time for transfer to port</i>
		C	Coastal connectivity	<i>Number of transits, number and frequency of lines, number of interconnected destinations</i>
		D	Quality of coastal service	<i>Accommodation on board, services on board, information services, booking and issuing tickets</i>
		E	Social cost of coastal transport	<i>environmental performance of vessels, corporate social responsibility of the coastal companies</i>
		F	Air services	<i>YES/NO</i>

⁴ NEET: a person who is "Not in Education, Employment, or Training"

AREAS		PARAMETERS	INDICATIVE INDICATORS
6 Environment	A	Urban solid waste management	<i>Compliance with the legislative framework, existence of landfills, cost management per tonne, frequency of waste collection, awareness activities</i>
	B	Recycling	<i>Weight of recyclable material, cost management per tonne, frequency of collection, awareness activities</i>
	C	Wastewater management	<i>Existence of central sewage system per number of users, existence of biological treatment plants per number of users, operating costs of sewer systems per user, awareness activities</i>
	D	Water resources management	<i>Consumption cost per cubic meter of water, rates of coverage of needs from springs – boreholes - reservoirs for rainwater / desalination/ ships, overall consumption per inhabitant/visitor, awareness activities</i>
	E	Conservation of natural resources on land and biodiversity	<i>Rate of change of forest land - residential areas - port areas - species of flora and fauna, awareness activities</i>
	F	Conservation of natural water resources and biodiversity	<i>Infection/pollution rate of aquatic natural reserves – coastal marine waters, existence of anti-pollution means for coastal zones, awareness activities</i>
	G	Sustainable transports	<i>Weighted average cost per km per passenger, number of disembarked/embarked cars per inhabitant, carrying capacity of public transport per inhabitant/visitor, awareness activities</i>
	H	Energy management	<i>Consumption cost electricity per KWH, Energy needs coverage by renewable energy sources, overall consumption per inhabitant/visitor, awareness activities</i>
7 Quality of Life	A	Well-being	<i>Life expectancy, number of heavy health incidents, rates of persons with disabilities</i>
	B	Cultural activity	<i>Frequency of cultural events, cultural cooperation with other islands or cities, existence of museums, number of cultural centers, love of the arts</i>
	C	Sporting activities	<i>Number of sports associations, number of sports facilities, number of sporting – naturalist events</i>
	D	Amusement - entertainment	<i>Number of amusement activities, number of entertainment/amusement centers</i>
	E	Transaction procedure (public and private sectors)	<i>Number of financial institutions, number of automated teller machines, existence of Citizens' Service Centers (CSC), number of notaries</i>
	F	Sense of security	<i>Number of police officers, days of Coast Guard patrols presence</i>
8 Entrepreneurship –economic activity	A	Business performance	<i>Turnover, number of persons employed, number of enterprises per size of turnover, number of employees, number of established/closed enterprises, net profits</i>
	B	Enterprises access to financial resources	<i>Amount of loans by financial institutes, financing from national/EU funds, financing by private funds</i>
	C	Market conditions	<i>Imports/exports rate - Inhabitants/visitors rate</i>
	D	Human capital specialization	<i>Number of higher education graduates, number of secondary level graduates</i>
	E	Dispersion of economic activity	<i>Turnover of main activity, number of enterprises related to the main activity, number of employees in the main activity</i>

A flow chart reflecting the methodological process of the research is shown in Figure 2.

Figure 2: Methodological approach of the research

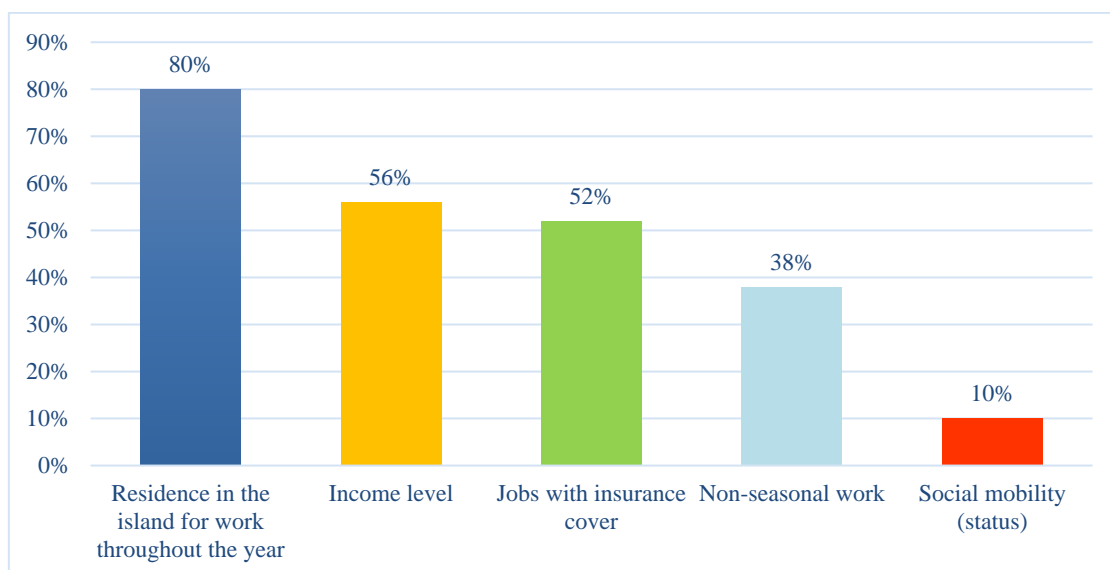


4. Research results

4.1. Survey results

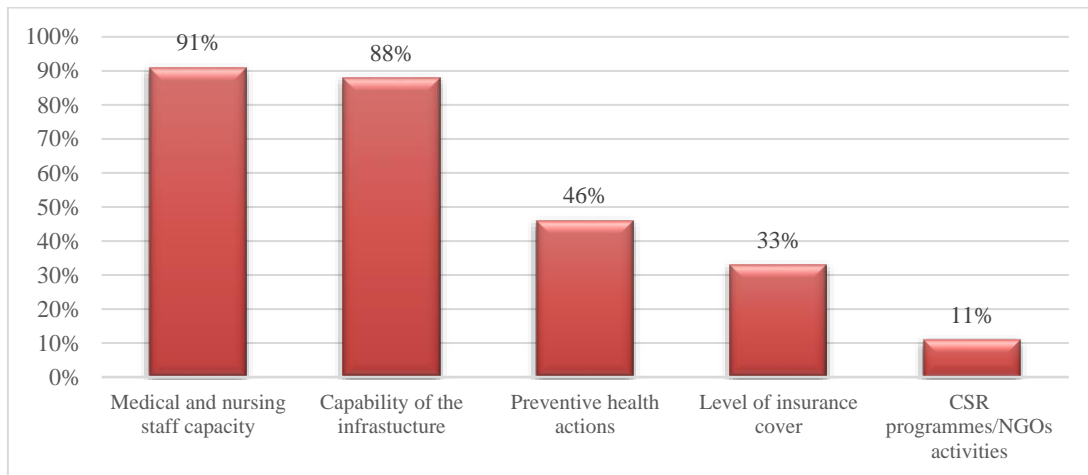
The area “**Employment**” includes 5 parameters related to job security in small islands. According to the participants’ choices the parameter “Residence in the island for work throughout the year” is the most important as it attains the 80% of the answers. The parameters “Income level” and “Jobs with insurance cover” get 56% and 52% respectively (Figure 3).

Figure 3: Evaluation of the parameters of the area “Employment”



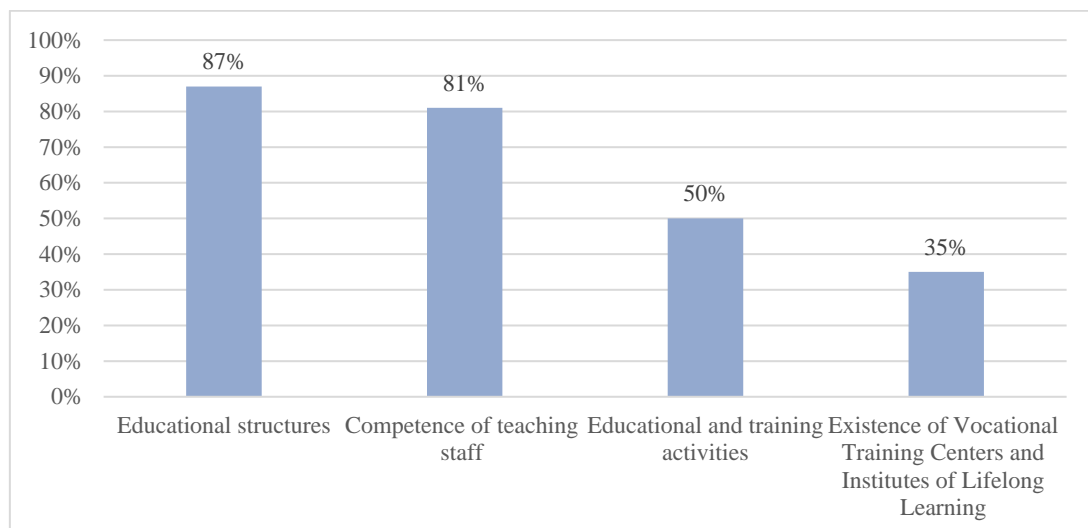
The second area is related to “**Health**” and particularly to issues concerning the islanders’ access to qualitative services. The criteria “Sufficient staff” (91%) and “Sufficient infrastructure” are the most important for the participants. Less than half of the responders consider the other three criteria as critical for the quality of health services provided. The local health centers (facilities), the medical and nursing staff and their specialization are critical parameters at a local level which determine the qualitative level of the healthcare services provided. The lack of high-quality services makes people feel more insecure (Figure 4).

Figure 4: Evaluation of the parameters of the area “Health services”



The “Educational structures” (87%) and the “Competence of teaching staff” (81%) are the most critical parameters for the experts. An interesting feature of the results is that half of the responders believe that the implementation of non-formal education, like living labs, entrepreneurship competitions and summer schools, is an important parameter, while the 1/3 find that Vocational Training Centers and Institutes of Lifelong Learning are very important as well. (Figure 5).

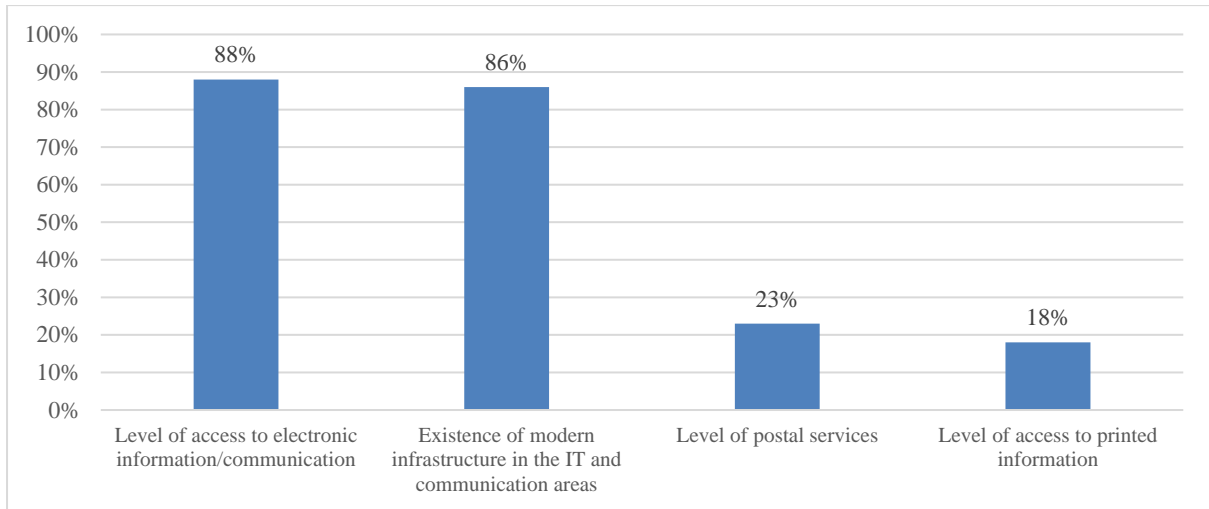
Figure 5: Evaluation of the parameters of the area “Education and training”



The area “**Information/communication**” is related to the existence of infrastructure and the inhabitants’ accessibility to IT/communication systems. Regarding the four relevant parameters, the participants evaluate the “Level of access to electronic sharing of information/

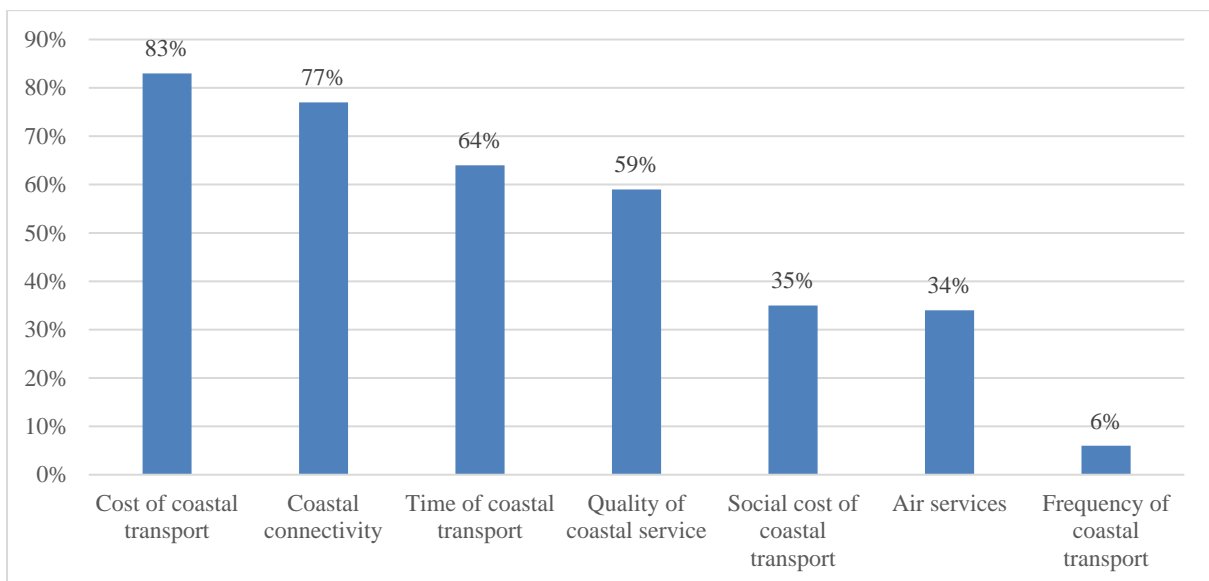
communication” as the most important parameter (88%), followed by the “Existence of modern infrastructure in the IT and communication area” (86%). The parameters “Level of postal services” and “Level of access to printed information”, concentrate less than 25% of the responses (23% and 18% respectively – Figure 6).

Figure 6: Evaluation of the parameters of the area “Information - Communication”



The fifth area is about **transport connection** and accessibility and includes six parameters related to the smooth movement of passengers and the transport of goods to and from small islands. According to the participants’ evaluations, the most crucial parameter is the “Cost of coastal transport”, which affects the small islands residents’ mobility (83%). “Coastal connectivity” (77%) is considered to be equally important, since this considered to be directly related to accessibility. “Time of coastal transport” and “Quality of Service” are also important parameters for the responders (65% and 59% - Figure 7).

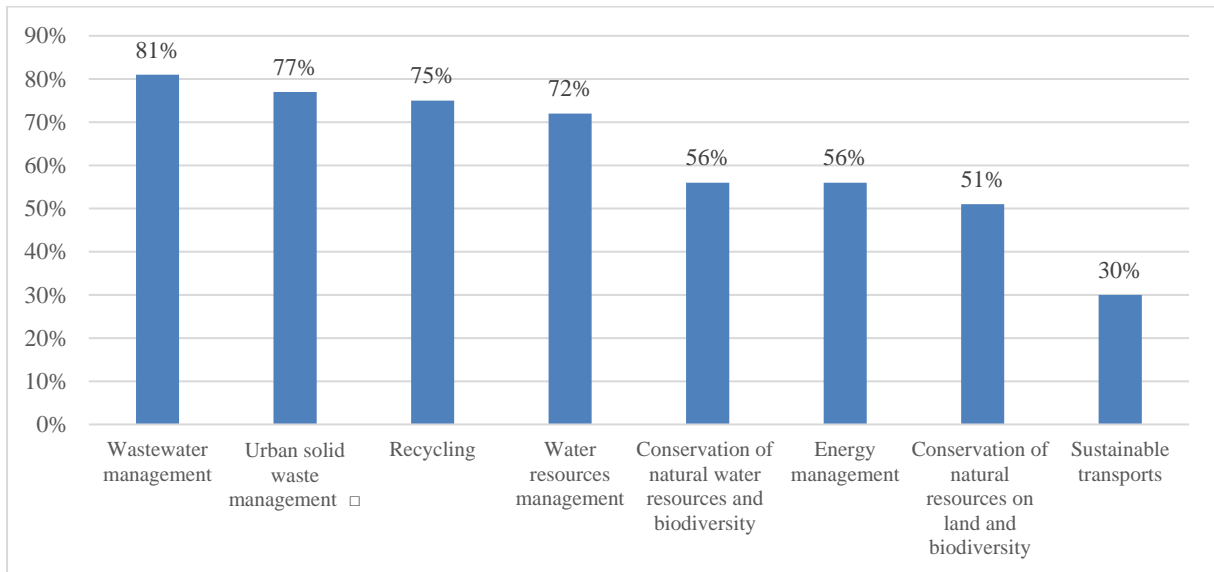
Figure 7: Evaluation of the parameters of the area “Transport connection - Accessibility”



In the area “**Environment**”, 81% of the respondents believe that the most significant parameter for its’ protection is the “Wastewater management”. The parameters “Urban solid waste management”, “Recycling” and “Water resources management” are equally important (77%,

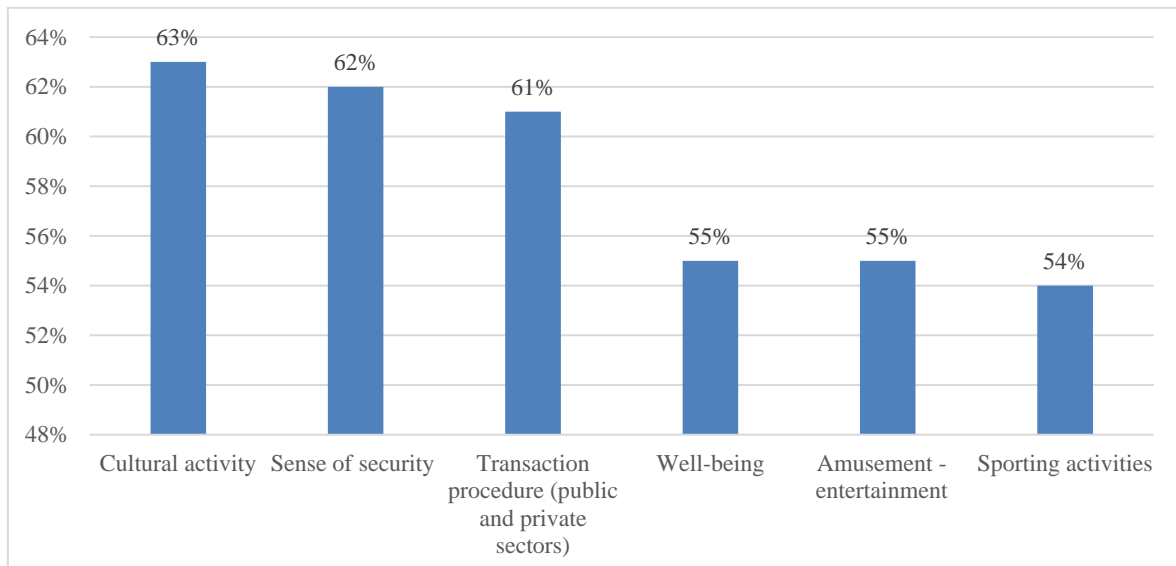
75% and 72% respectively). It is noteworthy that only 30% of the participants consider that “sustainable transport” is a significant parameter (Figure 8).

Figure 8: Evaluation of the parameters of the area “Environment”



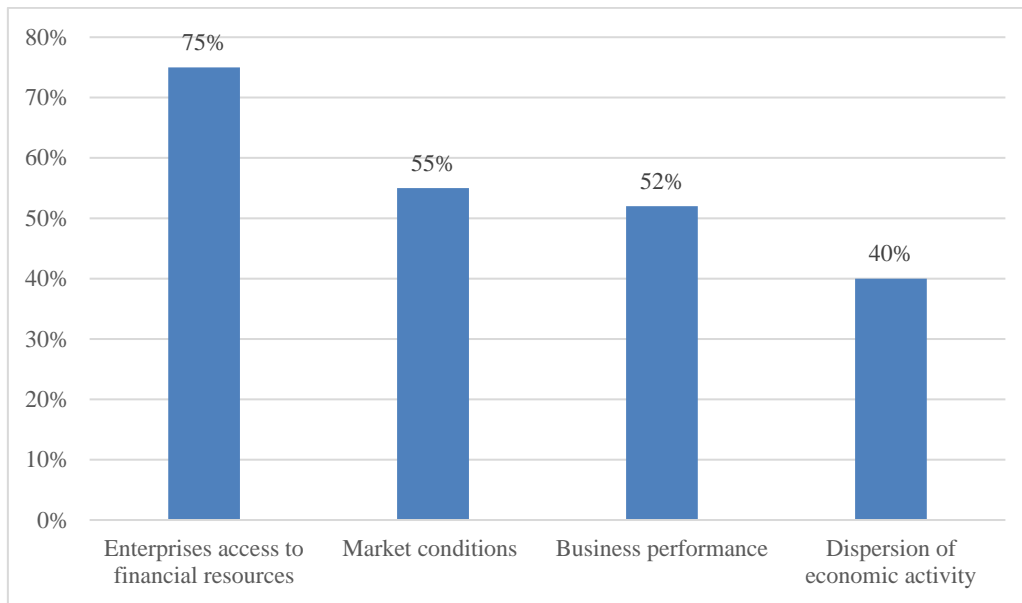
The area “**Quality of life**” refers to six parameters related to sporting, cultural and entertainment activities, and handling of transactions. According to the participants the parameters, “Cultural activity” “Sense of security”, and “Transaction settlement procedure (public and private sectors)” are the most critical to ensure a high quality of life in small islands. 55% of the responders think that the “Well-being” and the alternative ways of amusement and entertainment and the participation in sporting activities are rather important (Figure 9).

Figure 9: Evaluation of the parameters of the area “Quality of life”



The last evaluation area is related to **entrepreneurship and economic activity** in small islands. The responders think that the “Enterprises access to financial resources” is the most important parameter for the support of entrepreneurship (75%). The other significant parameters are “Market conditions” and “Business performance” (Figure 10).

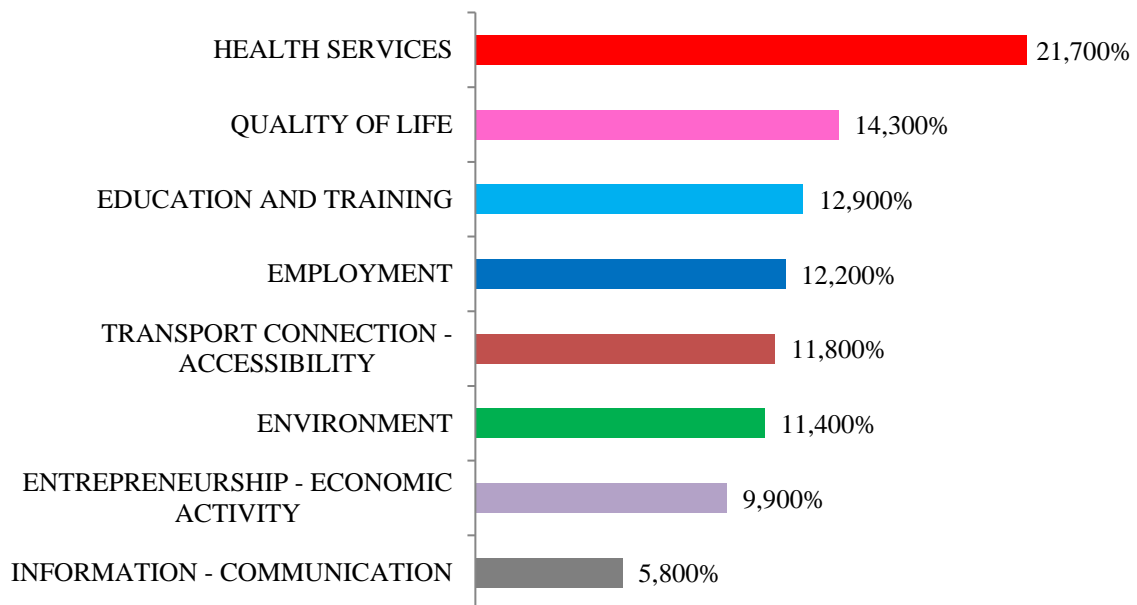
Figure 10: Evaluation of the parameters of the area “entrepreneurship and economic activity”



4.2. Public consultation results

As seen in Figure 11, the participants in the public consultation evaluated the area “Health care” as the most important condition for the achievement of cohesion in small islands.

Figure 11: Importance (weight) of cohesion and sustainable development areas in small islands



The main results of the public consultation regarding the most significant indicators (in terms of participants approval) per cohesion and sustainable development area are summarized in Figure 12.

Figure 12: The most significant indicators for cohesion and sustainability as approved by the experts



5. Conclusions

The determination and the systematic collection of data, as well as the measurement and monitoring of the suggested "smart" indicators, can be a useful decision-making tool for the development of policies related the cohesion and sustainable development of small islands.

These indicators could also be used for the programming and evaluation of current policies concerning the development and economic, social and territorial cohesion of small islands.

It is important to stress that the continuous evaluation and review of the implementation and effectiveness of these suggested indicators' main components is necessary, so that the methodology is consistent and in line with the development of islands. Consequently, the continuous suitability evaluation of the selected areas, parameters and corresponding performance indicators, is a fundamental prerequisite for the reliability and consistency of the suggested methodology.

Participatory techniques have emerged as a powerful tool for the collection and assessment of the users' perception with regard to alternative policy options towards sustainable development and services of general interest, striving to build community resilience, while strengthening public awareness and capacity. The induced methodology is based on a multi-criteria analysis technique for policy-making mainly fed by documentation obtained through a participatory process where experts and stakeholders formulate the main criteria, their weights and indicative performance indicators, creating a path for the implementation of sustainable development measures.

As a result of this process a method for the estimation of "smart" indicators, through a corresponding mathematical formula, has been developed, taking into account the main areas, their constituting parameters, their weights and their most significant performance indicators, with regard to the cohesion and sustainable development of small islands.

National Statistic Authorities are key DATA providers but definitely there is a need to raise awareness and motivate local government and other local actors, to systematically collect quantitative and mostly qualitative data that National Authorities do not collect .

The voluntary involvement of islanders can be decisive in collecting data for SGI hence in the production of new knowledge. Given the small size of the islands, 'Citizenship', can be an alternative approach in collecting reliable data and creating a paradigm of Citizens' Science. New technologies enable citizens to be actively involved and facilitate the mass participation of citizens in research programs, while at the same time there are tools for visualizing and analyzing measurements that give new roles to citizens beyond mere data collection.

Therefore, monitoring Services of General Impact through a systematic participatory process may build a concrete and acceptable policy-making initiative which might be integrated into the public policies for blue economy and growth, while strengthening people's participation in insular and ocean governance.

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The Future of Adriatic-Ionian Region. What can EUSAIR do in Addressing Upcoming Regional Challenges?

Erblin Berisha¹

Abstract

EU macro-regions are an institutional experiment aiming at addressing territorial development from a multi-governance perspective. However, since their conceptualization, European Union (EU) macro-regions have been relegated to the role of a high-level and intergovernmental institutional platform. Being as such, evidence shows the three “NO” upon which macro-regions are conceived (i.e. no new funds, no new legislation, no new institutions), which have been hampering their role and capability to promote effective territorial cohesion. Differently from the rest of the EU macro-regions, the EUSAIR has also played a main role in the harmonisation of national-based relations among countries participating to the strategy. Indeed, for the current programming period 2021-2027, the EUSAIR is the only macro strategy where participants are EU member states (Italy, Greece, Slovenia and Croatia), candidates (Albania, Serbia, Montenegro and North Macedonia), potential candidates (Bosnia and Herzegovina) and third party-states (San Marino). This heterogeneity makes the role of EUSAIR even more challenging and at the same time strategic for the future development of the entire Adriatic-Ionian region. Due to its geographic features and geopolitical attention, indeed, the Adriatic-Ionian region is expected to become crucial in the next decades for the EU to reaffirm its role within the region and beyond. Recent developments (Ukrainian war above all) are changing the territorial development perspective, as well as they are increasing uncertainty. This paper reflects upon a number of pressing questions that the Adriatic-Ionian region will face by stressing the role that the EUSAIR should have in addressing them.

Keywords: EU Macro-regions, Adriatic-Ionian region, Cooperation, Territorial Challenges

Introduction

The Adriatic-Ionian is a geographic region² that is becoming more and more strategic for global powers (Berisha et al., 2021). As pointed out by Gaifami et al. (2020) the region has represented a “hinge” between the Mediterranean Sea and the Central and Eastern part of the European continent. This particular geographical position is attracting international investors like Russia, Turkey and last but not least China. Although very heterogeneous and historically instable, the Adriatic-Ionian region has been the place in the Old Continent where some geopolitical battles

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² For the paper purposes, the Adriatic-Ionian Region concedes with the countries covered by the EUSAIR in the new programming period of 2021-2027 which includes: four EU member states (Italy, Greece, Slovenia and Croatia), four candidate (Albania, Serbia, Montenegro and North Macedonia), 2 potential candidate (Bosnia and Herzegovina) and third party-states (San Marino)

happened (see the cases of the Balkans Wars in the nineties, NATO intervention in 1999 etc.). However, since the beginning of 2000s, the European Union Integration started and with it, a number of cooperation programmes have been activated. Among them, the establishing of the European Union Strategy of the Adriatic-Ionian Region (EUSAIR), approved by the European Commission in 2014, was the final recognition of the strategic importance of the region. The role the EUSAIR is playing – among the others – is that of increasing cooperation capacities and collaboration initiatives among a variety of institutions across the region.

That being said, the paper focuses on highlighting the pros and cons of being objective of international powers as well as investigating the role of EUSAIR in addressing regional challenges. Based on a brief literature review on EU macro-regions, (Solly and Berisha, 2021; Gänzle, 2018; Gänzle et al. 2018; Stead, 2014; Cugusi, B., Stocchiero, 2013; Mirwaldt et al., 2011), the paper discusses also the essential limits of EU macro-regions by pointing out a number of questions. Indeed, although it does not exist a common definition of macro-regions, they are considered as an institutional experiment aiming at addressing territorial development from a multi-governance perspective. This essential nature of “platform of cooperation” and their three “NO” (i.e. no new funds, no new legislation, no new institutions) are at the centre of the debate. The discussion on the nature of the EU macro-regions, and particularly on the EUSAIR, is functional to understand whether this kind of initiatives can effectively address regional challenges.

To do that, the paper is composed of five sections. After this brief introduction, section 2 explores the centrality of the Adriatic-Ionian region as an identity in construction by highlighting its cooperation limits and impediments. Section 3 focuses on understanding international relations, exploring asymmetric power interests and highlighting regional challenges. Then, section 4 discusses the role of the macro-regional strategies by looking at their historic path and future perspectives while section 5 ends up with the conclusion and final considerations.

Adriatic-Ionian: a regional (identity) in construction

The Adriatic and Ionian region is heterogeneous in geographical (economic and social) terms, characterized by a variety of coastal, insular, rural and mountainous areas, as well as by large urban agglomerations and suburban territories (Gaifami et al., 2020). Historically, the region has represented a “hinge” between the Mediterranean Sea and the Central and Eastern part of the European continent as well as it has been strategic also in terms of trade exchange, being in the middle between Asia and Europe and between the southern Mediterranean seaway connecting the Suez Channel and the Strait of Gibraltar and the centre of the European Union market (Gaifami et al., 2020). Despite that, from a geopolitical and economic perspective, the Adriatic-Ionian region is not perceived as strategic as it should. Indeed, although historical relations exists within the region, after the World War II, exchanges were totally interrupted until the beginning of the '90s. Only in the last three decades, relations (re)started. Accordingly, numerous initiatives have been implemented under the European Union umbrella and thanks to that, a number of cooperation programmes and investments have been activated. Apart from bilateral agreements, an important step forward the internal integration of the region started at the beginning of 2000, when Italy hosted the first Summit on Development and Security on the Adriatic and Ionian Seas, which was attended by almost all the EUSAIR countries, except Montenegro and Serbia, which were included later on (Solly and Berisha, 2021). The main objective of this Summit, known as the Ancona Declaration, was to guarantee the political and economic stabilisation of the Adriatic and Ionian Region after years of instability. Another aim was to enhance regional cooperation since “it is an effective incentive that is instrumental to

fostering political and economic stability, thereby making it the most solid basis for progress in the European integration process” (Ancona Declaration, 2000, p. 1). In concomitance, the Adriatic and Ionian Initiative (AII) was launched as an “initiative for dialogue and cooperation in the Adriatic and Ionian Region and to this end to establish the Adriatic and Ionian Council (AIC)” (Ancona Declaration 2000, p. 3). Since that, every year, the AIC organises an annual meeting where progress in the level of cooperation is usually assessed and new initiatives are presented. To formalise these cooperation activities, in 2008, the Permanent Secretariat of the Adriatic Ionian was established in Ancona. The main objective of the Permanent Secretariat is to make the AIC more project-oriented by coordinating several transnational cooperation activities. The turning point for the consolidation of the EU macro-region strategy was the 2010 Declaration of the Adriatic Ionian Council on the support to the EU Strategy for the Adriatic Ionian Region where the AIC affirmed its readiness to foster an attractive, secure and prosperous region, as well as to place the region within a European regional policy perspective (Solly and Berisha, 2021). Moreover, the importance of collaborating with the EU Commission for the preparation and implementation of the Strategy, involving national, regional and local administrations, was finally recognised. With the 2012 launch of the EUSAIR Strategy, the European Council provided the mandate to present the Strategy before the end of 2014.

Although these institutional attempts, a number of obstacles still exists. According to the recent publication of the European Commission (2021) “Analysis of Cross-border obstacles between EU Member States and Enlargement Countries”, cooperation in the Adriatic-Ionian Region and in particular within the Western Balkans, is hampered by a number of multi-dimensional impediments. These impediments are various: (i) political obstacles, as legal and administrative barriers, (ii) geographic-natural obstacles, like transport infrastructure and natural barriers; (iii) economic and social obstacles, like economic discontinuity, historical legacy and cultural tradition. Based on the study conducted, almost 145 obstacles exist between EU member states and Western Balkans countries, while 86 between Western Balkans countries themselves. The effects of these impediments are numerous and affect the quality of territorial development and cross border cooperation and development (Pinnavaia and Berisha, 2021).

International relations, asymmetric power interests and regional challenges

As asserted in academic debate (Cotella and Berisha, 2019, 2021, Đurašković et al., 2021, Jaćimović et al., 2021), since the end of the totalitarian regimes in the ‘90s, the Western Balkans part of the Adriatic-Ionian Region, in particular, has become a field for international geopolitical disputes where exogenous interests were assorted with the endogenous ones. Except for Italy and Greece, the rest of the Adriatic-Ionian Region countries undertook a number of economic, political and social reforms with the final aim of moving from the “central controlled economy” to a market oriented one (Berisha et al., 2021; Berisha and Cotella, 2021). The need to change their economic and political system has allowed external actors like the USA, the European Union and its Member states, Russia, Turkey and last but not least China, to invest - in various forms, with often divergent objectives and throughout different mechanisms - in the region. Since then, numerous (external) initiatives have been taking place within various sectors and fields like energy, infrastructure, economic reconversion, institutional arrangement, security cooperation, health and pandemic emergency etc. However, despite substantial foreign investments attracted (Estrin and Uvalic, 2016), the transition process has been hampered by external influences. As it has been largely recognized in the literature (Brljavac, 2012), the asymmetric interests of external actors have somehow undermined the transition process and slowed down the integration of the Western Balkans countries within the European Union. The multipolar dispute in the region shows different geopolitical connotations. In this analysis, it is important to separate our (geopolitical)

considerations between EU Member States (Italy, Greece, Slovenia and Croatia) and the rest of Western Balkans countries participating to the EUSAIR (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia). Regarding the former, the impact of the external actors has been relatively slow since being an EU Member state have prevented them from external influences except in the case of Greece and somehow also in Italy, for what concerns the implementation of the Chinese Belt and Road Initiative (Cotella and Berisha, 2021). In this regard, Greece officially joined China's 'Cooperation between China and Central and Eastern European Countries', becoming the 17th European Nation to join the initiative, making it 17+1 while Italy has signed a memorandum agreement with China in 2019. That being said, investments of other international powers in these countries have been relatively insignificant.

When it comes to the Western Balkans countries, instead, the asymmetric interests have been various according to the actors involved. Russian's interests, for example, became more evident during the so-called NATO bombing in Belgrade 1999 when Russia condemned it, or when the country used its status as a permanent UN Security Council member in Serbia's favour in two different situations: in 1994 and 2015, Moscow vetoed two UN Security Council resolutions condemning violence by Bosnian Serbs, the latter being the resolution which qualified the 1995 Srebrenica massacre as genocide. The Russian soft power was manifested also during the pandemic as is generally called 'vaccine diplomacy' trying to revitalize the tarnished "Moscow Consensus" (Lewis, 2016) in the region and particularly in Serbia and in the Republic of Srpska. The Russian pandemic diplomacy however has involved also countries like Italy where the first pandemic wave hit particularly hard.

In the case of Turkey, its soft power is well documented in the literature (Đurašković et al., 2021). In several cases, indeed, Turkey makes use of NGOs, charities organisations, etc., to become a reference point for selected Western Balkans countries. In this respect, several Turkish NGOs have played a very important role in supporting all the Balkan ethnic groups with aid for education and restoration of important cultural monuments (Brljavac, 2012). Being member of NATO, Turkey has also applied deterrent power in order to enlarge the NATO influence and this happened for the inclusion of some Western Balkans countries. While the EU countries demonstrated vague and often inconsistent positions, Turkey used this "power gap" and showed that it has both economic and diplomatic capacity to become a regional leader.

While the interests of Russia and Turkey are deeply rooted in the history of the region, the influence of China is much more recent but not less effective. As Cotella and Berisha (2021) argued, the Chinese investment in the region is growing and the impact of their initiatives as well. Different from Russia and Turkey, China seems to not be interested in the region as such but sees the Adriatic-Ionian region as the "door of Europe" where goods and resources have to go through. Indeed, by looking at the investments put in place until now, it seems that all the efforts are dedicated to creating a functional infrastructure system to facilitate communications between East and West with great benefit for China and less for countries involved as learned by Montenegro with the so-called "debt trap" (Shopov, 2022).

The Adriatic-Ionian Region is a relatively new "territorial entity", very heterogeneous and often fragmented in terms of political power. As far as the future of the region is concerned, there are at least three challenges that the region should soon or later deal with.

The first concerns the role the region should have in the new multi-polar geopolitical schema by avoiding shifting "from a space of political confrontation to a space of spatial dispute". This is particularly linked with the current situation of the Ukrainian war, but rooted in the regional historical path. The asymmetric interests that have somehow influenced the process of transition are still there and need to be solved as soon as possible. As recently reminded by the EU High Representative Josep Borrell, as candidates and potential candidates, Western

Balkans countries are asked to align their position to the EU – without any additional ambiguity. To accelerate the process of EU Integration, on July, 19th 2022 the European Commission has announced the opening of access negotiation for Albania and North Macedonia. After almost two decades since their path towards the EU started, the screen of the EU acquis will start.

The second challenge regards the role that the Adriatic-Ionian Region should play into the new semi-globalised world. In this regard, the region should avoid shifting from a “space of transition to a space of transit” (Cotella and Berisha, 2019). This is particularly linked with the geographic position and territorial potentialities that the region has. In order to fully benefit from the implementation, on the one side, of the TEN-T and, on the other side, of BRI infrastructure, the region should be able to find the way of integrating their infrastructural and economic system within. However, since the implementation of the BRI seems to be slowed down, the region should autonomously take care of their infrastructure system to avoid becoming even more territorially fragmented.

Yet importantly and strongly connected with the former two challenges, the region should think on how to turn regional obstacles in opportunities. As the report of the European Commission (2021) pointed out, the region suffers from internal and external multi-dimensional obstacles. As the nature of obstacles are often localized, countries can overcome them by – in some cases – working bilaterally while in other cases, a multilateral framework is needed. In this regard, the use of EU funds and the implementation of EU programmes like EUSAIR and the number of cross border cooperation initiatives should support the region in overcoming existing and emerging obstacles and impediments.

What is an (EU) macro-regional strategy: historic path and future perspectives

According to the definition given by the European Commission (2017), the European Union (EU) macro-regional strategy is a policy framework which allows countries located in the same region to jointly tackle and find solutions to problems or to better use the potential they have in common (e.g. pollution, navigability, worldwide business competition, etc.). By doing so, they benefit from strengthened cooperation; with the aim of making their policies more efficient than if they had addressed the issues in isolation. Despite this institutional definition, however, there is no agreement on the exact definition of the EU macro-regional strategies as pointed out by Mirwaldt et al., (2011). For Soukos (2017), EU macro-regions are ‘hybrid forms of organization’, which include both a territorial and a functional dimension that need to be carefully managed and balanced. In fact, EU macro-regions are affected by pre-existing institutional arrangements and include countries that have different historical, political, cultural, and normative backgrounds (Solly and Berisha, 2021). As Gänzle et al. (2018, p. 1) point out, “both the macro-regional strategies and the macro-regions themselves have been met with increasing interest across several disciplines, including geography, regional planning, political science and public administration, triggering questions and debates on issues such as their impacts on existing practices of territorial cooperation and their relation to previously established forms of regional cooperation”. Thus, Gänzle et al. (2018, p. 10) further suggest that scholars should reflect more extensively on “the impacts and outputs of macro-regional strategies”, focusing on their political relevance and effectiveness. As an instrument for managing transnational territories that deal with common challenges and spatial perspectives, macro-regions are the outcome of the rescaling process of functional regions beyond administrative subdivisions. Indeed, the European Parliament (2015) defines macro-regions as “a major emerging instrument of governance in the EU that involves a plurality of state and non-state actors around a series of functional problems in a given territory”. Overall, macro-

regions should be considered through the lenses of European territorial governance and seen as a first attempt to *territorialise* EU Cohesion Policy (European Parliament, 2015), as well as “soft policy spaces” (Stead, 2014) where formal and informal relational mechanisms may happen.

Currently, four EU macro-regions are formalised while many others are under consideration³ (European Parliament, 2015). The first EU macro-regional strategy launched was the EU Strategy for the Baltic Sea Region (EUSBSR) in 2009 involving various EU member states: Sweden, Denmark, Estonia, Finland, Germany, Latvia, Lithuania and Poland. The main objectives and policy areas of the EUSBSR aim to protect the sea, increase the prosperity and to enhance the connectivity of the region. The Strategy aims to strengthen cooperation between the countries bordering the Baltic Sea in order to meet the common challenges and to benefit from common opportunities facing the region (Solly and Berisha, 2021). The Strategy is also strengthening cooperation with EU neighbouring countries (Russia, Iceland, Norway and Belarus).

In 2011, the EU Strategy for the Danube Region (EUSDR) was endorsed by the European Council. The Strategy seeks to create synergies and coordination between existing policies and initiatives taking place across the Danube Region. This macro-regional strategy involves a high number of stakeholders geographically located in fourteen different countries, of which nine are EU Member States (Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Romania, Slovakia, Slovenia), three accession countries (Bosnia and Herzegovina, Montenegro, Serbia) and two neighbouring countries (Moldova, Ukraine).

Later on, in 2014, the EU Strategy for the Adriatic Ionian Region (EUSAIR) was endorsed by the European Council. The Strategy aims at creating synergies and fostering coordination among all territories in the Adriatic-Ionian Region. The Strategy involves eight countries: four Member States (Croatia, Greece, Italy and Slovenia) and four non-EU countries (Albania, Bosnia and Herzegovina, Montenegro, Serbia)⁴. In the last years two new members have joined the strategy: North Macedonia (2020) and the Republic of San Marino (2022).

Finally, in 2015 was launched the EU Strategy for the Alpine Region (EUSALP). The Strategy aims to improve cross-border cooperation in the Alpine countries as well as to identify common goals and implement them more effectively through transnational collaboration. This Strategy includes seven countries, of which five are EU Member States (Austria, France, Germany, Italy and Slovenia) and two non-EU countries (Liechtenstein and Switzerland).

Being considered as an “institutional experimentation” (Solly and Berisha, 2021) and a “political governance experiment” (Cagusi and Stocchiero, 2013), the EU macro-regions have been representing a new multilevel instrument to strengthen territorial cohesion inside the European Union as well as with bordering countries. According to the European Commission (2020), the platform provided by the macro-regional strategies for policy coordination across countries and among funds, sectors, governance levels and stakeholders has been key in achieving results which however seem to not be enough. Indeed, even though the macro-regions strategies have already delivered meaningful results, realising their full potential requires time and a bold change of mind-set among countries, ensuring they systematically consider the benefits of working together (European Commission, 2020). After more than 10

³ Six other strategies are under the process of institutionalization: the Carpathian Region, the North Sea, the Black Sea, the Atlantic Arc, and the Western and Eastern parts of the Mediterranean Sea (European Parliament, 2015).

⁴ North Macedonia has only recently been officially included in the EUSAIR, becoming the ninth country in the strategy. See: <https://www.adriatic-ionian.eu/2020/04/03/north-macedonia-has-officially-been-included-into-eusair/>

years of “experimentalist governance” as called by Ganzle and Mirtl (2018), it is the time to have a look to the potentials and limits of macro-regions. According to the authors indeed, it is still necessary to reflect on the meaning of what the macro-regions are and what responsibilities and tasks they should have. Even more important, they call for the establishment of a common understanding on the nature of the macro-regions that should be intended as “long-term endeavours aimed at incremental change and not a mere duplication of existing programmes and related project activities” (Ganzle and Mirtl, 2018: 28). In light of that, some questions raises.

Table 1: EU macro-regions (source: updated on the work of Solly and Berisha, 2021)

Macro-regions	Year	Geographical coverage	Main objectives and policy areas
Baltic Sea Region (EUSBSR)	2009	7 Member States (Sweden, Denmark, Estonia, Finland, Germany, Latvia, Lithuania and Poland)	save the sea, increase prosperity, connect the region
Danube Strategy (EUSDR)	2011	14 countries, of which 9 EU Member States (Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Romania, Slovakia, Slovenia), 3 accession countries (Bosnia and Herzegovina, Montenegro, Serbia) and 2 neighbouring countries (Moldova, Ukraine)	connect the region, protecting the environment, strengthening the region, building prosperity
Adriatic-Ionian Strategy (EUSAIR)	2014	10 countries, of which 4 Member States (Croatia, Greece, Italy, Slovenia), 5 non-EU Countries (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia), and Republic of San Marino	blue growth, connecting the region, environmental quality, sustainable tourism
Alpine Strategy (EUSALP)	2015	7 Countries, of which 5 EU Member States (Austria, France, Germany, Italy, Slovenia) and 2 non-EU States (Liechtenstein, Switzerland)	growth and innovation, mobility and connectivity, environment and energy, governance

First, to what extent the three “no” - no new funds, no new legislation, no new institutions – have been constructive or rather limiting factors for the development of a real multi-level governance system where the macro-regions could have a prominent role? In hard times as we are, the existence of a strong and independent macro-regional authority – with own funds and rules - would have been essential in addressing unpredictable challenges. As the macro-regions are conceived, unfortunately, there is no space for rapid reaction to internal and external stimuli while the success or failure of the macro-regions strategy is ultimately linked to their capacity to ensure that EU, national, regional, and other public and private funds are aligned with the priorities of the relevant strategy (European Commission, 2020). What it would have been if the macro-regions had been given the chance to directly manage EU funds?

Second, after a decade of incremental experimentations, the main role of macro-regions remains anchored to that of being a “platform of exchange” or a platform of “policy integration” (Stead, 2018). With the scope of increasing coordination, the new concept of macro-regions is “embedding”. The embedding activities started since 2018 and is expected to be even more emphasised in the current programming period of 2021-2027 (European Commission, 2020). Accordingly, the embedding approach should be seen in terms of integrating the macro-regional strategies priorities to exiting EU programmes as well as pushing countries to incorporate them within the national and regional operative programmes. In so doing, embedding is expected to increase programmes’ impacts through better cooperation and coordination. However, in this perspective, it is hard to see the added value of

macro-regions concerning effective territorial development, since there isn't a clear spatial/territorial strategy upon which converge flagships and projects.

Third, until now, the major efforts made by macro-regions concern their mechanisms of governance to deliver as well as their organisational features focusing on institutional and internal challenges. This internal perspective has allowed them to build functional coordination mechanisms where the external dimension – thus its effectiveness in territorializing their impacts – have been less stressed. As many authors call (Ganzle and Mirtl, 2018; Stead, 2018) there is a need for, on the one side, further including territorial stakeholders and citizens, and on the other side, pushing countries to involve institutional actors at various level (central, regional and above all local units) in their daily activity. This will allow macro-regions to go beyond their conceptual and institutional borders. Indeed, the time we live in, requires additional efforts in a multi-level perspective in terms of (re)conceptualizing EU macro-regions, and better positioning the EU macro-regions within the EU macro institutional framework and in relation to the new geopolitical multi-polar scheme.

As far as the role of EUSAIR is concerned, the current institutional efforts of the macro-regions are focused on embedding and integrating flagships and actions. For the current programming period 2021-2027, EUSAIR has already adopted its flagships (15 in total) and it is in the process of revising the Action Plan via public consultation. Each of the identified flagships has a list of proposed actions and projects that are coherent and integrated among them (Table 2). The novelty of this programming period is the willingness of “embedding” these flagships within national and regional development programmes. As confirmed by Anze Logar, Minister of Foreign Affairs of Slovenia, during the closing event of the EUSAIR Slovenian Presidency 2020-2021 and as it is included into the Izola Declaration (2021): the scope is of embedding flagship projects into concrete funding programmes, European, regional and national, thus making many of our common projects not only possible but feasible. The idea is to create synergies among different programmes and levels in order to implement concrete ideas with great benefit for territories involved.

Conclusions

The Adriatic-Ionian Region is a relatively new “territorial entity”, very heterogeneous and often historically fragmented in terms of territory, economic performance as well as political power. Throughout time, the internal fragmentation, the relatively scarce sense of regional belonging and the lack of self-recognition, has made the Adriatic-Ionian region a space where institutional interactions were discontinuous, not linear and often unproductive. Only in the last decades, cooperation among countries within the Adriatic-Ionian Region started to take place under the umbrella of the EU. Although the EUSAIR was adopted only in 2014, the strategy is rooted on cooperation activity started with the first Ancona Declaration of 2000 (Solly and Berisha, 2021). Since then, there has been an incremental cooperation activity that has involved countries at various stages and levels. The role played by the EUSAIR in coordinating actions has been praiseworthy. However, the challenges the region is facing and the upcoming ones, seem to be greater compared to the EUSAIR effective possibilities. It is still unclear what the EUSAIR can do in supporting the region in order to avoiding shifting “from a space of political confrontation to a space of spatial dispute”. Even if not directly touched by the Ukraine war, indeed, the Western Balkans countries are the “weakest link” of the Western where divergent interests are present. Another issue is how to preserve the regional territorial integrity by avoiding shifting “from a space of transition to a space of transit” where international actors can influence strategic sectors like infrastructure, energy and industry. Although the embedding activity promoted by EUSAIR goes in the right direction, it seems not sufficient in order to

face the incremental foreign investments (mainly derived by China) recently made in the region. Conversely, embedding would be a good instrument to reduce intra and infra regional obstacles as pointed out by European Commission (2021).

Although the efforts made, macro-regions seem to be limited in their actions by their essential nature of being a “soft instrument” with no funds, no rules and no recognized authority. The fact that macro-regions play a role of coordination means there is no space for autonomous and independent actions. As far as the regional challenges mentioned, the EUSAIR seems to be structurally and conceptually unprepared to deal with, being so perceived as “not useful” for promoting effective territorial development of the region.

Finally, it is hard to say if the EU macro-regions are at the end of their days; however, it seems clear that a reconceptualization is needed in order to redefine the role of such instrument and their effectiveness to deal with unpredictable events. In this reconfiguration perspective, it is necessary to (re)discuss the three “NO” moving on towards a reconfiguration of the macro-region as a new and more effective instrument with dedicated tasks and responsibilities (including an own direct funding mechanism).

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Harmonization of Economic Sectors of the Western Balkans in Accordance with the EU Members of EUSAIR and Innovative Solutions for Sustainable Development

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Abstract

Countries should follow structural transformation, which reduces the participation of the primary and secondary sectors in favor of the tertiary sector, during their economic development. The OLS panel regression on the EUSAIR members, with a special indication of the EU member states and accession countries, shows that the participation of the primary and secondary sectors in GDP, as well as employment in those sectors, have a negative impact on economic development, unlike the tertiary sector. The Kruskal-Wallis test shows that the Western Balkans have a higher share of agriculture in economic development and employment in this sector than the EU member states of EUSAIR and EU average, which is not the case in the secondary sector. This justifies the process of deagrarization, but raises the question of premature deindustrialization, which was proven by the Friedman test. That is why special emphasis should be placed on productivity, which in all sectors has a positive impact on economic development, examined by the OLS panel regression. Productivity enhancement should be aligned with environmental goals, in order to achieve sustainable development. Therefore, it is proposed to introduce innovative approaches, especially in the primary and secondary sectors as the major polluters, and further harmonization with the EU Green Agenda.

Keywords: EUSAIR vs. EU, sustainable development, innovative approaches, sectoral structure of economy, productivity, tertiarization, deagrarization, deindustrialization

Introduction

Structural transformation is defined as the redistribution of economic activity to the sectors of agriculture, industry and services, which follows the process of the modern economic growth. Developed economies are increasingly dominated by services (Herrendorf et al., 2014). Structural transformation can be understood as a process by which an economy with economic growth changes its economic activity and sectoral specialization from the primary sector to the industrial, and finally to the service sectors (Jena & Barua, 2020).

Structural transformation reflects a fundamental redistribution of labor from goods to services. The share of employees in services increases as countries become richer. Technological change

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is a key driver of employment redistribution (Duernecker & Herrendorf, 2021). Structural transformation includes the increasing migration of people from villages to cities and industrial areas. The assessment of the level of rural transformation focuses on measuring changes in the economy, employment, the movement into the non-agricultural sectors, etc. (Majumdar, 2020).

The evolution of the economy is characterized by different phases, from primary (agriculture, mining) to secondary (manufacturing), tertiary (services) and then quaternary (based on knowledge) (Pike, 2020). Redistribution of factors of production in the sectors of agriculture, industry and services is one of the important facts of growth and development. As economies develop, agriculture is decreasing, industry first grows and then decreases, and services grow. Technological progress affects the redistribution of factors of production in agriculture, industry and services, and it is a driver of structural transformation (Herrendorf et al., 2015).

The sustainable development „calls” for tertiarization and the transition from the primary and secondary sectors to the tertiary sector, as a path to the economic prosperity while preserving the environment. In contrast, agriculture and industry are often identified as the culprits of negative environmental impact. Technological improvements are often seen in the context of increased productivity rather than reduced environmental impact (Greenford et al., 2020). Therefore, it is important to innovate in meeting both economic and ecological goals, with the goal of sustainable development.

The subject of this paper is the tertiarization of the economy at a certain level of economic development, and the goal of the paper is to determine the way in which it should be implemented, with the strengthening of productivity and the introduction of innovative approaches in accordance with environmental goals. In accordance with the subject and goal of the paper, the following research hypotheses were defined:

H₁: Tertiarization of economy is in accordance with economic development.

H₂: Increase in productivity through the introduction of innovative approaches in the sectoral structure of economy has a positive impact on economic development.

H₃: Tertiarization, deagrarization and deindustrialization, have a positive impact on the economic development.

1. Literature review

Different types of regional cooperation have existed in Europe for decades. The EU Strategy for the Adriatic-Ionian Region (EUSAIR) includes four EU member states (Croatia, Greece, Italy and Slovenia), five candidate and potential candidate countries for EU membership (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia), and now, San Marino (which is not within the Western Balkans, nor a member of the EU). It has an explicit aim of supporting the processes of European integration. The Adriatic-Ionian Region faces various challenges, including environmental protection, energy, climate change, research and innovation, resource conservation, competitiveness and job creation, trade, transport and logistics (Belloni, 2019; EUSAIR, 2022).

The transition process in the Western Balkans is aimed at modernization, growth of industrial production, restructuring and open market rules. Technological competence, high value-added of production, investments and innovations have a positive impact on economic development. Thereby, the Western Balkans is oriented towards the EU. In the future, the European and Western Balkan industries will face with new challenges: the growth of global competitiveness, climate change, deficits of non-renewable resources, transformation towards the ICT sector, implementation of the fourth industrial revolution, etc. Hence, the further growth of trade

should continue, as well as greater investments and improvement of technological cooperation between the EU and Western Balkans (Popović et al., 2021).

Role of structural changes is crucial for economic development. Development associated with structural transformation leads to decline of role of agriculture. Low agricultural productivity can significantly delay industrialization, and poor agricultural technology or policies cause that per capita income of country lags behind the leaders. Improvements in agricultural productivity can accelerate industrialization and have large effects on a relative income of country (Gollin et al., 2002). There is concern about premature deindustrialization in developing countries, so a return to the active industrial policies is suggested. Also, the traditional role of services as a driver of productivity growth in these economies is being questioned (Di Meglio et al., 2018).

For developed countries, tertiary expansion has been described since the emergence of post-industrial society. In the modern society, the share of unqualified workforce has decreased and the most of the population is dedicated to the production of non-material goods. On the other hand, in developing countries has been migration from rural to urban areas. As a result, the service sector is swelled up with low-productivity workforce, which represents false growth in the service sector. However, it cannot be concluded that developing countries are only experiencing a false growth of the service sector, and that the tertiarization carried out in industrialized economies is represented by a highly qualified workforce, capable of producing a high value-added (De Souza et al., 2016).

During the last two decades, many developed European countries have experienced a slowdown in economic growth and stagnation in labor productivity. The low level of expenditure on research and development, as well as the lack of investment in the ICTs (Information and Communication Technologies), negatively affect the labor productivity, which is the cause of slow economic growth. However, stagnant productivity is also associated with the structural change and radical transformations, i.e. by moving from production to service sectors, so-called tertiarization (Deleidi et al., 2019).

The sectoral transformation, which is characterized by the increasing economic importance of the tertiary sector, has a negative impact on the long-term growth of productivity in the EU economies. Therefore, the growth of total factor productivity should be influenced through innovation and expenditure on research and development (Duernecker & Sanchez-Martinez, 2021). A successful EU structural change should be based on the services with high value-added (Cutrini, 2019).

2. Methodology

The research was conducted on the Western Balkans and the EU member states of EUSAIR, as well as the EU average, for the period 2000-2019 years. A special emphasis is placed on the difference between the EU average and the EU member states of EUSAIR in relation to the Western Balkans that are candidates for the EU membership, and which are separated by a dummy variable. San Marino is not included in the analysis, considering that it is not a Western Balkan country, nor it is a member of the EU.

The OLS panel regression was used to examine the influence of the primary, secondary and tertiary sectors on the economic development, i.e. GDP per capita. For the sectoral structure, the participation of each sector in GDP, the gross value-added per worker (as a measure of productivity) and the participation in total employment of each sector, were used. An additional analysis was also carried out, where the importance of the sectoral structure during the observed period was examined using the Friedman test, i.e. participation in GDP, gross value-added per worker and participation in total employment. The Kruskal-Wallis test was used to compare

sectors between the EUSAIR member states, i.e. the Western Balkans were compared with the EU member states of EUSAIR and the EU average.

In the next part of the analysis, one indicator was selected from each sector (export of agri-food products as a part of the primary sector, CIP index as a part of the secondary sector and arrival of tourists as a part of the tertiary sector), their impact on the economic development was examined by the OLS panel regression, their values during the observed period by the Friedman test, and their difference between the Western Balkans and the EU member states of EUSAIR, as well as the EU average, by the Kruskal-Wallis test.

The research used secondary data taken from: World Bank, World Bank-TC data360, ITC trade map and UNIDO (2022).

3. Research results

The research analysis was carried out in two stages. In the first part, the influence of the sectoral structure was examined. In the second part, within each sector, one important indicator was selected and its impact on the economic development was examined.

3.1. Sectoral structure

The Table 1 shows the variables that were used for the research. The variables are classified according to the sectors, and a dummy variable is used to observe the Western Balkans in relation to the EU member states of EUSAIR and the EU average.

Table 1: Variable definition

Label	Variable name
<i>Dependent variable</i>	
GDP_pc	Gross domestic product per capita
<i>Independent variables by sector</i>	
<i>Primary sector</i>	
VA_agr	Agriculture, forestry and fishing, value added (% of GDP)
VA_pw_agr	Agriculture, forestry and fishing, value added per worker
Emp_agr	Employment in agriculture (% of total employment)
<i>Secondary sector</i>	
VA_ind	Industry (including construction), value added (% of GDP)
VA_pw_ind	Industry (including construction), value added per worker
Emp_ind	Employment in industry (% of total employment)
<i>Tertiary sector</i>	
VA_ser	Services, value added (% of GDP)
VA_pw_ser	Services, value added per worker
Emp_ser	Employment in services (% of total employment)
<i>Control variables</i>	
Unemp	Unemployment (% of total labor force)
Exp	Exports of goods and services (% of GDP)
<i>Dummy</i>	
WB_EU_EUSAIR	Western Balkans vs the EU member states of EUSAIR and the EU average

Source: World Bank, 2022

Control variables were introduced due to the multicollinearity of the variables (Table 2), on the basis of which the research models were determined.

Table 2: Multicollinearity of variables

Probability	VA_agr	VA_ind	VA_ser	VA_pw_agr	VA_pw_ind	VA_pw_ser	Emp_agr	Emp_ind	Emp_ser	Unemp	Exp	GDP_pc
VA_agr	1											
VA_ind	-0.01	1										
VA_ser	*** -0.77	*** -0.51	1									
VA_pw_agr	*** -0.50	*** -0.28	*** 0.68	1								
VA_pw_ind	*** -0.68	-0.07	*** 0.79	*** 0.75	1							
VA_pw_ser	*** -0.70	-0.05	*** 0.79	*** 0.77	*** 0.98	1						
Emp_agr	*** 0.90	** 0.14	*** -0.78	*** -0.65	*** -0.61	*** -0.63	1					
Emp_ind	*** -0.47	*** 0.60	0.01	-0.01	0.06	*** 0.18	*** -0.38	1				
Emp_ser	*** -0.71	*** -0.48	*** 0.83	*** 0.70	*** 0.62	*** 0.58	*** -0.86	** -0.14	1			
Unemp	*** 0.41	*** -0.34	*** -0.24	*** -0.34	*** -0.62	*** -0.57	*** 0.29	-0.09	*** -0.26	1		
Exp	*** -0.36	*** 0.29	0.03	-0.05	0.02	-0.01	*** -0.39	*** 0.40	*** 0.20	*** -0.21	1	
GDP_pc	*** -0.71	-0.03	*** 0.76	*** 0.72	*** 0.95	*** 0.93	*** -0.64	*0.14	*** 0.61	*** -0.64	** 0.15	1

Source: Authors' research.

Note: *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively

In further research, the impact of each sector on the economic development of the Western Balkans & EU member states of EUSAIR and the EU average will be examined.

Table 3: Impact of deagrarization on the economic development of the Western Balkans & EU member states of EUSAIR and the EU average

	Model 1	Model 2	Model 3
C	***10765.16 (2.48)	1422.334 (0.49)	***14055.38 (3.08)
VA_agr	***-658.6029 (-3.10)		
VA_pw_agr		***0.540115 (6.94)	
Emp_agr			***-406.7395 (-3.55)
Unemp	***-165.9136 (-2.61)	***-194.3326 (-3.29)	***-150.1900 (-2.37)
Exp	***127.9566 (3.31)	***86.31570 (2.49)	**88.43777 (2.05)
WB_EU_EUSAIR	***10947.11 (2.58)	***10165.49 (3.12)	***10874.26 (2.80)
Adjusted R-squared	0.28	0.40	0.29
F-statistic	***19.87	***33.88	***21.59

Source: Authors' research.

Note: beta coefficients in front of parentheses, t-values in parentheses; *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Primary sector (Table 3), i.e. the participation of agriculture in GDP, as well as employment in agriculture have a statistically negative impact, while productivity in agriculture, i.e. gross value added per worker has a statistically positive impact on the economic development. Among the control variables, unemployment has a statistically negative impact, while export has a statistically positive impact on the economic development, of the observed countries. The EU membership has a statistically positive impact on the economic development, but the Western Balkan countries are not members of the EU.

In the theory, there is no consensus on the impact of agriculture on economic growth. Some researchers emphasize that the development of agriculture is a prerequisite for industrialization and economic growth, while others emphasize that the growth of the economy depends on the development of agricultural sector, i.e. agriculture has a key role in the national economy of developing countries (Awokuse & Xie, 2014). It has already made a significant contribution to the economic prosperity of developed countries, in the past, so today it has less importance for the economic development, in contrast to its role in the economic development of developing countries, where it is of vital importance. In other words, where the per capita income is low, an emphasis is placed on agriculture and other primary sectors (Praburaj et al., 2018). With the development of economy, deagrarianization has a positive impact on economic development, in terms of declining employment and participation of primary sector in economic development. On the other hand, emphasis is placed on the introduction of technologies that have an impact on productivity growth, which has a positive impact on the economic development.

The European Union (EU) agriculture has undergone significant structural changes over recent decades. The most obvious structural changes in the EU agriculture are reflected in the decline in the number of farms, the growth in farm size and the specialization of production. The important drivers are technology and productivity growth (Neuenfeldt et al., 2018). Precision agriculture and technological development in the agricultural sector provide better management practices to reduce inputs, increase profits and protect the environment (Say et al., 2018), thus achieving both economic and environmental goals in line with sustainable development. Supplying modern and sustainable systems of agricultural production is one of the main factors in the growth of agricultural production. Different energy sources are used in agriculture, often there are hybrid systems that use both traditional and renewable energy sources. The agricultural sector also supplies energy in the form of biomass (Rokicki, 2021).

About half of total greenhouse gas emissions, biodiversity loss and water scarcity come from resource processing. Therefore, the European Union has given priority to circular economy policies, waste processing and biomass use. Agricultural residues can represent new opportunities for current circular economy challenges in the EUSAIR member states. In Italy, for example, agricultural by-products are considered "special waste", so their reuse as new material can contribute to reducing disposal costs (Liuzzi et al., 2022).

In the Western Balkans, agriculture is an important sector for the national economies, but with a tendency to decline. In recent years, a significant progress has been made in harmonizing long-term program documents with the EU requirements. However, funding for structural and rural development measures is generally low, and support for environmental and rural improvement is negligible (Volk et al., 2019). One of the main goals of the Western Balkans is to access the European Union, which implies that the Common Agricultural Policy (CAP) is a benchmark for determining their future agricultural policy (Erjavec, et al., 2021).

Table 4: Impact of deindustrialization on the economic development of the Western Balkans & EU member states of EUSAIR and the EU average

	Model 1	Model 2	Model 3
C	***22617.80 (4.18)	*-1958.289 (-1.33)	***19832.53 (3.64)
VA_ind	***-713.8664 (-5.05)		
VA_pw_ind		*** 0.509661 (18.62)	
Emp_ind			***-538.1536 (-4.23)
Unemp	***-293.9406 (-4.61)	***-123.6670 (-2.77)	***-268.9138 (-4.20)
Exp	***128.5441 (3.71)	***89.83482 (4.24)	***121.9554 (3.34)
WB_EU_EUSAIR	***14838.02 (3.36)	-1180.350 (-0.97)	***16293.38 (3.78)
Adjusted R-squared	0.32	0.86	0.29
F-statistic	***24.08	***297.52	***21.81

Source: Authors' research.

Note: beta coefficients in front of parentheses, t-values in parentheses; *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

The importance of secondary sector for economic development (Table 4) is the same as that of the primary sector, i.e. participation in GDP and employment in this sector have a statistically negative impact, which means that deindustrialization on the example of the EUSAIR member states has a positive impact on the economic development. Productivity in the secondary sector has a statistically positive impact on economic development. Unemployment has a statistically negative impact, while export has a statistically positive impact on economic development. Accession to the EU has a positive impact on the economic development of the observed countries.

Most of the developed economies have passed into a new, post-industrial phase of development, i.e. deindustrialization, which is a trend that is noticeable when looking at the share of employment in production. Developing countries have also experienced a decline in the share of industry in employment and value added. They are turning into service economies without having gone through the proper experience of industrialization, which represents premature deindustrialization and mostly leads to decline in productivity (Rodrik, 2016).

The Western Balkans have experienced a process of extreme deindustrialization that very quickly reduced the contribution of production to levels that are not in line with their relatively low economic development. That is why a strategy of reindustrialization of these economies is necessary, which would strengthen their export capacity and enable stronger economic growth (Damiani & Uvalic, 2018).

Table 5: The impact of tertiarization on the economic development of the Western Balkans & EU member states of EUSAIR and the EU average

	Model 1	Model 2	Model 3
C	***-42921.41 (-6.54)	-1361.030 (-0.81)	***-22666.57 (-4.57)
VA_ser	***995.2089 (7.63)		
VA_pw_ser		***0.420221 (15.30)	
Emp_ser			***639.8531 (6.77)
Unemp	***-301.9648 (-5.17)	***-185.0447 (-3.67)	***-210.5253 (-3.65)
Exp	*60.77193 (1.78)	***120.8951 (4.93)	-44.57628 (-0.96)
WB_EU_EUSAIR	*4903.904 (1.44)	-719.2550 (-0.51)	**9339.387 (2.26)
Adjusted R-squared	0.43	0.83	0.38
F-statistic	***38.09	***234.03	***31.00

Source: Authors' research.

Note: beta coefficients in front of parentheses, t-values in parentheses; *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

The importance of tertiary sector for economic development (Table 5) differs from the primary and secondary sectors, given that the entire sector, i.e. participation in GDP, employment and productivity have a statistically positive impact on the economic development, which is proof that tertiarization has a positive impact on economic development of the observed countries. Unemployment, as in the previous sectors, has a statistically negative impact, while export has a statistically positive impact on the economic development. Also, the EU accession has a statistically positive impact on the economic development.

The service sector has the significant implications for economic growth in the Western Balkans. However, services tend to be labor intensive or use less capital equipment, and productivity growth has been slower (Ristić, 2017). Rapid economic restructuring has led to the emergence of serious deficiencies in many economies in transition, which are particularly pronounced in the Western Balkans. The rapid structural change that occurred during the transition led to high rates of structural unemployment, further deteriorated by a mismatch between the skills needed in declining industrial sectors and the new skills required by emerging service sectors (Bartlett, 2013).

The Western Balkans have a significantly higher share of the primary sector in GDP, as well as total employment, compared to the EU member states of the EUSAIR and the EU average. On the other hand, productivity in this sector generally lags behind these countries. However, when looking at the secondary and tertiary sectors, the Western Balkans generally lag behind the observed countries, especially in terms of productivity, which further leads to an economic lag, measured by GDP per capita (Table 6). This further raises the issue of premature deindustrialization and tertiarization of these countries.

Table 6: Differences between the Western Balkans & EU member states of EUSAIR and the EU average, in Mean Rank

States	VA_agr	VA_pw_agr	emp_agr	VA_ind	VA_pw_ind	emp_ind	VA_ser	VA_pw_ser	emp_ser	GDP_pc
Serbia	128.55	27.60	156.85	176.35	63.65	85.80	26.85	33.85	62.68	63.20
Montenegro	142.55	152.65	56.50	28.90	76.95	35.85	114.05	57.15	181.50	69.15
B&H	124.15	41.67	149.05	90.00	36.93	150.45	73.50	86.93	45.80	45.15
Albania	190.40	19.30	190.50	111.85	45.15	23.15	14.15	14.50	10.90	33.35
North Macedonia	162.45	70.30	142.70	81.90	14.55	162.93	65.65	57.30	50.08	46.40
Croatia	79.45	90.85	94.38	89.35	105.50	114.63	110.70	105.50	105.75	109.50
Slovenia	40.10	105.70	62.45	184.00	125.70	184.55	88.60	125.50	95.10	142.95
Greece	80.30	124.35	101.23	20.10	146.10	32.75	184.65	145.50	155.10	144.10
Italy	40.80	185.35	11.85	98.35	183.90	121.95	168.80	185.50	149.45	179.15
EU average	16.25	148.15	39.50	124.20	166.30	92.95	158.05	165.50	148.65	172.05
Chi-Square	***	***	***	***	***	***	***	***	***	***
	180.27	177.29	181.58	152.79	184.35	173.98	180.96	187.04	174.97	166.94

Source: Authors' research.

Note: *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 7: Tertiarization in the Western Balkans & EU member states of EUSAIR and the EU average, in Mean Rank

Years	VA_agr	VA_pw_agr	emp_agr	VA_ind	VA_pw_ind	emp_ind	VA_ser	VA_pw_ser	emp_ser	GDP_pc
2000	19.10	2.33	19.20	14.80	3.22	14.50	3.30	7.44	1.60	1.10
2001	18.20	2.56	18.80	14.60	3.22	14.40	4.60	7.89	2.10	1.90
2002	17.80	4.67	17.60	13.00	3.89	14.45	3.80	8.11	3.20	3.00
2003	16.40	3.00	16.00	14.20	5.00	14.90	5.10	7.67	4.20	4.20
2004	16.80	7.56	15.65	14.20	7.44	13.95	5.70	7.67	5.30	6.00
2005	13.10	8.33	14.00	12.30	10.56	13.20	7.90	8.67	6.20	7.00
2006	9.60	8.00	12.25	14.20	13.33	12.80	6.20	9.44	8.10	8.10
2007	6.90	8.22	10.75	13.90	12.67	14.00	6.90	12.44	8.40	12.10
2008	7.80	11.22	9.25	12.90	11.44	12.75	8.50	12.67	8.50	17.40
2009	7.60	11.11	9.45	8.30	7.11	10.55	15.80	8.44	9.70	13.70
2010	6.60	11.89	9.95	9.00	9.67	9.55	14.50	11.44	12.00	11.90
2011	9.20	13.67	8.95	8.70	11.44	8.55	14.00	12.22	12.05	16.50
2012	7.20	12.44	8.15	7.40	11.78	7.20	16.50	11.67	13.40	11.50
2013	10.70	14.00	7.95	7.70	13.89	6.10	14.10	12.78	14.30	14.10
2014	10.30	13.67	7.40	5.50	14.00	4.85	15.40	11.67	15.30	15.40
2015	9.40	14.89	6.40	7.40	13.67	4.95	14.40	12.33	15.80	8.40
2016	7.60	15.56	5.90	8.40	14.67	5.75	12.10	11.44	16.65	10.00
2017	5.60	14.44	4.80	7.90	14.44	6.85	14.20	11.33	18.25	13.40
2018	6.10	15.44	4.20	8.00	14.56	10.15	12.80	12.00	17.30	17.20
2019	4.00	17.00	3.35	7.60	14.00	10.55	14.20	12.67	17.65	17.10
Chi-Square	***	***	***	***	***	***	***	***	***	***
	120.11	105.65	130.18	54.69	80.47	69.08	115.91	20.25	164.87	152.68

Source: Authors' research.

Note: *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

The Friedman test (Table 7) shows a decrease in the share of agriculture and industry in GDP, as well as employment in these sectors. Productivity in these sectors has an increasing trend. In contrast to them, the tertiary sector recorded growth, starting with share in GDP and employment, as well as productivity. It is proof of implementation of deagrarization and deindustrialization, i.e. tertiarization of observed countries. Also, it can be said that the EUSAIR member states recorded the economic development in the observed period.

Since the 1970s, it is possible to observe a change in specialization, in most countries, that corresponds to the decline of agriculture, in terms of value added and employment, then an increase in the share of industry, and then services. Usually, the structure of production in the economy moves away from agriculture towards industry, and later towards increased specialization in the service sector, which is seen as a driver of technological change and thus economic growth (Simões et al., 2019).

It can be concluded that the reduction of importance of agriculture for economic development of the Western Balkans (Table 7) is justified, given that this sector holds primacy in relation to the observed countries (Table 6). However, the decrease in the importance of industry (Table 7) is questioned for the Western Balkans, given that these countries lag behind the EU countries in terms of industrial development (Table 6). Additionally, very important issue of the future development is modernization of agriculture of the Western Balkans.

3.2. Important indicators of the sectoral and economic structure

In further research, one indicator from each sector was selected and their impact on the economic development was examined, as well as the difference between the levels of pollution, competitiveness and innovation of the observed countries.

Table 8: Important indicators of the sectoral and economic structure in the Western Balkans & EU member states of EUSAIR and the EU average, in Mean Rank

	Export agri-food, 000 \$	CIP	International tourism, number of arrivals	Fossil fuel energy consumption (% of total)	GCI	GII
Serbia	112.07	89.15	56.61	108.00	23.23	20.93
Montenegro	22.79	21.00	61.28	11.20	61.36	33.07
B&H	51.71	58.10	32.60	120.07	13.90	11.93
Albania	14.00	21.00	82.13	17.40	26.95	5.57
North Macedonia	50.47	63.25	25.48	90.13	47.30	21.42
Croatia	93.44	112.38	140.70	61.47	55.32	41.07
Slovenia	83.00	150.50	93.00	30.88	84.18	55.50
Greece	126.94	128.63	123.50	131.13	38.09	37.07
Italy	146.50	170.50	160.30	103.88	87.32	55.50
EU average	164.50	/	180.50	53.31	/	/
Chi-Square	***165.796	***175.540	***168.484	***132.012	***73.498	***54.453

Source: Authors' research

Note: *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

According to all indicators (except: export agri-food for Serbia) within the primary (export agri-food), secondary (CIP - Competitive Industrial Performance Index) and tertiary (international tourism, number of arrivals) sectors, the Western Balkans lag behind the EU member states of EUSAIR, as well as the EU average. This further leads to a lag in the overall

competitiveness and innovativeness of these countries. However, all EUSAIR member states, except Montenegro, Albania and Slovenia, have a higher consumption of fossil fuels than the EU average, which is why special emphasis should be placed on environmental protection in the future (Table 8).

Although the emissions of the EU have generally decreased, the changes have not been large enough. Particularly noticeable are increased CO₂ emissions, which can overcome gains from technological change (De Araújo et al., 2020). The European Commission (EC), based on the European Green Deal (2019) and the European Recovery Plan (2021), foresees investing 30% of the budget in climate related projects. Also, an initiative is being taken for the initial alignment of the Western Balkans with the EU plan to achieve net zero greenhouse gas (GHG) emissions by 2050 (Knez, et al., 2022).

Agriculture is an important sector in the Western Balkans. The role of agriculture in the Western Balkans is higher than the EU average, but agriculture is characterized by issues of unbalanced sectoral production. Trade agreements with the EU and the Central European Free Trade Agreement (CEFTA) significantly influenced the liberalization of agricultural and food products in the Western Balkans. It should continue these processes during the pre-accession negotiations for the EU membership and take the necessary steps towards increasing the level of competitiveness at the EU common market (Matkovski et al., 2022). Also, during the pre-accession negotiations with the EU, it is important to define the sustainable development of tourism in accordance with the EU, because tourist arrivals and income have positive effects on the efficiency of tourism and economic development. However, the budgetary expenditures for tourism are insufficient in the Western Balkans (Radovanov et al., 2020).

By analyzing the competitiveness based on the low values of the CIP index (Competitive Industrial Performance Index) in the case of the Western Balkans, a connection was established between the low level of economic development and the low level of competitiveness. By accepting the process of deindustrialization as an integral part of the transition of the Western Balkans, there was a drastic decline in industrial production. A significant decline in activities such as transport, construction, agriculture, and tourism during the 1990s caused a decline in demand for industrial products. Therefore, reindustrialization represents the process of restoring industrial production with the aim of increasing the participation of industry in the GDP. In the Western Balkans, reindustrialization is recognized as a necessary process aimed at increasing employment and improving the export structure. It is a response to the negative consequences of deindustrialization and tertiarization (Miljković, 2020).

The current ranking of the Western Balkans is bad according to almost all relevant indicators of the Global Competitiveness Index (GCI). That is why further reforms are necessary, in accordance with the EU Stabilization and Association Agreement, especially in building infrastructure and a strong institutional framework, strengthening the macroeconomic position, etc. (Tosković et al., 2016), which would improve the competitive position of the entire region. According to the Global Competitiveness Index, the Western Balkans generally lag behind the EU. The most problematic components of competitiveness are technological readiness and innovation, such as the use of information and communication technologies (ICTs) and low results of research and development (R&D) expenditures (Endrődi-Kovács, 2020).

The Western Balkans lag behind the EU also in terms of innovation, where there is a strong linear correlation between innovation (Global Innovation Index - GII) and competitiveness (GCI), which is not the case with the Western Balkans. For this reason, it is necessary to stabilize institutions, improve infrastructure and political stability in the region. Accepting the European Union standards is the best way to achieve these goals (Despotovic et al., 2014). The

impact of these significant indicators within the sectoral structure on the economic development was further examined.

Table 9: Multicollinearity of important indicators of the sectoral structure

	Export agri-food, 000 \$	CIP	International tourism, number of arrivals	Unemp	Exp	GDP_pc
Export agri-food, 000 \$	1					
CIP	***0.86	1				
International tourism, number of arrivals	***0.81	***0.76	1			
Unemp	***-0.33	***-0.53	***-0.43	1		
Exp	***-0.25	-0.07	***-0.24	***-0.27	1	
GDP_pc	***0.77	***0.89	***0.73	***-0.63	*0.14	1

Source: Authors' research.

Note: *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Based on the multicollinearity of the variables (Table 9), research models were determined.

Table 10: Impact of important indicators of the sectoral structure on the economic development in the Western Balkans & EU member states of EUSAIR and the EU average

	Model 1	Model 2	Model 3
C	**7542.898 (2.28)	2548.539 (1.08)	675.5685 (0.19)
Export agri-food, 000 \$	***4.87E-05 (6.46)		
CIP		*** 29199.57 (2.38)	
International tourism, number of arrivals			***2.67E-05 (4.70)
Unemp	***-225.9650 (-4.25)	***-162.2233 (-2.76)	*-107.6161 (-1.75)
Exp	**68.33687 (2.29)	***145.5361 (4.72)	***183.7600 (5.59)
WB_EU_EUSAIR	***13304.98 (3.28)	***11123.57 (4.35)	***11020.59 (2.64)
Adjusted R-squared	0.37	0.34	0.33
F-statistic	***26.00	***24.27	***24.33

Source: Authors' research.

Note: beta coefficients in front of parentheses, t-values in parentheses; *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Important indicators, each within the corresponding sector, have a statistically positive impact on the economic development (Table 10), so now the importance of their lagging behind the EU can be seen again (after Table 8). Unemployment has a statistically negative impact, while export has a statistically positive impact on economic development. The EU accession has a statistically positive impact on the economic development (Table 10).

Table 11: The important indicators of the sectoral and economic structure in the Western Balkans & EU member states of EUSAIR and the EU average, in Mean Rank

Years	Export agri-food, 000 \$	CIP	International tourism, number of arrivals	Fossil fuel energy consumption (% of total)
2000	/	8.83	3.14	15.75
2001	1.50	7.89	1.86	15.25
2002	1.50	10.28	2.86	14.00
2003	3.00	11.33	3.71	12.75
2004	4.50	12.06	4.29	11.75
2005	4.50	11.61	5.29	10.25
2006	6.00	12.72	7.43	10.00
2007	9.00	12.72	9.43	9.25
2008	9.00	13.00	10.14	9.00
2009	7.50	12.39	9.00	7.00
2010	11.50	11.50	10.57	5.75
2011	15.00	10.78	12.00	5.00
2012	14.50	9.56	12.29	4.25
2013	17.50	8.72	13.29	3.00
2014	12.00	9.83	14.71	1.25
2015	12.50	8.61	16.00	1.75
2016	15.50	8.89	17.00	/
2017	13.00	9.94	18.14	/
2018	14.00	9.67	18.86	/
2019	18.00	9.67	20.00	/
Chi-Square	**32.31	20.71	***126.80	***58.52

Source: Authors' research.

Note: *, **, *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Friedman's test (Table 11) showed a decreasing trend in the export of agri-food products, and an increasing trend in tourist arrivals, which corresponds to the previous research and the decreasing importance of the primary sector, but the growth of the tertiary sector. On the other hand, the CIP index does not have a clear trend, which premature deindustrialization is once again called into question, especially in the Western Balkans. The decline in fossil fuel energy consumption as a factor in environmental pollution is positive. Innovativeness and competitiveness did not register significant oscillations.

Conclusion

The higher growth rates and structural changes are impossible without new investments. The high GDP growth rates, structural changes, social reforms are activities that should be undertaken by every country in transition on its way to the market economy. This also applies to the Western Balkans (Popovic et al., 2020).

Services are currently the dominant sector in developed and most developing countries. This so-called process of tertiarization has raised the question of whether services can be a source of sustainable growth, since it has traditionally been viewed as a low-productivity sector. However, technological changes have enabled the rise of modern impersonal services

(communications, banking, insurance and business-related services) that have a high potential to increase productivity (Simões et al., 2019).

Deindustrialization is defined as a decrease in the participation of industry in the economy and employment. Compared to services, industry has a greater potential for the application of new digital technologies of the 4th industrial revolution, technological progress and the spillover of innovations that improve productivity (Pike, 2020). The factors that leading to deindustrialization are: faster growth of productivity in this sector, shift of manufacturing firms to services, progress of the digital revolution and automation. The industries of developed countries, with higher labor productivity, are more resistant to deindustrialization, and this effect is stronger for low-tech industries (Vu et al., 2021). It is proof that the Western Balkans started with the deindustrialization and tertiarization too early, considering that in terms of productivity. The Western Balkan countries lag behind the EU member states of EUSAIR, as well as the EU average. Deagrization and deindustrialization, i.e. tertiarization, have a positive impact on the economic development, only if satisfactory growth in productivity in all sectors is achieved.

The positive association between technological change and worker training suggests that one way to solve underinvestment in training in the Western Balkans is to strengthen incentives for companies to undertake technological change (Gashi & Adnett, 2012). The economies of the Western Balkans offer prospects for economic development through the strengthening of innovation and improved innovation policy support (Radovanovic & Benner, 2019).

It could be concluded that deagrization, deindustrialization and tertiarization can achieve positive effect on economic development only if these structural changes are conditioned by technological changes that increase productivity. On the other hand, innovative approaches must also be in line with the preservation of the environment, bearing in mind the large percentage of gas emissions and pollution. Only innovative approaches (green, bioeconomy, circular economy, and similar) can lead to the sustainable development, if they satisfy all its dimensions (economic, ecological and social).

This research partially proves the first hypothesis, that the tertiarization is in accordance with the economic development, given that there is no consensus on this topic. Tertiarization should be in accordance with the economic development, but it is also carried out by economies that have not yet reached the appropriate economic development and productivity, on the basis of which they would implement it. The third hypothesis is also partially proven, because the tertiarization, and therefore the deagrization and deindustrialization, will have a positive impact on the economic development only if the structural changes are implemented on the right basis, i.e. by increasing productivity in all sectors. This fully proves the second hypothesis, that the increase in productivity through the introduction of innovative approaches in the sectoral structure has a positive impact on the economic development, and therefore on the sustainable development.

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The Relationship between Economic and Financial Development in the EU Countries for the Period 2011-2020

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Abstract

This research paper studies the relationship between financial development and economic development in EU countries for the period 2011-2020. During this time period, the EU expanded and experienced many changes. From the perspective of enlargement, the Republic of Croatia became a new member of the EU. Furthermore, during this period, the world and the EU, in particular, experienced the consequences of the 2007 - 2009 global financial crisis, the 2011 debt crisis, and the Covid-19 pandemic crisis. All these events affected the EU in one form or another. In the past, similar studies were conducted by other researchers for the period 2000 - 2011 with almost the same approach. The current research uses secondary data, which has been analyzed mainly based on the quantitative empirical approach. The final empirical result of this paper shows that there is a relationship between economic and financial variables for the period 2011-2020. However, not all EU countries presented and grouped into four different groups have a relationship at the same level between financial development and economic development.

Keywords: economic relationship, financial relationship, EU members, development

1. Introduction

Speaking of economic behavior and trends, almost all individuals will make the correlation that if the financial sector develops, economic development will follow. Pouring cash into the economy through the financial system seems like the way to further stimulate economic development and growth. Many may contemplate that this correction, as wordy stated, may exactly exist without any major effort in proceedings. However, the reality, as baked by empirical studies, does present quite interesting findings for these two trends, as are further elaborated in this paper. The scope of this paper is to fragmentally study financial development and economic development in EU countries for the period of 2011-2020. During this period, the EU, as a new union of independent European states, has experienced many changes and updates. It enlarged, it further stabilized its common currency (Euro) in most of its states, and it became more complex. By surprise, it also experienced a divorce from one of its founding members (BREXIT, Great Britain's departure from the EU). This paper follows a similar study done by other authors in this domain but for a different time range. The presented empirical findings in this paper, although not in confrontation with some views presented in the literature review, will further elaborate on how different EU states, regardless of being part of the same

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EU, did differently absorb economic development as a result of financial development. One main hypothesis is raised that is followed by one research question:

RQ: Is there any significant relationship between economic and financial development?

H1: Economic and financial development has an important and significant relationship.

2. Literature review

The impact of financial development on economic development has been a topic for a while now. It has been treated scientifically in terms of relevance and cross-dependency as well as being used as a precursor for further socio-economic developments. Changes in financial and economic domains have linked these two important socio-economic variables to an odd relationship. At first glance, these two variables seem to be cross-linked and in a natural relationship. Meaning, that if the financial sector develops/progresses, the economy will follow in correlation. On the contrary, to the literature review, this is not a relevant trend, and, at large, these two phenomena do present different standings. Relations and the impact of financial development on economic development in the EU are covered for the years 2011 until 2020. The literature review covers scholarly writings and, up to now, accessible research online writings.

According to Čižo, Lavrinenko, and Ignatjeva (2020), their study consists of the period from 1995 until 2017, covering 70% of the time in this paper that we have written. Per the study, although the natural inclination does exist, there is no consensus on the significance of this relationship within EU countries. Therefore, the authors argue that financial development does not necessarily trigger economic development in the EU within the analyzed time span. It is worth mentioning that this study does cover a broad period, which in EU organization development presents quite an important momentum of the EU conception phase, when many countries did join the union. Thus, they became economic and financial players within the union, further shaping and changing the EU. Authors, Asteriou, and Spanos (2019) argue interestingly based on analyzing two variables in the EU case. Per the authors, in relation to the financial and economic impact dilemma, the situation should be seen (*analyzed*) in two periods. Before the financial crisis of 2008, financial development greatly impacted economic growth (*development*) in the EU zone. Nevertheless, after the crisis, there was an empirically reverse effect. Financial development slowed down economic development. This was due to the effect of rapid changes in the financial sector, more conservative lending policies, and further changes and implementations in terms of credit risk, market risk, and operational risk being taken as a new standard in the banking industry worldwide.

Per Demetriades, and Hussein (1996), although this study pertains to a different time period as well as covers different clusters of economies worldwide, it is worth mentioning its empirical studies. Per the study, the development of the financial sector provides incremental support to further economic development in the countries.

Analyzing reports from EU official sources presents the following. According to the “Investment in the EU Member States”, a report from the European Commission (2017), states that a further smart approach toward investments (*funding allocation and strategy*) in the EU zone has proven to further development in the zone. Since 2017, the funding has approved around 236 billion euros in growth, which directly influenced growth and investment projects at the union level, consequently leading to economic growth and development.

Joining the EU did not take place at the same time for all countries that are part of the EU with the cut-off of 2020. Therefore, going back and analyzing their joint work presents the following

findings in the literature review. According to Caporale, Sova, Rault, and Sova (2014), the credit markets are still underdeveloped in different EU countries/economies. Consequently, their economic growth presents limited options. It is evident that in many EU and European countries, banking sectors are over-liquidated. Deposits are pouring in, but the banking sector is not capable of rendering more sophisticated credit options besides basic banking. Consequently, there is excess cash available, while credit options are stiff and limited. This paper further presents findings that are also seen in other studies that more efficient banking structures do present better options for further economic growth/development of the countries. This has to do mainly with the banking product range, options, and different credit facilities.

In Rossi and Scalise (2021), they present similar findings as those in other studies. According to scholars, financial development is not necessarily linked with economic development in EU countries. The evidence that they presented shows a similar path in findings that other scholars have been able to identify so far in terms of this topic. Findings presented by these scholars show that what matters the most as far as financial development and economic growth is the development of complex financing rather than basic banking. This goes in correction with other findings as previously stated that few EU countries that are less developed did not necessarily develop because in pre-cursor had developed financial markets. In-depth, this has to do with the situation that these countries have in terms of credit risk and its management.

3. Research Methodology

In the methodology part, several dimensions are applied: 1. Literature review, 2. Empirical findings (Reliability test, Classification of EU countries, Descriptive statistics, Regression and correlation analyses, and Multiple linear regression), and 3. Visualization of the graph of the variables. The first part of the literature review includes a significant number of authors related to the elaborated topic. With all due respect to the aforementioned authors, we have considered many of their findings in our model, and such findings have been verified or rejected by our results significantly. The second part of the empirical findings includes the reliability test to proceed with the next stages. It is well to mention that all results are generated by the STATA program, as well as graphs and the application of statistical models, hence the data source of all variables involved in World Bank Source (Global Financial Database).

We have also elaborated the main idea part together with the ranking of the EU countries by groups, and this ranking is based on the preliminary research that we have mentioned in the source located below in the table. The main variables, the economic ones, are variables that we consider dependent, and the financial variables are considered independent, all of which are presented with abbreviations to make their presence in the respective tables easier to read and understand. The empirical findings focus on a sample of the 28 EU countries. The table of descriptive statistics shows the minimum, maximum, standard, and average deviation of the considered economic and financial variables. Additionally, the regression and correlation analysis section chronologically analyzes and tests the significance of the variables and the relationship between them. In the third, or last part, we used a mathematical model to test the variables, presenting them econometrically accompanied by a graph, so that it is as clear as possible to the eyes of the reader.

4. Empirical Findings

Since many authors, researchers, and scientists have investigated findings on the relationship between economic and financial development for different periods of time, our aim is to further

investigate the relationship between financial development and economic development in a given period of 2011-2020. In the classification section, we have divided some key points, such as the country belonging to the respective group, GDP per capita from the largest to the smallest value, showing only the largest and smallest value, the dependent and independent variables, and finally abbreviations for all variables so that statistical analysis can be performed more easily.

4.1 Classification

Table 1. The classification of the EU countries according to GDP per capita for the period (2011-2020)

Clusters	Countries part of each cluster	The range of GDP per capita in USD (max/min)	Economic and financial variables	Abbreviations
			GDP per capita	(GDP per capita)
Cluster 1	Luxembourg	[107, 480]	Private credit by deposit money banks and other financial institutions to GDP Stock market capitalization to GDP	(PCDB to GDP)
Cluster 2	Denmark, Ireland, Sweden, Netherlands, Austria, United Kingdom, Finland, Belgium, Germany, France, Italy	[74,559.3; 33,616]	Non-life insurance premium volume to GDP	(SMC to GDP)
Cluster 3	Spain, Cyprus, Croatia, Greece, Portugal, Slovenia, Malta	[32,402.7; 13,629.5]	Life insurance premium volume to GDP	(NLI to GDP)
Cluster 4	Czech Republic, Slovak Republic, Hungary, Estonia, Poland, Lithuania, Latvia, Romania, Bulgaria	[22,754.8; 7,019.17]	Pension fund assets to GDP Mutual fund assets to GDP	(LI to GDP) (PFA to GDP) (MFA to GDP)

Source: Authors' calculations according to World Bank Source and according to Deltuvait (2014) for the ranking of EU countries and the naming of variables.

To better present the data used in the paper, we have presented 4 groups or “clusters” by country. In the first group, we have presented only Luxembourg (we note that the GDP per capita is about 107,480 US dollars), which is seen to have the highest value of GDP per capita. Group 2 includes countries from Denmark to Italy with a GDP per capita of (74,559.3; 33,616). Group 3 includes countries from Spain to Malta with a GDP per capita of (32,402.7; 13,629.5), including Croatia (joint EU in 2013). The last group includes the countries from the Czech Republic to Bulgaria, which are considered to have the lowest GDP per capita compared to other countries presented according to the collected data (22,754.8; 7,019.17).

Explanation: GDP per capita is expressed in US dollars (constant 2005) as a variable collected from the World Bank DB.

4.2. Descriptive statistics analysis

Table 2. Economic/Financial Development Variables (2011-2020)

Clusters	Financial/economic development variables	Mean	Std. Deviation	Minimum	Maximum
Cluster 2	GDP per capita	47975.54	8209.467	33,616	74,559.3
	PCDB to GDP	102.7581	33.83533	33.00546	187.2415
	SMC to GDP	63.27742	35.90977	18.82583	209.1409
	NLI to GDP	1.890369	.4429203	.782448	2.69209
	LI to GDP	4.660277	2.32011	1.37352	10.9075
	PFA to GDP	49.2322	48.8282	4.7606	196.574
	MFA to GDP	116.0493	204.2788	9.72433	881.036
Cluster 3	GDP per capita	23704.46	5040.148	13,629.5	32,402.7
	PCDB to GDP	92.92357	31.78555	42.45473	167.7841
	SMC to GDP	31.18624	17.90416	7.989867	82.41779
	NLI to GDP	1.679041	.4013112	.945977	2.43816
	LI to GDP	2.107052	1.202883	.729634	5.86731
	PFA to GDP	12.00325	10.87956	.035906	48.2469
	MFA to GDP	12.11636	10.92104	1.81134	49.1228
Cluster 4	GDP per capita	7019.17	22754.8	7,019.17	22,754.8
	PCDB to GDP	49.96324	11.23552	30.48991	77.63263
	SMC to GDP	17.75625	9.664215	5.313742	39.25838
	NLI to GDP	1.27427	.3166605	.75858	1.9077
	LI to GDP	.7894935	.525584	.197412	1.94276
	PFA to GDP	8.502291	3.983485	1.22602	18.315
	MFA to GDP	4.694965	4.419159	.432989	16.9029

Source: Authors' calculations according to descriptive statistics of the variables (economic/financial)

The descriptive statistics section presents the characteristics of countries within the group. If we analyze each financial variable by comparing them with the groups, we notice that in the second group, the most developed countries pay more attention, especially to life insurance. In the third group, strong insignificance is observed for the stock market variable, and this has really affected the overall significance of all EU countries. Thus, the countries of the last group are the most homogeneous, especially in pension fund assets. The standard deviation in all cases, except for GDP per capita, turns out to be lower than the average of the variables, thus showing a satisfactory result.

4.3. Regression and Correlation coefficient

Table 3. Economic development level (GDP per capita) and financial development variables (2011-2020);

CLUSTERS	FINANCIAL DEVELOPMENT VARIABLES (%)	CORRELATIONS & (SIG. 2-TAILED)
28 EU Countries	PCDB to GDP	0.3740** (0.018)
	SMC to GDP	0.6801 (0.644)
	NLI to GDP	0.3795*** (0.000)
	LI to GDP	0.5944** (0.019)
	PFA to GDP	0.2395* (0.061)
	MFA to GDP	0.8586*** (0.000)
Countries in Cluster 2	PCDB to GDP	-0.3783*** (0.000)
	SMC to GDP	0.0373*** (0.010)
	NLI to GDP	-0.6880** (0.002)
	LI to GDP	-0.4159*** (0.000)
	PFA to GDP	0.3727*** (0.000)
	MFA to GDP	0.789*** (0.000)
Countries in Cluster 3	PCDB to GDP	0.1608 (0.710)
	SMC to GDP	0.1836 (0.764)
	NLI to GDP	0.3214*** (0.003)
	LI to GDP	0.2885* (0.073)
	PFA to GDP	-0.1016*** (0.001)
	MFA to GDP	0.3735** (0.012)
Countries in Cluster 4	PCDB to GDP	0.0869 (0.218)
	SMC to GDP	-0.0431*** (0.004)
	NLI to GDP	0.2992 (0.198)
	LI to GDP	0.4892 (0.331)
	PFA to GDP	0.5546*** (0.002)
	MFA to GDP	0.5992*** (0.007)

Clarification: Correlation is significant at the (***) 0.01 level, at the (**) 0.05 level, and at the (*) 0.10 level.

In [Table 3], we have analyzed the correlation and regression between financial variables and GDP per capita to see if there is a correlation or significance between economic and financial variables and then to verify whether financial variables have any relationship with economic variables and which variable matters or not. From the regression model, the most economically developed countries, as presented in group 2, show all variables as significant to the economic variable, but the correlation is negative for non-life insurance and life insurance variables. In group 3, including Croatia, we have four significant variables and two insignificant variables. In group 4, which includes less developed countries, it seems that they tend to value less private credit, non-life, and life insurance or less attention to the quality of life. Only one variable (stock market capitalization) has a negative correlation. The correlation between financial development and economic development is stronger in countries that are part of cluster 2. Hence, the group of all cluster countries seems to have a significant correlation with all variables, while the stock market capitalization variable is insignificant, so we do not take it into account, even though it is involved in the model. Compared to the findings of Deltuvait (2014), where all financial variables are significant for the period 2000-2011 (all EU countries), our findings for the period 2011-2020, with exactly the same financial and economic variables, have resulted in the stock market capitalization being insignificant.

Adopting the formula for multiple regression:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e \quad (1)$$

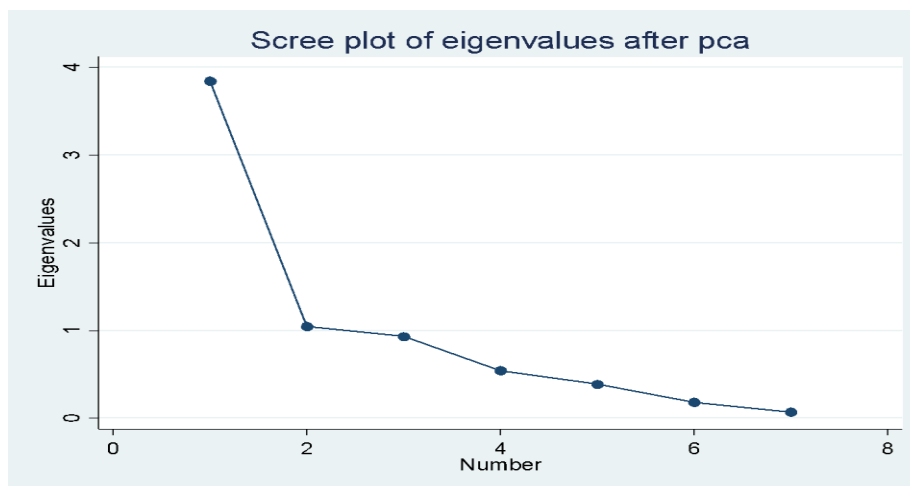
We have:

$$\begin{aligned} \ln GDPcapita = & 8.6057 + 0.1751622 * \ln PrivateCredits - 0.0230144 * \ln StockMarketCapit. \\ & + 0.4565805 * \ln Non/lifeInsurance + 0.0961354 * \ln LifeInsurance - 0.0338739 * \\ & \ln PensionFundAssets + 0.24000991 * \ln MutualFundAssets + e \end{aligned} \quad (2)$$

Financial variables have a normal logical flow and it can be said that variables: Private credits, Non/life, life insurance, and mutual fund assets positively affect the increase of GDP per capita. In contrast, pension funds negatively affect the increase of GDP per capita, while the stock market does not affect it at all.

4.4. Scree Plot after PCA

Graph 1. Economic and Financial variables



From Scree-Plot after Eigenvalues, all components are included. Components stand chronologically. A break between the private loans-stock market and non-life insurance can be noticed. It shows the insignificance of stock market capitalization. The two reasons why the stock market has turned out to be insignificant in our situation are the lack of data for this variable during the investigation and the impact of less developed countries, especially the impact of cluster 3, where it is seen that there is insignificance between stock market capitalization and GDP per capita, has also affected the overall value of this variable at the EU level. Current empirical results show that private loans, Non-life/Life insurance, fund assets, and mutual fund assets as well, all to GDP, have an impact on GDP per capita at the level of all EU countries, while stock market capitalization has no significance.

5. Conclusion

The main idea of the work lies precisely in the relationship between financial and economic variables. Addressing the findings of a considerable number of authors and our own, we have found that there is a relationship between economic and financial variables, but this relationship varies according to the level of the country's development. Therefore, economic and financial variables have a positive relationship, but this relationship is stronger in more developed countries, while in less developed countries the relationship is weaker. So the clarity of the link depends on the levels of economic and financial development across classes. According to the findings through statistical analysis, it is clearly observed that the countries with the highest GDP per capita, precisely the countries belonging to the second group, are significant in all variables. While countries with a lower GDP per capita in the ratio of economic-financial variables are seen to have insignificance in certain cases. Based on our findings and their significance, we can say that economic variables are related to financial variables. At the general level of the 28 EU countries, we see only one insignificant variable, and this turns out to be the result of the lack of relevant data for the years 2011-2020 for the capitalization of the stock market, as well as being influenced by the insignificance of the same variable transmitted by less developed countries. According to the multiple regression, we see in a mathematical way the flow of the included variables, and also, through the Scree-Plot we visually see how they are related to each other.

While the results show that the relationship between economic development variables and financial development variables remains, this relationship varies according to the levels (clusters) of economic development or GDP per capita.

Limitations: Lack of access to sufficient data related to financial and economic issues. Likewise, the application of more complicated statistical methods can also be considered a recommendation for future studies.

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Causes of High Inflation in EU Countries in 2021

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Abstract

Inflation is one of the major concerns of economists in the aftermath of the Great Lockdown and amid the war in Ukraine in 2022. However, this issue started to rise even before the pandemic. Inflation at this moment is the highest in the last 40 years, CPI index in EU countries is 7.9% and asset inflation is higher, it is approximately 30%. Earlier, at the end of 2021, the monetary authority claimed that inflation is transient but today we know that it is a reality. In this paper, we research the driving factors of inflation rates in EU member states that have emerged after several decades of overall price stability. We constructed a robust model using the consumer price index as a dependent variable, and introduced multiple regression to explain the drivers of inflation and whether blame can be put on monetary expansion or on the supply side problems and bottlenecks that emerged in the COVID-19 pandemic. A limited model suggests that causes of inflation in EU should indeed be searched for in the monetary policy and money supply increase, as well as trade and production problems caused by the pandemic.

Keywords: inflation, interest rate, money supply, aggregate demand, post covid economy

1. INTRODUCTION

Inflation has emerged as a key economic issue globally again in 2022, after a decades-long period of controlled inflation. This problem is present across all economies: developed, developing and undeveloped, with some of them even approaching a state of hyperinflation. Developed economies also face very high annual inflation digits, with United States achieving a 6.3% core inflation rate in April 2022⁴, which is well above the 2% goal. In the Eurozone the situation is even more dramatic, with some member states having double-digit inflation rates, and the overall inflation rate being 8.1%⁵. The issue of inflation triggered a response by central banks, including the European Central Bank (ECB from hereon) whose main policy tool is interest rates. Major central banks, such as FED, the ECB, Bank of England, etc. have all hiked interest rates to combat persistent inflation that emerged after the easing of COVID-19 restrictions. The US FED raised the interest rate several times, which prompted fears of a

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⁴ Source: <https://www.federalreserve.gov/newsevents/testimony/powell20220622a.htm>

⁵ Source: <https://ec.europa.eu/eurostat/documents/2995521/14644605/2-17062022-AP-EN.pdf/1491c8b5-35e4-cdec-b02a-101a14a912ad?t=1655388297694>

recession in the global economy that was already shaken by the effects of the COVID-19 pandemic. Along with the ongoing inflation and pandemic, came the war in Ukraine which further deepened the inflation problem by causing energy price hikes and supply disruptions, together with other economic and political limitations.

A major question is what has caused inflation, which can be observed in two periods: before the war in Ukraine and after (or during) it. Inflation issue was already present before the conflict in Ukraine that made the situation worse, by causing problems mainly on the energy and commodities market which pushed prices up on other markets. A key debate among economists was whether inflation before the conflict was caused by supply disruptions due to COVID-19 or on the side of demand, mainly due to policy responses by fiscal and monetary authorities who increased money supply in the market.

Our paper aims to examine what are the causes of inflation in the Eurozone before the war in Ukraine. We want to provide an answer to whether the supply or demand side is the problem, or maybe both. We use data from the ECB and perform a cross section analysis on it. The paper is structured as follows: we first provide an overview of current literature, then explain the data and methods, followed by the results of the analysis and a discussion part in which we interpret the results from the prior part.

As the issue of inflation in the EU after the pandemic is a new and unresearched topic, there is not much academic work on it that was published. Most of it is in the form of working papers and newspaper articles whose objectivity can be questioned. In the following lines, we will present some of the most important works on this topic.

When we talk about inflation we must give base definition famous economists “inflation is always and everywhere a monetary phenomenon resulting from and accompanied by a rise in the quantity of money relative to output (Friedman, 1966).”

Matthews & Ong researched whether inflation is caused by deteriorating inflation expectations or excessive monetary growth (2022). These authors conclude that M4 growth is a much more important driver of inflation than inflation expectations, although they are not insignificant (Matthews and Ong, 2022). However, their analysis is for England. Bordo and Levy (2020) survey the historical record for over two centuries on the connection between expansionary fiscal policy and inflation. They find that the relationship between fiscal deficits and inflation generally holds in wartime when fiscally stressed governments resorted to the inflation tax. Dräger, Grundler and Potrafke (2022) had unique survey on inflation expectations among 145 tenured economics professors in Germany and exploit the Russian conflict in Ukraine as a natural experiment to identify the effect of a global political shock on expectations about national inflation rates. They find that the Russian invasion increased short-run inflation expectations for 2022 by 0.75 percentage points. Treatment effects are smaller regarding mid-term expectations for 2023 (0.47 percentage points) and are close to zero for longer periods. Comparing the results to a representative sample of households, they find that the treatment effects are twice as large for experts than for households.

Also great work what is causes higher inflation made Reis (2022). He think that 4 reasons for something that : misdiagnosis of the nature of shocks during, expectation that will be temporary, over-reliance on the credibility central banks earned in the past and revision of strategy that made central banks tolerant of higher inflation because of the trend fall in the return on government bonds, even though the return on private capital stayed high.

The famous economists Paul de Grauwe (2021) argue that the short answer is that it has everything to do with the economic recovery from the pandemic that hit the world in 2020.

This recovery has been made possible by two things: the release of excess savings accumulated during 2020 and strong expansionary fiscal and monetary policies, especially in the US, where the mix of fiscal and monetary policy has been extraordinarily expansionary. Grawe is calculated that every 1% decline in GDP, the US fiscal authorities allowed the budget deficit to increase by almost 2% of GDP. On other side, every 1% decline in GDP in the euro zone, fiscal authorities allowed the budget deficit to increase by less than 1% of GDP. The fact is that the QE programme of the ECB has led to a surge in the money stock in the euro zone. This in the end will lead to a surge in inflation, according to this monetarist analysis.

Abuseridze et al. (2022) research problems of the European economy, where they identify inflation as one of the key problems. However, their paper deals with political instability and its effects on economic performance. It focuses mainly on the effects of the war in Ukraine, which is not in our scope.

Kilian and Zhou (2022) examine the effects of energy price shocks on inflation. They conclude that there is no significant evidence that these prices have moved the levels of general prices significantly. They also find that these price shocks do not change the inflation expectations of the population.

2. DATA AND METHODS

In this paper, we use data published by the ECB and the Eurostat, as well as the Organisation for Economic Co-operation and Development (OECD from hereon) and the International Monetary Fund (IMF from hereon) to estimate the causes of inflation in the EU countries in 2021. At the time of writing this paper, relevant data for this year is fully available for EU member states. We estimate these causes with multiple linear regression, using robust standard errors, to correct the limitations of the small sample size ($n=27$).

Our dependent variable is the annual inflation rate calculated and published by Eurostat. Data is harmonized by the publisher and calculated using the same methodology since all countries from the sample comply with Eurostat's statistical rules. Inflation in the EU is calculated using the Harmonised index of consumer prices (HICP from hereon) which is the main inflation measurement tool in the EU (Eurostat, 2021).

For the dependent variables we chose the following:

1. 2021 GDP GROWTH RATE
2. 2021 FINAL CONSUMPTION GROWTH
3. 2020 GOV SPEND GROWTH RATE
4. 2021 GOV SPENDING GROWTH RATE
5. 2020-2019 IMPORTS AS A % OF GDP (PERCENTAGE POINTS)
6. 2021-2020 IMPORTS AS A % OF GDP (PERCENTAGE POINTS)
7. % CHANGE OF ELECTRICITY PRICES FOR HOUSEHOLDS
8. % CHANGE OF ELECTRICITY PRICES FOR NON-HOUSEHOLDS
9. % CHANGE IN LABOR COSTS 2021 Q4 VS 2020 Q4

Presented in table 1 below is the basic descriptive statistics of given variables.

Table 1. Descriptive statistics of variables

Variable	Mean	Standard Error	Median	Standard Deviation	Kurtosis	Skewness	Minimum	Maximum
HICP 2021	109.333704	0.868396	109.300000	4.512317	-0.635278	0.218010	101.750000	119.040000
2021 GDP GROWTH RATE	0.061326	0.004803	0.055123	0.024960	1.856551	1.197410	0.026270	0.135882
2021 FINAL CONSUMPTION GROWTH	0.082764	0.004667	0.081510	0.024252	-0.337165	0.464901	0.042378	0.138391
2020 GOV SPEND GROWTH RATE	0.119504	0.008805	0.112405	0.045752	1.289733	0.991643	0.051381	0.251840
2021 GOV SPENDING GROWTH RATE	0.053459	0.006543	0.047460	0.033998	3.209106	1.666031	0.008155	0.159845
2020-2019 IMPORTS AS A % OF GDP (PERCENTAGE POINTS)	-3.085185185	0.71787207	-3	3.730199387	5.920699354	1.645437557	-10	10.3
2021-2020 IMPORTS AS A % OF GDP (PERCENTAGE POINTS)	4.518518519	1.113975415	5	5.788386054	11.25647278	-2.857482473	-19.4	12
% CHANGE OF ELECTRICITY PRICES FOR HOUSEHOLDS	0.169092593	0.040791955	0.1106	0.211961214	0.608244685	1.237012432	-0.0778	0.6792
% CHANGE OF ELECTRICITY PRICES FOR NON-HOUSEHOLDS	0.341407407	0.073291752	0.2593	0.380835117	2.270391873	1.526461887	-0.1263	1.5006
% CHANGE IN LABOR COSTS 2021 Q4 VS 2020 Q4	0.050222222	0.008363081	0.04	0.043455843	0.052408134	0.485534562	-0.039	0.153

Countries that are included in the analysis are the 27 EU member countries: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta,

Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. This is also the key limitation as there are only 27 countries in the sample. Another limitation lies in the fact that there was an exogenous shock i. e. the COVID-19 pandemic that affected the economy and inflation rates, whose effects cannot be isolated to estimate whether inflation was a consequence of economic processes that would occur even without the pandemic.

3. RESULTS AND DISCUSSION

Regression analysis was performed using the data explained in the previous section. Robust standard errors were used and a 95% confidence interval. Full results are given in the table on the next page. The reported adjusted R squared is equal to 0,326656578. However, the joint significance F test shows that for 95% significance the model is invalid, as the p-value of the F test is higher than 0.05 (0.057258976). Furthermore, none of the estimated betas for the dependent variables has a t-statistic that is significantly over 2, and only the labor cost growth rate has a t-statistic near 2, which amounts to 1.977 and the p-value is 0.06.

This analysis shows that a surge in demand and consumption that followed the relaxation of COVID-19 containment measures cannot be seen as an important cause of the inflation in the European Union. Furthermore, in 2021 electricity price increases also did not significantly affect national inflation levels, despite the fact that prices rose in many member states. Additionally, the increase in government spending caused by the pandemic does also not determine the level of HICP in EU member states, nor does the fall of the level of imports relative to GDP, which was caused by trade barriers posed by the pandemic.

There are two causes of inflation that are mentioned in the relevant literature and that were not included in the model, due to data availability problems and measurement problems. The first is the money supply and its increase in every member country as ECB publishes data for the Eurozone as a whole. The second is supply bottlenecks that are difficult to quantify, i.e. there are measurement issues for this occurrence to be used as a dependent variable. However, both would be very useful in a model that explains HICP levels in EU countries, especially the level of M1 and other monetary aggregates.

This is the key limitation of the model, apart from the sample size. It would be especially meaningful to include these occurrences as the explanatory variables, but, money supply levels were only available to us at the Eurozone level, making it possible to estimate inflation levels on a different basis, not the EU member states one.

Table 2. regression output

Regression Statistics									
Multiple R	0,748155728								
R Square	0,559736993								
Adjusted R Square	0,326656578								
Standard Error	3,70289515								
Observations	27								

ANOVA									
	df	SS	MS	F	Significance F				
Regression	9	296,3170563	32,92411737	2,401475868	0,057258976				
Residual	17	233,0691733	13,70995137						
Total	26	529,3862296							

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	104,995609	4,336357245	24,21286231	1,28941E-14	95,84670683	114,144535	95,84670683	114,144535
2021 GDP GROWTH RATE	-18,52407197	54,16869327	-0,341970073	0,73654519	-132,8100249	95,76188092	-132,8100249	95,76188092
2021 FINAL CONSUMPTION GROWTH	16,87459129	45,62319324	0,368669148	0,716047409	-79,38181648	113,1309991	-79,38181648	113,1309991
2020 GOV SPENDING GROWTH RATE	6,798689777	24,73321706	0,274880933	0,786720477	-45,38836688	58,98121643	-45,38836688	58,98121643
2021 GOV SPENDING GROWTH RATE	-6,060303345	27,32457991	-0,221789447	0,827120199	-63,71012644	51,58951975	-63,71012644	51,58951975
2020-2019 IMPORTS AS A % OF GDP (PERCENTAGE POINTS)	-0,057348625	0,240503851	-0,239262799	0,813762602	-0,564962397	0,449875148	-0,564962397	0,449875148
2021-2020 IMPORTS AS A % OF GDP (PERCENTAGE POINTS)	0,236627731	0,19832811	1,199112417	0,24921159	-0,181808005	0,655063467	-0,181808005	0,655063467
% CHANGE OF ELECTRICITY PRICES FOR HOUSEHOLDS	5,830144043	5,191501094	1,123017024	0,277040472	-5,122965711	16,7832538	-5,122965711	16,7832538
% CHANGE OF ELECTRICITY PRICES FOR NON-HOUSEHOLDS	-4,017043528	2,911459558	-1,3797353	0,185546988	-10,15968626	2,125599203	-10,15968626	2,125599203
% CHANGE IN LABOR COSTS 2021 Q4 VS 2020 Q4	54,32833118	27,46749569	1,977913523	0,064380866	-3,623019117	112,2796815	-3,623019117	112,2796815

4. CONCLUSION

Inflation in the EU remains a significant problem that has intensified with the war in Ukraine and the consequences it had on European economies. Our model used several explanatory variables to test whether they are significant determinants of inflation levels in the EU. However, the regression analysis showed that these economic indicators are not significant in determining levels of inflation in EU member countries, measured by the Harmonised Index of Consumer Prices.

Two important variables were omitted due to data availability and measurement issues and these are the money supply (or its increase) in every country observed, as well as the effect of trade and production bottlenecks that appeared in the pandemic, however, these are almost impossible to assess on a country level. Yet, many authors mention exactly these occurrences as key to price rise in Europe. Implicitly, since we showed that some other variables that can be captured with the model are not significant, despite the fact that these are often mentioned as inflation causes, we can say that it is very possible that money supply increase and trade and production bottlenecks are indeed keys to high inflation levels in the EU.

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Economic Development of Tirana, Albania

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Abstract

On July 2014, the Government of Albania started the implementation of the Administrative and Territorial Reform. This reform reduced the number of local administrative units from 373 to 61 municipalities and it was considered as a helpful means in the implementation of new reforms addressed by the European Union. The main objectives of this reform were to strengthen the institutional and administrative capacities at local level, to increase the efficiency of local service delivery (in terms of quality, coverage, accessibility and inclusiveness) and to enhance local democracy through fostering citizen-oriented governance and participatory decision-making. After this reform, the Municipality of Tirana, is facing many problems in terms of sustainable economic development, business climate improvement, infrastructure development (in order to narrow the gap between urban and rural areas in Tirana), etc. This research paper will analyse the relationship between infrastructure development and economic growth in the Municipality of Tirana, the possible factors that impact the interdependence between these two variables (investments in roads, agriculture, street light system, public transport service, etc.) and it will focus on a comparison of economic and infrastructure development before and after the implementation of the Administrative and Territorial Reform. The research hypothesis is: “There is a relationship between investments in infrastructure and economic growth”. This research is based on primary and secondary resources, which were obtained online and from the Office of Information in the municipality of Tirana. In the focus of the study is the period of time 2013-2020. After data were gathered, compared and analysed it was found that there is a relationship between infrastructure investments and economic development of the municipality of Tirana.

Keywords: economic development, infrastructure, transport, urban area, rural area.

1. Introduction

This paper will shed light on the relationship between infrastructure development and economic growth in the case of the Municipality of Tirana. Infrastructure development is defined as “an instrumental component in encouraging country’s economic growth and development” (Adhikary and Khatun, 2017:1). The first part of this research paper will be focused on short history of Tirana. Then, the paper will explain the impact of the infrastructure in economic growth by concentrating in selective and empirical literature review. Data will be presented, compared and analysed in the “Findings” section. It will shed light on data related with *two variables* (infrastructure investments, economic growth) and *infrastructure indicators* into which the infrastructure investments variable is operationalized (number of paved roads; number of reconstructing roads; money invested in reconstructing the existing, *investments in*

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agriculture, in street light system, in public transport service, etc.). Lastly, Conclusions and Recommendation will be provided.

Albania (in general) and Tirana (in particular) have inherited an undeveloped infrastructure from the monism time (before 1990). This situation is inconvenient for new requests of market and for the economic development. Consequently, investments in infrastructure are a necessity in the Albanian capital. Adding paved roads, reconstructing existing roads with new standards, investing in the modernization of public transportation lines (rural and urban area), increasing the number of electric vehicles, etc. are considered as top-priorities. The main goal of these investments is to improve and to grow the regional economy of Tirana, which represents the biggest and the most important city of Albania. It is considered as the engine of the economic development of the country. The insufficient infrastructure has negatively impacted investments in terms of opening new jobs, tourism development, agriculture production, improving service area performance, etc.

Many economic experts think that there is a positive relationship between infrastructure development and economic growth. Investments in infrastructure affects directly the economic development and vice versa. According to them, seems like the only way to raise per capita income is to increase production capacity. "...this need not refer only with the provision of plant and machinery, but also with provision roads, railways, power lines, water pipes, schools, hospitals, houses and even "incentive" consumer goods such as consumer durables, all of which can contribute to increased productivity and higher living standards" (Srinivasu and Srinivasa, 2013:81). Albania needs foreign and private investments because it is dealing with a liquidity crisis. However, it is not possible to speak about investments without improving the existing infrastructure. Both local and central government play a crucial role in infrastructure investments, but it is really hard defining each one's sphere of competences. Central government deals with most of the problems mentioned above, while local government is responsible for designing strategic economic development plans in a specific region and to invest in its regional infrastructure.

1.1. The municipality of Tirana in our days

During the dictatorship regime, infrastructure and economic development of Albania was directed by party-state. Tirana, as the biggest and the most important city of the country, had priorities in investments. It had more public companies than other Albanian cities and this indicator made Tirana the most important economic center of the country. At the same time, all public institutions were concentrated in Tirana, and its infrastructure was better comparing with other cities. After 90's (the fall of communism) until today, there are implemented some administrative reforms, worth mentioning the Administrative-Territorial Division Reform of Albania, which started its implementation in 2014. Until 2015, there were in effect 11 municipal units in Tirana, while following the reform, this number were joined by 13 more divisions, reaching to 24 administrative units. On January 1, 2022, Tirana had 912,190 inhabitants (32.9% of population in national-level) and it included five municipalities as follows: Tirana, Kamza, Vora, Kavaja and Rrogozhina.

The economic development of Tirana is not just a competence of the central government, but it is a competence of the local government as well. This competence was imposed by different laws and by the Administrative-Territorial Division Reform. According to the Law No. 8652, date 31.07.2000 "On the Organization and Functioning of Local Government (updated)", Local Government is responsible for the function of local units and economic regional development including: "... the preparation of economic development programs..." (Albanian Parliament, 2000:6). This role was re-enforced also by the Law No. 139, date 17.12.2015 "On local self-

government”: “... the municipalities are responsible for designing the strategic development plan and for local economic development programs...” (Albanian Parliament, 2015:12). Furthermore, referring to the Administrative-Territorial Reform more competences for local units were given from respective ministries to restructured municipalities.

2. Literature review

2.1. Infrastructure, economy and Tirana as objects of study

Before explaining the contribution that infrastructure has in the economic development of Tirana, it is necessary to define some important concepts on these issues. According to, Srinivasu and Srinivasa “Infrastructure, in general, defines as a set of facilities through which goods and services are provided to the public. Its installations do not produce goods and services directly but provide inputs for all other socio-economic activities. Infrastructure is the stock of basic facilities and capital equipment needed for the functioning of a country or area; the term refers collectively to the roads, bridges, rail lines, and similar public works that are required for an industrial economy, or a portion of it, to function” (Srinivasu and Srinivasa, 2013:82). Infrastructure and economy have a symbiotic relation between them, however in this research will be analyzed the impact of infrastructure in economic growth. Referring to, National Council on Public Works Improvement (in the USA), “The quality of the national’s infrastructure is a critical index of its economic vitality. Reliable transportation, clean water, and safe deposit of wastes are basic elements of civilized society and a productive economy. Their absence or failure introduces a major obstacle to growth and competitiveness” (Cited by Aschauer, 1989:31). David Alan Aschauer was a pioneer in econometric analysis, and he tried to correlate the impact of investment in public infrastructure, with economic growth in the United States in the period 1949 -1985.

Many analysts highlight the fact that exist a relationship between development infrastructure and economic growth: “Countries with adequate and efficient supply of infrastructure services would have higher productivity growth than countries with lower and inefficient infrastructure services. (Ismail and Mahyideen 2015:10). Ncube and Lufumpa are two other authors, who have analyzed infrastructure investments in in Africa. They emphasize also the significant impact that infrastructure has on economic development. “...infrastructure is also an important driver of sustainable development” (2017:1). The development of road network creates new possibility for businesses to connect with the market and open new area for capital investment in terms of creating new jobs. Peter and Adewale (2017) have studied the link between infrastructure development and economic growth in Nigeria, using data from 1981 to 2014. They found that “infrastructural development on road and communication show a positive relationship with Nigerian economic growth” (page 470). In the same logic line is even the World Bank, which emphasizes that “infrastructure helps to determine the success of manufacturing and agricultural activities. Investment in infrastructure improves lives and help to reduce poverty” (Cited by Yilmaz and Çetin, 2018:40).

During the study of infrastructure in Asia, Ismail and Mahyideen, summarized that “The quality of infrastructure is as important as the quantity; any inadequate or poorly performing infrastructure may create obstacles for economies to meet their full growth potential. Results confirm that the quantity of infrastructure is important to enhance economic growth; however, having quality infrastructure benefits more in producing productive and efficient output, thus has greater impacts on sustainability in economic growth” (2015:26).

According to Yılmaz and Çetin, infrastructure contributes to economic growth through various channels, like: “... (i) The infrastructure has a positive impact on private investment; ... (ii) lowers better infrastructure lowers transaction costs, [that]... would make it easier penetrating to the new markets. As the market participants rise, the effectiveness of the market is improved and the economy grows as a result; ... (iii) telecommunication infrastructure helps to reduce the costs of acquiring information; (iv) infrastructure promotes market integration and helps to raise domestic and international trade ... [and] has an impact on the size of the market ... [because] transportation costs are central in the determination of the location and scale of economic activity; (v) infrastructure also helps to improve other factors of productions’ contribution to growth; (vi) location, in the better infrastructure conditions, it is less costly to adjust firm location or sector (2017:42, 43). Some authors explain that the impact that infrastructure has on the economic development depends on the economic level of the country. Its impact is higher in case of low-income country. “... Capital is lower in this countries, infrastructure improvements’ impact on economic growth is higher. ... For example, the rate of return of building a factory would be higher even if the country had already provided the needed infrastructure capital” (Yılmaz & Çetin, 2018:42). In our case, Albania is a Developing country with low income, following the same logic; infrastructure’s impact can be higher.

Referring to the Global Competitiveness Report 2016 – 2017, Albanian was in the 80-th position in economics rankings among 138 countries (World Economic Forum [WEF], 2016: xiii) and in the 91-st position in infrastructure ranking (WEF, 2019:91). The same Report indicated that, in terms of inadequate supply of infrastructure, Albania was on top ten (rank 8-th) countries and showed problematic factors for doing business. Referring to the quality of overall infrastructure, Albania was ranked 68-th among 138 countries and referring to the quality of roads, it was ranked 56-th out of 138 countries (page 95). International Monetary Fund (IMF), in its report on Albania, has emphasized the role that infrastructure has in other sectors, and its impact in strengthening Albanian international investment position, “the authorities should complete key infrastructure projects to reduce transportation cost and address energy sector reliability, increase domestic saving; improve governance and the role of the law; and raise labor market efficiency by reducing skills shortage (International Monetary Fund [IMF], 2014:8). The International Monetary Fund (IMF) indicated also that “deficiencies in infrastructure, including roads, railways, telecommunications, ports and airports constrain trade and connectivity with neighboring countries. This is reflected in the fact that Albania had an infrastructure score of 3.6 (WEF infrastructure rankings), which is below the average (4.6) compared with other European New Member States” (2017:10).

Based on the IMF, infrastructure plays a crucial in Albanian economy because a developed infrastructure will reduce the transportation cost, the labor cost, the production cost, and it will open new perspectives on terms of developing new businesses and industries. The IMF Country Report indicated that “the key growth [of investment climate] obstacles are rule of law, land property rights, and infrastructure gaps” (2017:21). Infrastructure is important not only for the domestic economy but for import-exports as well. Being responsible for this situation, political actors in Albania and Balkans are paying more attention to infrastructure investments and geostrategic cooperation. According to the European Union: “The “Western Balkans Six” (Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, Serbia and North Macedonia) have made the Connectivity agenda one of their highest priorities, with a special emphasis on the preparation and financing of concrete regional infrastructure investment projects, ... All these

* This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

measures aim ..., as well as for further development of the overall economy to the benefit of both the EU and the region” (2018, paragraph 5).

2.2. Tirana as the capital of Albania

The Independence of Albania from the Ottoman Empire (on November 28, 1912), was followed by the establishment of the Permanent Government and the public governance reorganization in two levels, central and local level. According to the Albanian Administrative Law of that period of time (*Kanuni i Pertashëm i administratës civile të Shqipërisë*), Albania was divided in some administrative units as follows: “Albania is divided into prefectures, which are divided into sub-prefecture and the sub-prefectures were divided into regions...” (Permanent Government of Vlora, 1913:1). The number of prefectures was eight and Tirana was a sub-prefecture, part of the prefecture of Durrës (another Albanian city). During 1920 – 1945, the Albanian administrative territory was divided into other several divisions. According to the "Municipal Organic Law" (adopted in 1921) and the "Civil Code" (adopted in February 1928), the administrative divisions were: municipality, village, commune, sub-prefecture, and prefecture.

Tirana was considered unimportant until the 20-th century, and then the Congress of Lushnje (1920) proclaimed it as the Albanian temporary capital. In 1925, the Constitutional Assemble proclaimed Tirana as the capital of Albania, and it was the only administrative unit of that period of time. This fact was written even in the Albanian Royal Statute: “The capital of Albania is Tirana” (Constitutional Assemble, 1928:1). After the Second World War and during the communist regime, Tirana remained the capital and the most important administrative unit of Albania, even though some changes took place in terms of territorial administrative division. Nowadays, Tirana continues to be the biggest administrative unit of Albania and one of the 61 municipalities. The Administrative-Territorial Division of 2014 highlighted the same fact (Parliament of Albania, 2014).

3. Methodology

This paper will analyze the relation between infrastructure and economic growth. It is based on primary resources (interviews) and secondary resources collected by public and private institutions. This is an empirical research and provides a mixture of qualitative and quantitative research methods. After data was collected, from online resources and from the Information Office of the Municipality of Tirana, a discussion with the Deputy Major of Municipality took place. Further, data was compared, analyzed, and findings were provided. In the focus of this study is the period of time before and after the 2014-Territorial and Administrative Reform in Albania (the period between 2013-2020). This period coincides with political changes in terms of local government. From June 2009 until June 2013, the Major of the Municipality of Tirana was the representative of Democratic Party. After the Municipality Election of June 2013, the Major became the candidate of Socialist Part. Infrastructure development will be the independent variable and economic growth will be the dependent variable. There is bivariate statistic because two variables will be analysed at the same time. In order to measure the role that infrastructure plays in economic growth, variables will be operationalized into some indicators of infrastructure like: (i) number of paved roads; (ii) reconstruction of the existing roads; (iii) moneys invested in reconstructing existing roads; (iv) urban and rural transport lines used daily and their addition during the period of analyses; (v) number of urban and rural vehicles used daily and their addition during the period of analyses, **(investments in agriculture, street light system, etc.)**.

3.1. Objectives of the paper

The objectives of the paper are:

- a) To present a historical development of municipality of Tirana;
- b) To analyze the impact of infrastructure in economic growth of this municipality.

3.2. Contribution

Despite the fact that this research offers a picture of Tirana in terms of history, infrastructure development, economy, it aims to provide empirical findings on the impact that infrastructure has in economic development of Tirana. Also, it aims to open a new perspective in studying the role that economic development plays in improving lives of Albanian citizens.

3.2. Research question and Hypothesis

Research question: Is there any relationship between investment in infrastructure and economic development in municipality of Tirana?

4. Findings

4.1. The Municipality of Tirana and the 2014 Administrative-Territorial Reform

In the last two decades, Tirana has undergone significant changes in administration. At the beginning of the new millennium, Tirana was governed by the Law No. 8654, dated 31.07.2000: "On the organization and functioning of the Municipality of Tirana". Further, changes to the legal basis left no long-term imprint on Tirana's administration. A radical change was brought about by the 2014 Administrative-Territorial Reform, which was characterized by "the creation of larger municipalities and aimed at enhancing public sector performance" (Supreme State Audit, 2018: 33). Despite the decentralization of public service, its goal was also to "Improve the quality of infrastructure; Ensure sustainable local economic development" (Minister for Local Affairs, 2015: 27).

During the Implementation of the Reform, Tirana faced two challenges: "firstly, the new unknown territory; secondly, the fact that federal fund allocated was not commensurate with the budget that municipalities really needed to fulfil its function by respecting standards" (The State Supreme Audit Institution, 2018: 36). However, the Municipality of Tirana has been successful in finding alternative funds to support its projects, like the Memorandum of Understanding between the Municipality of Tirana and the European Bank for Reconstruction and Development (EBRD), through which both parties "have agreed to work together to upgrade municipal infrastructure and to develop Albanian capital in a sustainable way. A Memorandum of Understanding was signed... [and] the parties list strategic areas of cooperation such as urban transport, urban roads infrastructure, water and wastewater services, etc." (European Bank for Reconstruction and Development, paragraphs 1, 2).

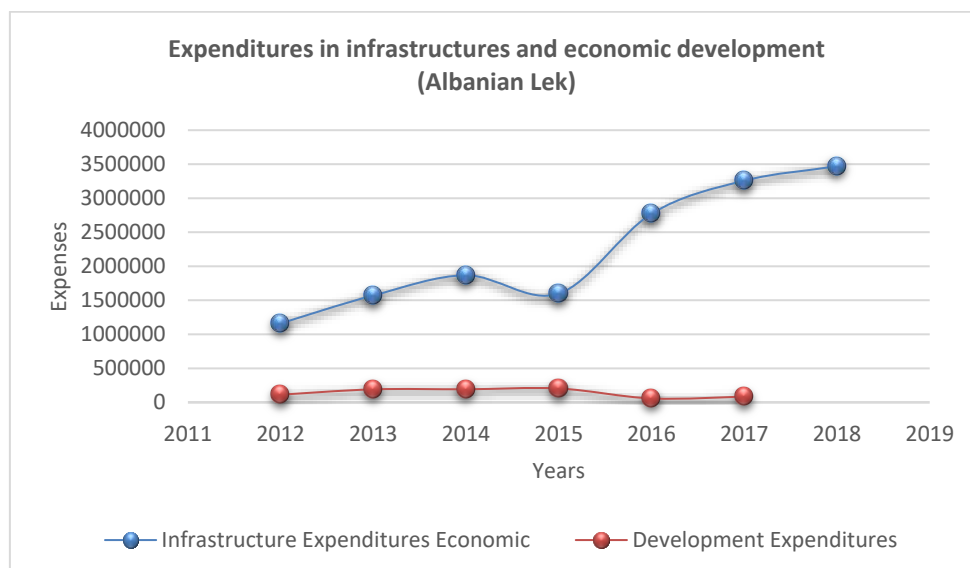
From the publications of the Municipality of Tirana and during the conversation with one of the four Deputy Mayors of Tirana, he declared that Tirana seems like a construction site, and that the Municipality of Tirana is performing very well in changing the look of the city. The Deputy mentioned that the Municipality has executed over 90% of its projects. In the last seven years, the municipality is governed by the Socialist leader. During this period, there are implemented many more projects and there are allocated more federal funding than during the Democrats' rule (2011-2015). However, it is worth to emphasize that: (i) during 2013-2015,

there were Democrats in the municipal government, while Socialists in central government and they did not cooperate together but they blamed each other for the situation; (ii) during this period it was noticed an economic and functional isolation of the Tirana municipality from the central government. In 2015, the Socialist leader won the Municipal Elections, while the country was governed by the Socialist Party. This situation was accompanied, by strong political and economic support for the Municipality's projects. At the same time, the merit of working with the Socialist-led City Hall at greater rates also refers to administrative leadership, which has proven to be more creative, more innovative, and more engaged than their former Democratic colleagues.

However, the State Supreme Audit on the performance of the Municipality of Tirana stated: “poor performance in realizing public investments, realizing the investment item in the amount of 49 % foreseen” (State Supreme Audit, 2018: 68). Likewise, from the comparative data between the plan and actual expenditures incurred by the Municipality of Tirana for 2015, 2016 and 2017, the State Supreme Audit concludes that: “the realization of the investment voice [by the Municipality of Tirana] is almost the same with the amount spent from the municipal budget on wages and social security, which speaks of an unfair distribution and not in favour of expenditures which would also promote economic growth” (State Supreme Audit, 2018: 69).

Referring to the analysis of expenditures, made by the Municipality of Tirana, in the period 2012-2018, it is noticed that infrastructure investments have always been increasing. By comparing infrastructure expenditures in 2012 with those in 2018, it can be said that investments in Road Management and Public Transport have tripled. While making comparability before and after territorial reform we highlight the same fact. By the end of 2018 investments in Road Management and public transport are about 3 times higher. The graph below indicates that in the period of time 2012-2018, more money is allocated on infrastructure than on economic development. By this way it can be said that infrastructure investment is considered as a priority and its impact is bigger than the impact of economic development on infrastructure.

Figure 1: Expenditures in infrastructures and economic development



4.2. Infrastructure Investment

- a) **Roads:** After the Administrative-Territorial Reform, many roads are constructed reconstructed and maintained both in urban and rural areas. In the first six months of 2018, 12 new roads were built in urban and rural areas (Table 1) or 3 roads more than one year ago. Another important and positive element is the fact that the Municipality of Tirana carries out the reconstruction of the roads, not only on the main roads, but also on the pallet blocks. In 2017, 116,180 m² of roads were constructed in residential blocks because investments in this direction were considered as an important factor in improving the environment and the living conditions of the citizens.
- b) **Street light system:** The development of a street light system in the constructed roads brings a multiple positive effect. First, it increases road safety, meets standards, improves the quality of roads, but also has an impact on the economy of the area. Street lighting enables small businesses to work longer in the evening, without limiting their working hours to natural lighting (whether night or day). This brings in more income for them, increases the employment opportunity, as working 10-12 hours a day, the small business would need 2 employees, and this would also increase formal employment. However, despite the significant developments of the Municipality of Tirana, from data analyses, it was found a significant difference between urban and rural roads. Roads are asphalted in urban areas, while in those are levelled in rural. Table 1 indicates also that, in the first six months of 2019, the surface of paved roads was 12 times larger than the level of levelled rural roads.

Table 1: The infrastructure investment in the Municipality of Tirana

No.	Description	Units	Years			Until July
			2016	2017	2018	2019
1	Asphalt paving - Urban roads	m ²	43,076	56,246	54,158	58,803
2	Excavations, Scarification, Levels	m ²	-	85	12,363	4,597
3	Reconstructed roads - Urban and Rural	No.	36	20	12*	-
4	Reconstructed roads - Urban and Rural	Km	22	13,4	6,3*	-
5	Lighting columns located on the reconstructed roads	No.	575	148	221*	-
6	New roads – Rural & Urban	No.	-	9	12*	-
7	New roads – Rural & Urban	Km	-	5.80	4.5*	-
8	Lighting columns located on the reconstructed roads	No.	-	93	573*	-
9	Reconstructed roads - Reconstructed residential blocks	m ²	166,468	116,180	-	-
10	Lighting columns located on the reconstructed roads	No.	1,621	878	555*	-

* For the first six months; ** Until June

Source: Tirana Municipality

The infrastructure expenditures are higher in the city of Tirana than in the territories of the former municipalities or in the peripheral administrative units. The municipality of Tirana is trying to reduce this investment gap, but it needs time. The State Supreme Audit Institution reaches the same conclusion in the Performance Audit Report (the context of administrative-territorial reform for the Municipality of Tirana). From the data in Table 1, it can be noticed that the costs of road infrastructure have increased year by year. However, this increase has not reduced the inequality between the urban and rural areas of Tirana Municipality.

- c) **Public transport service:** Public transport service is another helpful element in understanding infrastructure investment in Tirana.

Table 2: Data related to public transport service

No.	Description	Units	Years			3 first months
			2016	2017	2018	2019
1	Private operator in public transport	No.	7	10	10	10
2	Bus station	No.	391	415	451	451
3	Buses	No.	225	292	309	310
4	Public transport line	No.	13	15	16	16
5	Average bus frequency in normal hour	Min	10	9	9	9
6	Average bus frequency in passenger peak hour	Min	4	4	4	4
7	Average passenger in public transport	Average No./day	199,458	203,347	201,921	200,978

Source: Tirana Municipality

Since 2013, this service is being provided by different private operators and the number of these operators is increasing continuously in the last three years. From the data obtained and presented in Table 2 it can be noticed:

- An increase in the number of public transport lines. At the end of the first quarter of 2019 there were 16 lines while in 2016 there were only 7 lines.
- An increase in the number of bus stops. There are 60 more stations in the first quarter of 2019, compared to 2016. The increases in the number of stations and in number of transport lines are indicators that measure the improvement of the public service between the city of Tirana and the suburbs. These services did not exist before 2016.
- An increase in public service performance as measured by the increase in the number of public transport vehicles. From 2016 to the first half of 2019, it is noticed an increase of 27%.
- Significant improvement in public service performance because: (i) the average bus travel time is reduced; (ii) the average bus frequency at peak times is reduced; (iii) security cameras are installed in buses; (iv) buses have platforms for people with disabilities, a total of 269 at the end of the first quarter of 2019, or 33% more than in 2016.
- An increase in the average number of passengers from year to year, which is also due to the increase of the number of urban transport lines.

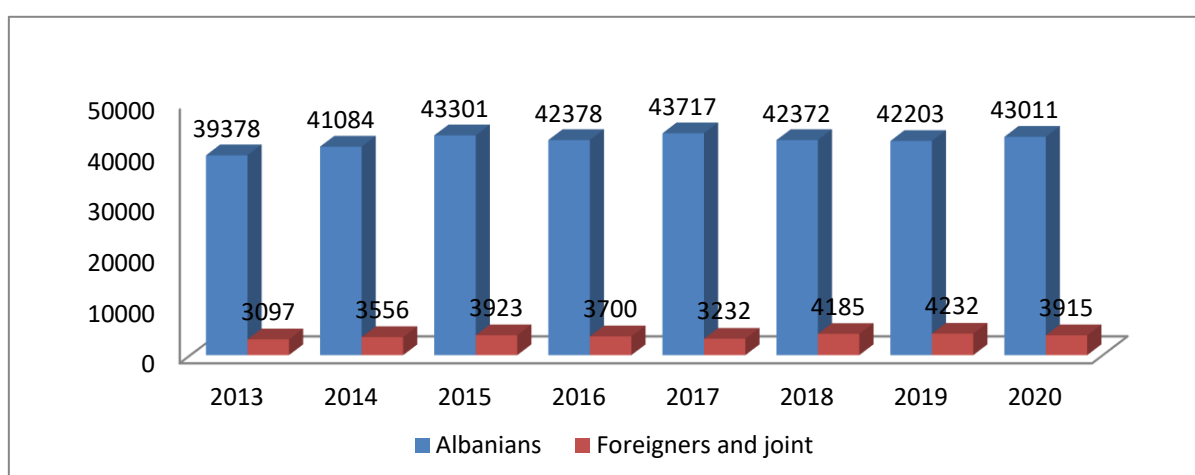
Economic, social and infrastructure development continues to be a challenge for the Municipality of Tirana and the main goal remains to improve the lives of Tirana's citizens and to promote the sustainable economic development. Public transportation service helps people to move from rural areas to Tirana. It creates more employment opportunities because people are able to go to work no matter where the company is located. Also, it helps farmers to sell their products at low cost and it has also a big impact in constructing, retraining and restructuring of markets for sale of agricultural and livestock products. Although there are no measurable statistics of these benefits for farmers yet, these changes are easily perceivable and evident every day by us as citizens.

4.3. Infrastructure investment's impact on the economic development

Infrastructure investments have impacted the economic development of Tirana by increasing the number of Albanian enterprises. According to the Albanian Institute of Statistics on GDP in the regions of Albania, it resulted that Tirana is Albania's largest centre and the engine of the economy. In 2016, it generated the 40% of GDP (2019:2), in 2018, it generated the 42,58% of GDP at national level (INSTAT, 2021a:2), it generated the 42,75% of GDP at national level and in the first half of 2020, it generated the 42,98% of GDP at national level (INSTAT, 2022:2). This is explained by the large number of enterprises in the territory of the Tirana municipality, which have been increasing during the period under review.

The graph below shows this fact. It can be noticed that the number of Albanian enterprises is increased but the number of the foreign or joint enterprises is decreased.

Figure 2: No. of Active enterprises by ownership in Municipality of Tirana



Source: Albanian Institute of Statistics

Table 3 shows the data of the enterprises in the Municipality of Tirana based on the number of employees. The data estimates an increase in terms of the number of small /family businesses, which in 2017 accounted for 84% of the total.

Table 3: Active enterprises by size in Municipality of Tirana (In No.)

No.	Active enterprises by size	Years							
		2013	2014	2015	2016	2017	2018	2019	2020
1	1-4 employees	37,128	39,133	39,696	39,043	39,444	36,432	38,093	39,247
2	5-9 employees	2,725	2,780	4,009	3,641	3,848	4,138	4,263	3,613
3	10-49 employees	1,920	1,985	2,681	2,549	2,749	3,029	3,096	3,095
4	50 and more employed	702	742	838	845	907	958	983	971
	Total	42,475	44,640	47,224	46,078	46,948	46,557	46,435	46,926

Source: Albanian Institute of Statistics

Table 5 shows enterprises operating in the municipality of Tirana categorized by the field of activity.

Table 5: Active enterprises and economic activity in Tirana municipality (in No.)

		Years							
		2013	2014	2015	2016	2017	2018	2019	2020
Production of Goods		5,017	5,225	5,468	5,298	5,362	5,320	5,298	5,505
1	Agriculture, forestry and fishing	100	123	150	236	293	422	527	663
2	Industry	3,019	3,149	3,383	3,202	3,155	2,905	2,703	2,681
3	Construction	1,898	1,953	1,935	1,860	1,914	1,993	20,068	2,161
Providers of Services		37,458	39,415	41,756	40,780	41,586	41,237	41,137	41,421
4	Trade	16,240	16,683	17,221	16,302	16,100	15,538	15,063	15,081
5	Transport and storage	1,870	1,900	1,697	1,611	1,610	1,654	1,652	1,705
6	Accommodation and food service activities	6,909	7,317	7,246	6,697	6,588	5,971	5,548	5,344
7	Information and communication	1,351	1,442	1,313	1,489	1,878	1,996	2,158	2,368
8	Other Services	11,088	12,073	14,279	14,681	15,410	16,078	16,716	16,923
Total of Goods + Services		42,475	44,640	47,224	46,078	46,948	46,557	46,435	46,926

Source: Albanian Institute of Statistics

What is notable is the increase in the number of enterprises in agriculture, forestry and fishing, and this number has almost tripled compared with 2013. Meanwhile, the number of enterprises, active in industry and construction, continues to grow at a lower rate compared to enterprises with agricultural activity. Likewise, the number of enterprises providing services continues to grow, but at lower rates than the number of enterprises in the field of agriculture. Based on the combined analysis of the data obtained from the Municipality, the factors that contributed to this increase are as follows:

1. The territorial reform brought about the expansion of the territory of the Municipality of Tirana, which was also accompanied by the total recount of the enterprises in the new territory.
2. Improvement of infrastructure in urban and rural areas, expressed in the data in Table 1.
3. Investments in public transport, which connected rural areas with the center of Tirana (Table 2).
4. Increase in agricultural production for the domestic market and for export. Referring to the data presented in Table 6 (Annexes), it can be noticed that after the implementation of the territorial reform (2014) until 2017, export has been doubled in value.
5. The flow of investments in the agricultural sector in both quantity and quality, through investments in technology. Table 7 (Annexes) shows that tractor-farmed land in Tirana District occupies 91% of farmed land. Also, Tirana ranks fifth in terms of land farmed by tractor³ in national level.
6. Farmers pay more attention to the development of the agro-agricultural and livestock system.

³ <http://www.instat.gov.al/al/temat/bujq%C3%ABsia-dhe-peshkimi/bujq%C3%ABsia/#tab10>

7. The trend of rural tourism, mountain tourism, adventure, sports and ecotourism are increased. Likewise, the development of infrastructure has an impact in increasing the number of domestic and foreign tourists as it gives them more access to tourist areas. Table 8 (Annexes) shows a steady increase in the millions of tourists per year who use road infrastructure for moving.
8. The increase in demand for bio-products coming directly from farms has also led to an increase in the quantity of these products. Tirana is among the three counties with the largest amount of vegetables produced in the last three years and the quantity of products has been increasing, from year to year reflected in Table 9 (Annexes).

The Major is making all efforts to make the capital of Albania a European capital; however, Tirana is facing many problems. On one hand, there are some specific problems that are related only with the Municipality of Tirana, such as city's supply of potable water in 24 hours; developing the underdeveloped and partially operational railway network, waste management process, etc. On the other hand, there are some general problems that belong to the central government and to other municipalities as well, such as: (i) informality; (ii) corruption; (iii) tax evasion; (iv) law enforcement problems; (v) improving the business climate and these issues are present in Tirana, where there are the largest number of enterprises at national level.

5. Conclusions and Recommendations

Tirana inherited from the past an inconvenient situation in terms of infrastructure and the economic development. Two of the elements of the past are: an amortized road network from the dictatorship regime and a lack of long-term strategies in terms of infrastructure during the Transition years (1990-2022). In 2014, the Administrative-Territorial Division Reform started its implementation and Tirana faced many challenges such as: (i) a new unknown territory; (ii) limited funds; (iii) the decentralization of public services, etc. Infrastructure development is one of the basic variables that impact a country's economy. By analysing the data obtained from the Office of Information in the municipality of Tirana, it can be said that infrastructure development in the period 2012-2018 impacted directly the economic development of the city. By the comparison of the periods before and after the territorial reform, it can be said that after the reform it was noticed a higher increase in both infrastructure investments and economic development. It is worth to mention that the territorial reform corresponded with the change municipal governance. Before the reform, the Municipality of Tirana was run by the Democratic Party and after the Election; the Major became the representative of the Socialist Party.

There is a direct relationship between infrastructure development and economic growth of Tirana. Because of infrastructure investments, Tirana demonstrated to be the largest center of Albania and the engine of the economy. In the first half of 2020 alone, it generated 42,98% of GDP nationally. On one hand investments in infrastructure brought the following benefits: (i) an increase in the number of enterprises operating in Tirana; (ii) an increase in investments terms of roads both in urban and rural areas; (iii) reconstruction of roads in the center and suburbs; (iv) performance improvement in public transport system by increasing the number of urban lines, the number of public transport vehicles (v) connecting the suburbs with the center using the public transport system; (vi) increase agricultural productivity mainly for export; (viii) an increase in tourism. On the other hand, infrastructure investments had the following drawbacks: (i) the decrease in the number of foreign and co-owned enterprises operating in Tirana; (ii) failure to meet the public investment forecast; (iii) unfair distribution of expenditures; (iv) inequality in investment between urban and rural areas.

From the analysis, it can be recommended to allocate more funding in rural areas in order to close the gap between the suburbs and the centre. Also, in order to have an economically developed country, it is not enough to invest in infrastructure only. The central and local governments need to work together to reduce informality, tackle corruption, eliminate fiscal evasion, enforce laws, improve the business climate, emphasize the role of the judicial system, etc. In Albania, each of these elements is a problem in itself. By continuing investments in infrastructure, Tirana will provide more employment opportunities, will have more chances to increase agricultural production, to open new markets, to invite more tourists, to develop its economy and to be a European Capital.

6. Annexes

Table 6: Foreign trade exports (in Billion Albanian Lekë)

Group products	Years						
	2013	2014	2015	2016	2017	2018	2019
Food and live animals	9,752	11,831	15,599	19,167	24,488	25,867	28,388

Source: Albanian Institute of Statistics

Table 7: Farms and tilled area on arable land by method of village (area in Ha)

Prefecture	TOTAL		TRACTORS		WITH ANIMALS		WITH HANDS	
	Farms	Tilled area	Farms	Tilled area	Farms	Tilled area	Farms	Tilled area
Tirana	30,120	14,744	20,453	13,432	1,118	374	13,801	938

Source: Albanian Institute of Statistics

Table 8: Movements of Albanian of foreign citizens by land 2014-2018 (In No.)

Description	Years							
	2014	2015	2016	2017	2018	2019	2020	2021
Total Arrivals and Departures	12,428,958	13,755,640	15,346,308	16,210,930	18,125,539	19,250,253	9,199,370	15,397,665

Source: Albanian Institute of Statistics

Table 9: Agricultural products in Tirana Municipality (In ton)

Products	Years				
	2016	2017	2018	2019	2020
Vegetable production	121,661	124,148	127,176	128,666	131,001

Source: Albanian Institute of Statistics

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Labor Market Challenges of the Young Female in Developing Countries - Case Study Republic of North Macedonia

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Abstract

Poor labor market performance is a major societal concern that reduces medium- and long-term economic growth and poses major policy challenges. Low employment rates mean giving up production while the unemployed risk losing their skills and thus make it harder for themselves to find work in the future. This cycle, in turn, can increase the natural rate of unemployment. The low youth employment rates can hamper the process of acquiring human capital and increase dependence on support systems, reducing the long-term growth potential of states. Finally, high unemployment levels create a burden on public finances in the form of higher social benefits for the unemployed and may reduce social cohesion (interaction). The gender gap in employment is high in North Macedonia. The employment rate of men in 2016 is 58.6% which is higher than the employment rate of women which was 39.2% with a difference of 19.4% point. The youth employment rate is low, which means that only 16.2% of young people aged 15-25 are employed. The share of young people (aged 15-29) who are not in employment, education, or training (NEET) is 31.3%, among young women in compared to young men. According to this, young women are more likely not to be involved in work, education, or training.

Key words: unemployment, employment, transition, youth, women.

1. Introduction

The focus of this paper is on the transition that women have undergone from education to employment, with a special emphasis on North Macedonia. Although gender discrimination dates to very early times, it has been manifested in different ways in different countries. Recent years have seen improvements in the labor market in North Macedonia. Although we have a not very high unemployment rate unlike previous years, the situation is still not satisfactory. If we look over the years, it is noticed that unemployment marks an increase from 2007 where the rate was 36.2% to 42.1% in 2015. In 2017 the government introduced active labor market policies that addressed unemployment and high inactivity to tackle the high rate of unemployment (Petreski & Tumanoska, 2017). Despite the positive trend, there is a high unemployment rate among young people, which is expected to decrease with the increase of

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their educational level. Among young people, the low job creation rate in the labor market as well as the high unemployment rate result in high long-term unemployment (Government of Republic of North Macedonia, 2017). This is especially highlighted on gender basis where young females face difficulties in entering to the labor market but also finding a job. The aims of this paper are: i) to analyze the factors that influence employment/unemployment of young females and ii) to analyze the factors that influence the transition of young females from school to labor market.

2. Literature review

Unemployed young people in the labor market are at a disadvantage compared to other categories of unemployed. The most important reasons for youth unemployment are:

- Poor qualification structure (high number of young people are unskilled or semi-skilled);
- Mismatch between the needs of the labor market and the education system.
- Strict requirements by employees for an employee with work experience.
- The growth of the so-called grey economy, where people are de facto employed, but in the employment, office are presented as unemployed to benefit from social health insurance.

Unemployed people also lose the opportunity to make the necessary contacts to succeed in the labor market and this lack of social capital building is one of the reasons for future bad placements in the labor market. Unemployment increases antisocial and deviant phenomena and increases inequality between different social groups. Analysis show that young people belonging to marginalized groups who are unemployed either come or live in neglected and / or abandoned places (Национален извештај за младинската невработеност во Република Македонија, 2015).

There are different factors that influence youth unemployment. According to European Youth Form (2014) these factors are as follow: inequality in the labor market, lack of services to young people, and privatization of education. But there are also other factors that influence young people unemployment rate and especially young females.

Individual and family characteristics represent important elements in shaping differences and trends in youth unemployment. In their study that analyzes youth unemployment in Italy and Russia, the individual and family factors such as household characteristics, region characteristics, time effect (to control macroeconomic conditions and the effects of the crisis) influence on young females and males' opportunity to find a job. The element such as available household income, has a higher negative effect on the probability of being unemployed, so with increasing income decreases the probability of being unemployed. The risk of unemployment decreases with the age of young people in Russia and with marital status in Italy. The time effect was also significant, as they lead to an increased risk of unemployment in times of crisis (Marelli & Vakulenko, 2014).

The authors Eichhorst & Neder (2014), in the study that analyzes youth unemployment in the Mediterranean countries (France, Greece, Italy, Portugal and Spain), conclude that youth unemployment in these countries has reached alarming proportions. According to them, in these countries the dropout rate is high, the return to the educational process is difficult and very low and the transition from school to employment is quite problematic. The authors conclude that the reasons for this are the very weak system of vocational training, labor market

dualization and high leveling of the minimum wage, and to overcome this the labor market performance must be improved.

Bell & Blanchflower (2010) highlight that, the highest unemployment among young people is among those who are less educated, the minority, those who have physical and mental problems. This is evident in countries such as Spain, Ireland, Croatia, East Germany, Hungary, Latvia, Lithuania, and North Macedonia. According to them, young people (based on their educational level), who leave school at the age of 20 and above have an average unemployment rate of 4.7% while those who leave school at an earlier age, have an average unemployment rate of 9%. On the other hand, another disappointing result for young people is that they are more likely to lose their jobs in times of crisis than the rest of the population (as was the case with the recent crisis).

Young people's future labor market situation is heavily influenced by their early experiences, including how quickly and well they are able to enter the labor market and the skills and competencies acquired through education and training. Therefore, policymakers should be concerned about idle youth. The negative consequences of a labor market that is not fully inclusive of youth can spread across many spheres of society and amplify in these youth's future labor market patterns, which is why effective youth employment strategies are critical to sustainable development. According to ILO estimates, 21% of the world's youth were not in employment, education, or training in 2018, while 37% were in employment, and 42 percent were not in employment but in education or training.

But what about young women? Where are they in the context of labor participation, and employment? According to the report of EuroFound (2016), even though the labor market participation of women within EU countries has increased, where in 2014, women participation was 46%, it is still an issue of concern, because their participation rate is still lower than males.

When the fraction of youth not in work, education, or training is broken out individually for men and women, a disappointing gender trend emerges, more than 30% of all young women in the globe were not in employment, education, or training in 2018, compared to 13% of all young men. In other words, young women are more than twice as likely as young males to be unemployed and out of school. This means that young women face extra barriers to entering the labor force, pursuing a decent education, or participating in vocational or skills training programs. % of young women (see the following figure). In the labor market, education, or training involvement, there is a gender disparity (Gammarano & Rosina, 2019).

Young women in North Macedonia

The Republic of North Macedonia after gaining independence with the referendum held in 1991 emerged as the poorest Republic in Europe with an unemployment rate of 24.5%. The severe economy of 1991 was due to several factors such as: market disintegration, wars with the former Yugoslav countries, trade blockades on the border with Greece, economic sanctions against the Yugoslav FR countries, etc. These factors prevented economic growth by associating it with a higher unemployment rate in Europe. Unemployment continued to rise in the years 1993-1994 from 27.7% to 30.0%, influenced by the economic and political crises of neighboring countries (Serbia and Montenegro), which blocked transport and exports in the country.

The Republic of North Macedonia is facing a relatively high-level unemployment rate, inequality, and social exclusion. And this is more highlighted among young people. The number of unemployed youths in the country is high, which means a higher risk of social exclusion. The participation of young people in the labor market is low. In 2014 the active

participation rate was 30.6%, employment 15.2%, and unemployment 50.4%. The long period of unemployment affects the prospects of young people to secure a job with career opportunities or even for a better salary. It is a general opinion that in the same situation are also unemployed young people who face a high risk of marginalization, especially those coming from families with low socio-economic status and from underdeveloped rural areas.

The table below offers more insight on the participation rate of the general public, divided into gender and age based. As can be seen the participation rate during the period 2007-2017 of women is lower than man, in average with more than 20 percentage point. When it comes to age category, the difference is even bigger, where the participation rate of the population 15-24 years of age is no more than 35% whereas for the rest is higher.

Table 1: Participation rate of young people in NM labor market

Year	Gender		Age			Education		
	Male	Female	15-24	25-49	50-64	Elementary school	High school	Higher education
2007	67.3	44.1	35.9	79.0	52.9	36.3	69.5	80.2
2008	68.8	43.8	35.9	79.4	54.9	37.3	70.7	80.6
2009	69.6	43.7	35.0	79.5	57.2	36.8	70.0	81.3
2010	69.8	44.0	33.3	80.4	57.5	36.5	69.6	81.5
2011	68.8	44.7	32.1	80.2	58.3	36.3	68.2	80.9
2012	68.7	44.3	33.6	79.5	56.7	34.4	68.7	79.5
2013	68.5	45.8	33.6	80.2	58.5	35.5	68.8	79.6
2014	69.3	45.3	32.4	81.0	58.8	36.3	67.9	79.1
2015	68.9	44.9	32.8	79.6	59.0	/	/	/
2016	69.2	43.8	31.3	79.8	57.8	/	/	/
2017	69.3	44.3	32.8	80.3	57.8	/	/	/

Source: State Statistical Office. Labor force survey 2008-2018

In terms of unemployment rate of young people and women, it can be seen that in gender terms the unemployment is more less similar, where as in terms of age, the young population has a higher rate with a tendency to decline during the later years (it was 57.7% in 2007 and in 2017 the rate fall to 46.7%).

Table 2: Unemployment rate of young people in NM labor market

Year	Gender		Age			Education		
	Male	Female	15-24	25-49	50-64	Elementary school	High school	Higher education
2007	34.5	35.5	57.7	32.9	28.5	42.6	35.1	20.5
2008	33.5	34.2	56.4	31.6	28.0	41.1	33.1	21.4
2009	31.8	32.8	55.1	30.3	25.9	40.5	33.1	19.3
2010	31.9	32.2	53.7	30.7	26.0	35.9	31.8	23.3
2011	31.8	30.8	55.3	29.6	26.2	37.3	32.8	22.7
2012	31.5	30.3	53.9	29.9	24.4	39.1	29.7	23.4
2013	29.0	29.0	51.9	27.7	23.2	31.1	26.6	25.7
2014	27.6	28.6	53.1	26.5	22.4	30.7	28.3	20.4
2015	26.7	25.1	47.3	25.2	20.9	29.5	26.6	19.1
2016	24.4	22.7	48.2	23.2	17.1	/	/	/
2017	22.7	21.8	46.7	21.4	16.5	/	/	/

Source: State Statistical Office. Labor force survey 2008-2018

On the other hand, the employment rate females and young people in comparison with males and adults has significant differences. In terms of gender, male employment rate has upward trend which is positive and females' employment rate as well but not in the same rhythm and there is a big difference between genders in the employment rate. During the analyzed period the difference in employment rate of males was higher than the females for almost 20 percentage points by the end of 2017. In terms of age based employment, it can be seen that youth employment is much lower than the other categories, which tends to be around 35-45 percentage points less than the category 25-49 years old and 22-30 percentage points for the category 50-64 years old.

Table 3: Employment rate of young people in NM labor market

Year	Gender		Age			Education		
	Male	Female	15-24	25-49	50-64	Elementary school	High school	Higher education
2007	44.1	28.4	15.2	53.0	37.8	30.3	56.1	71.9
2008	45.7	28.8	15.7	54.3	39.5	32.2	58.3	73.1
2009	47.5	29.4	15.7	55.4	42.4	33.6	58.7	74.3
2010	47.5	29.8	15.4	55.7	42.6	33.4	58.4	73.9
2011	47.0	30.9	14.4	56.5	43.1	34.3	58.3	72.4
2012	47.1	30.8	15.5	55.8	42.8	32.4	57.7	71.9
2013	48.7	32.5	16.2	58.0	44.9	35.4	60.2	71.4
2014	50.1	32.4	15.2	59.5	45.6	36.9	61.2	72.4
2015	50.5	33.7	17.3	59.5	46.7	35.3	61.5	74.4
2016	52.3	33.8	16.2	61.3	47.9	33.9	63.9	74.7
2017	53.6	34.6	17.5	63.1	48.2	/	/	/

Source: State Statistical Office. Labor force survey 2008-2018

The following table offers insight on the youth long-term unemployment, which was divided into three such category 15-19 years old, 20-24 and 25-29 years old. From the below table can be seen that higher level of long-term unemployment have the group age 25-29 years old, followed by the category 20-24 years old. In terms of gender, there is a higher unemployment of females compared to males in the category 25-29 years old, but on the category 20-24 years old, men have a higher level of unemployment.

Table 4: Long-term unemployment among young people aged 15-29, by age and gender

Long-term employment	Years							
	2010	2011	2012	2013	2014	2015	2016	2017
Age 15-19 y/o	2.2	2.1	3.3	2.1	2.1	1.0	2.0	2.5
• Male	2.8	2.6	3.8	2.0	2.4	1.3	2.3	2.9
• Female	1.2	1.3	2.4	2.3	1.8	-	1.5	1.9
Age 20-24 y/o	13.2	12.5	15.5	13.7	13.0	13.4	13.5	15.0
• Male	14.2	13.1	15.5	14.7	13.9	15.1	13.9	16.0
• Female	11.8	11.5	15.5	12.2	11.7	10.7	12.9	13.5
Age 25-29 y/o	16.9	17.6	18.2	17.9	19.2	19.4	18.6	19.1
• Male	15.1	15.7	17.2	16.8	17.1	19.4	18.1	16.8
• Female	19.6	20.6	19.9	19.3	22.3	19.5	19.5	22.9

Source: State Statistical Office. Labor force survey 2008-2018

In terms of young people that are not employed, in education or training (NEET), it can be seen that, the percentage of young females that belong to this category is higher than males. If in 2017, young males that were in NEET is 13.2%, the percentage of females was 15.3%.

Table 5: Persons aged 15-19 who are not employed, in the education or training process (NEET)

	Years				
	2013	2014	2015	2016	2017
Total males	12.9	12.5	11.1	13.3	13.2
• Unemployed	9.9	9.3	6.0	8.7	9.1
• Inactive	3.0	3.2	5.1	4.6	4.1
Total females	12.3	14.5	12.7	11.0	15.3
• Unemployed	5.3	5.6	3.2	3.7	3.8
• Inactive	7.0	8.9	9.5	7.7	11.5

Source: State Statistical Office. Labor force survey 2008-2018

3. Research methodology

3.1. Variable definition

The data used in this research were taken from the "Labor Force Survey" administered by the Statistical Office of North Macedonia. The data used are cross-sectoral data (survey conducted in 2017). The survey covered all age groups from 15-79 years. Given that our interest in this research was towards young women (age 15-29), the total number included in the survey was 1399. Our focus in the paper was on those who have already completed their studies and analyzing their transition, we moved away from female youth who are still studying and those who do not participate in the labor force (unemployed and not looking for a job). As a result, our total sample dropped to 804 people. Based on the proposed model, as a dependent variable is set to be the probability that a person is employed or unemployed. While the independent variables in the model are: living area, marital status, level of education of father and mother, highest level of completed education, financial situation of the family, field of education, work experience during the study. To estimate the probability that a young woman would be employed, we use Probe Regression analysis and its marginal effect. The dependent variable in our case takes the value 1 in case the person is employed and 0 otherwise respectively unemployed. Each variable is defined as follows:

- I. Dependent variable - being employed
 - a. Yemployment = 1 (Young females aged 15-29 years during the mentioned period, employed)
 - b. Yemployment = 0 (otherwise unemployed)
- II. Independent variables
 - a. Marital Status: Married = 1, not married = 0
 - b. Living area: Urban = 1, Rural = 0
 - c. Financial situation of the household: Good = 1, Bad = 0
 - d. Education level: University degree = 1, Other (less than university degree) = 0
 - e. Field of study: Social Sciences⁵ = 1, Natural/technical sciences⁶ = 0

⁵ Education, humanities and arts, social sciences, business, law and similar

⁶ Natural Sciences, Mathematics, IT, Engineering, Agriculture & Veterinary, Health & Social Work

- f. Working/internship during studies: Yes =1, No = 0
- g. Duration of job search: 1 week to 1 year = 1, More than 1 year = 0

3.2. Econometrical model used

As mentioned above, Probit Regression is applied in this paper in order to measure the phenomena of the transition of female youth from schooling to the labor market. The dependent variable is the probability of being employed or unemployed after you have completed your studies. Independent variables are marital status, living area, financial situation of the household, level of education, field of education, work experience/internship during the study. The model is presented below:

$$Y(Empl) = B_0 + B_1(\text{maritalstatus}) + B_2(\text{living area}) + B_3(\text{FinSitHH}) + B_4(\text{level of education}) + B_5(\text{field of education}) + B_6(\text{work/internship}) + B_7(\text{job search})$$

3.3. Results

After processing the collected data through the STATA statistical program, the data in the table in question were obtained:

Table 1: Results

Variables	Coefficient	Marginal effect
Marital status	.3806899*	-.0900792
Living area	.6250893*	-.125558
Financial situation of the household	1.000775**	-.2087995
Level of education	-.6028424*	.1004638
Field of education	-.1587085	.0333547
Work/internship while studying	3.866805***	-.9443067
Duration of job search	.1184897**	-0.257105

Source: Authors calculation.

Note: (***), (**), (*) indicate the significance at levels 1%, 5% and 10%, respectively

After statistical processing of data through the software program, the following results were obtained:

- a) Marital status is shown as a variable that has statistical significance. The data obtained show that a young married woman finds it more difficult to find a job than one who is not married. Women who are not married are 9% more likely to be employed than married women.
- b) Living area also represents a variable affecting the probability of finding work among young women. This variable has statistical significance in our model and its negative towards young women living in rural areas. According to the results, it turns out that young women coming from rural settlements have a 12.5% probability of not finding a job unlike young women living in urban settlements.
- c) Regarding the impact of the variable "financial situation and household" although it turns out to be statistically significant, the marginal effect shows a negative impact, so a young woman with better financial status turns out not to be employed or find a job

by contrast from young women coming from families with average or below average status and this probability is around 20.80%. This can be attributed to the fact that young women in good financial condition are not inclined to be employed in Northern Macedonia, which is also a daily reality.

- d) The educational level gained by a young woman, turns out to have positive statistical significance. In this case having a higher level of education increases the probability of being employed by 10.04%.
- e) Young women who have worked during their studies or have done internships, turn out to have a higher probability of employment than those who have not worked at all during their studies. This fact increases the probability that a young woman will be employed by 9.44%.
- f) Lastly, the variable "duration of job search - transition" turns out to have a positive statistical significance in terms of increasing the probability of employment of a young woman. The result shows that a young woman who is less in transition while looking for a job is more likely to be employed by him for 25.71%

4. Conclusions

Although the RMV shows a decrease in unemployment, we still have a discrepancy between the sexes and the age of the population in terms of indicators such as labor market participation, employment and unemployment. In the RMV, young women aged 15-29 are probably the most vulnerable category when it comes to their entry into the labor market and their effective employment. The data obtained from the model confirms the fact that a young, educated woman is likely to find work more easily than a woman with a lower level of education. Marital status is another factor that directly affects young women in this category, where married women with children are at a significant disadvantage as opposed to those who are not married. The financial situation of the young woman where she lives has a big impact on her probability of finding a job. A weaker financial situation enables or opens greater employment opportunities. The factor "work during studies" also has an impact, which increases their chances of finding a job, as through this they gain a significant work experience. Areas where they have completed education and internships in fact turned out to have no bearing at all on the probability of a young woman finding a job.

Therefore, the government, through the employment agency, should allocate funds and formulate labor market policies and programs that will directly target women, especially young women, as the measures so far have been more comprehensive. Encouraging young women to enter the labor market as soon as possible and providing opportunities to find work during their studies. Reducing the NEET rate (women who are neither in the educational process, nor in employment, nor in the training process) that would directly affect their participation in the labor market and the possibility of finding a job. Increase the level of training and professionalization of women with lower levels of education, in order to provide skills and abilities that would make them more competitive in the labor market.

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- Младински културен центар. (2015). НАЦИОНАЛЕН ИЗВЕШТАЈ ЗА МЛАДИНСКАТА НЕВРАБОТЕНОСТ Република Македонија. Битола.

Strategic Restructuring Stakeholders and Financial Structure

Dragana Vujičić Stefanović¹

Dragan Milovanović²

Abstract

Today, companies operate in modern conditions and an environment primarily characterized by the state of discontinuity, dynamism and turbulence of many of its factors and elements. The consequences of the global crisis caused by the Covid-19 coronavirus, geopolitical changes on the world stage, as well as many other factors, affect major changes in the strategy, structure and position of companies. In such circumstances, restructuring is a process that should help companies recover from crisis situations and put the company on a healthy platform. The process of strategic restructuring has long-term tendencies on the company's operations and as such generates the interests of a large number of interest groups - internal and external stakeholders. The general strategy and financial structure depend on the interests of stakeholders, which influence management and restructuring. The aim of the article is to point out the state of strategy and financial structure of companies in Bosnia and Herzegovina, as well as directions for improvement. Also, the aim of the article is to, based on the analysis of successful examples of companies in the world, indicate directions for improvement, as well as the influence of key stakeholders in that process. In the methodological part of the research, we will use the statistics of large samples, as well as the chi-square test.

Introduction

The process of strategic restructuring has long-term tendencies on the company's operations and as such generates the interests of a large number of interest groups (stakeholders). In modern business today, the number of interest groups is constantly growing. Two groups of factors are responsible for this. On the one hand, the complexity of the organizational structures of modern companies increases the number of functions and positions of employees in the company, and thus the number of interest groups, and constant changes, challenges, globalization, interdisciplinarity and other influences from the environment generate an increase in the number of interest groups. In order to understand the essence of the relationship below, we will classify interest groups into a category that has the possibility of realizing interests with the possibility of direct influence and another group that has the possibility of realizing interests but without the possibility of direct influence. More recent research contributions in the field of influence of interest groups point to the great importance of influence by stakeholders in certain strategic situations (Falbe & Yulke, 1992, pp. 638-652, Finn 1995). It certainly affects changes in certain structures in the company, primarily financial

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structures. In a broader sense, it is understood to be related to the configuration of organizational units and people who are connected through business tasks, obligations and authority within the organization. Given that restructuring refers to a change in the existing strategy, structure and/or position of the company, in this paper we will analyze the impact of the change in strategy caused by the different interests of interest groups on the financial structure of the company.

Through preliminary research, we identified various problems in relation to stakeholders and strategic restructuring of companies in Bosnia and Herzegovina. This primarily refers to the desire of the owners to maximize the profit that remains for the owners. On the other hand, the manager's goal is a higher reinvested profit, which contributes to the growth and development of the company and the growth of the market value of the company. The supplier's interest is the delivery of larger quantities on longer days. Customers demand higher quality products at lower prices. There appear great pressures and exerting influence on managers and owners, who need to balance interests. The goal of the work is also to identify the interests of various stakeholders in the process of restructuring companies in Bosnia and Herzegovina. Also, to point out their influence on the financial structure, first of all through the sources of financing and the portfolio of financing, and then on the financial condition of the company. The restructuring strategy unites the interests of all stakeholders of the restructuring process. The financing of the restructuring process generates the financial structure of the company. In this regard, we will try to investigate which sources of financing the restructuring process are used by companies in Bosnia and Herzegovina, and which in EU countries. The main research hypothesis of Ho: There are significant differences in sources of financing and financial structure in the process of company restructuring in Western Europe, Central and Eastern Europe, Serbia and Bosnia and Herzegovina. H1: For managers of companies in crisis, the greatest interest is stability of jobs, wages, medical and health insurance in the process of company restructuring. H2: Companies in Bosnia and Herzegovina mostly use bank loans as a source of financing in the process of strategic company restructuring. In creating the methodology, we used statistics of large samples (to test the representativeness of the sample), as well as the chi-square test to test the significance of differences.

1. A review of literature through previous research

The consequences of strategic restructuring are tied to the interests of a wider range of internal (owners, managers, employees, etc.) and external (suppliers, customers, government, consumers, creditors, unions, etc.) stakeholders. The special skill of management in formulating an adequate restructuring strategy consists precisely in harmonizing the interests of various stakeholders. There are also broader approaches that look at restructuring through the prism of restructuring strategy, structure and position of the company (Erić & Stošić 2013, Erić, Stošić & Redžepagić 2016). A significant contribution to the affirmation of the concept of interest groups was made by Professor Darden from the Business School of the University of Virginia Edward Freeman in the 80s of the last century, with his book entitled "Strategic Management: A Stakeholder Approach" (Freeman, 2010, p. 311). According to the same author, a stakeholder represents any group or individuals who can influence or are influenced by the achievement of organizational goals (Freeman 2010, Bryson 2003, Bryson, 1995, p. 27).

According to another view, stakeholders represent individuals and smaller groups who possess the power to negotiate, influence and change the strategic future of the organization (Ackermann & Eden, 2011, pp. 179-196). Stakeholders refer to all parties that will influence the organization's strategy or the organization itself (Nutt, Backoff 1992). Also, stakeholders represent individuals and groups that depend on the organization as well as on them, which

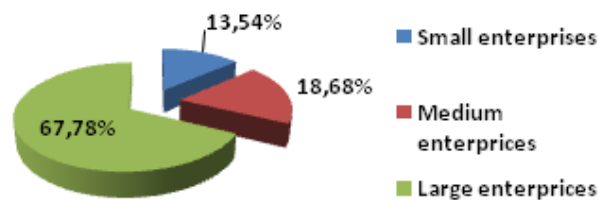
fulfills their goals (Johnson, Scholes 2002). In addition to Kenneth Andrews, Professor Alfred Chandler in his book "Strategy and Structure" made a huge contribution to the development of the process of strategy formulation and strategic management. and the allocation of resources necessary to achieve those stated goals" (Chandler, 1990, p. 76). The focus of Chandler's analysis is on the relationship between strategy and structure, their mutual influence and conditioning, mutual dependence and significance for the development of the company. In addition to Chandler, Igor Ansoff (Ansoff, 1987, pp. 22-27) also acted at the same time and directed his research focus towards the strategy formulation process. Michael Porter also made a great contribution to this field with his works "Competitive Strategy" (Porter 1980) and "Competitive Advantage" (Porter 1985).

The direction of financial activities includes activities within the financial function. In essence, it is about activities to improve the financial position based on internal and external sources of financing, as well as other modalities available in the field of finance. From internal sources of financing, we primarily mean depreciation, collection of long-term receivables, long-term provisions, accumulated (retained) net profit and revaluation effects compensated from total income (redetermination of the value of fixed assets on the basis of harmonizing their book value with their market value) (Damodaran 2001), (Milovanović 2021). In addition to the above for solving financial problems, companies often use other sources of financing, such as bank loans, share issues, bond issues, leasing, factoring, forfeiting, franchising and others (Damodaran 2001). If the crisis has affected the entire company, when the possibilities of additional borrowing or issuance of new financial instruments have been reduced and/or completely eliminated, the management of the company has at its disposal the possibility of improving the financial position based on "financial gymnastics", i.e. the restructuring of debts and cash flows. If the company has debts, it has several options at its disposal, such as complete or partial freezing of the payment of obligations, defining a certain grace period when part of the obligations will not be paid, reducing or limiting the amount of the interest rate, extending the time period for repayment of obligations, rescheduling loans (under more favorable conditions - longer period of time, more favorable interest rates), refinancing and new more favorable borrowing, debt to equity conversion/swap - (stand alone) D/E swap (Stand Alone Debt to Equity Swap), Investment of new funds through recapitalization with D/E conversion (New Money/Funded Plan) and conversion with the sale of the company (Sale of the Firm)), issuance of a new series of bonds, financial consolidation, sale of receivables, advance payments, deferred payment of tax obligations, etc. (Damodaran 2014, Gilson 2010, Giddy, 2004, pp. 34-35). In general, the adjustment of the financial structure, through the process of strategic restructuring, is aimed at optimizing the management of cash flows, a whole series of activities related to the collection and provision of financial resources, investment, placement of money and other significant issues through which changes are made to the existing financial structure, strategy and position of the company. In our article, a special focus is on the analysis of sources of financing for the company restructuring process.

2. Methodology research and sampling

The latest global economic trends have affected many companies in the world, including in Bosnia and Herzegovina. The preliminary research of the process of company restructuring in Bosnia and Herzegovina covers the period from 2020 to 2021, and thus refers to the period from 2015 to 2021. Key managers and business owners answered retrospectively and shared their experiences about the process and practice of restructuring their companies. The research showed that in that period 32,292 companies were registered in Bosnia and Herzegovina. According to the results of the research, 85.54% (27,595) of them were small businesses.

Total income of the economy of Bosnia and Herzegovina



Author's research, according to APIF and FIA data

The research results show that 3,588 (11.11%) companies are from the category of medium-sized companies, while 1,109 (3.43%) of the economy of Bosnia and Herzegovina are large companies, which generate 67.78% of the total income of the economy of Bosnia and Herzegovina. The analysis did not include companies for which complete data was not available. The research was carried out on the basis of the analysis of the financial reports of companies from the APIF and FIA databases. In accordance with the Law on Accounting and Auditing, large companies are those that achieve a total annual income of more than 8,000,000.00 BAM. Precisely on the basis of this criterion, we carried out sampling and stratification of a sample of companies in Bosnia and Herzegovina. In this regard, the research strategy and methodology includes the analysis of large companies in Bosnia and Herzegovina, according to the criterion of the amount of business income. The methodological selection criterion is significant because large enterprises comprise the largest part of business activities, and also large enterprises generate the largest part of the income of Bosnia and Herzegovina. Also, similar research has shown that the concept of restructuring is mostly related to large companies, so this was also one of the criteria for stratifying the sample. Based on those criteria, the research stratum consisted of 1,270 companies. Based on the given criteria, the company's assets were 80,024,997,861.00 BAM, revenues 48,274,525,776.00 BAM, net profit 2,686,665,433.00 BAM, and it employs a total of 267,120 workers.

The research methodology includes the research of the basic strategies of company restructuring. The given methodology consists of variables, Bankruptcy (bankruptcy through restructuring of the company with the aim of exiting the crisis), Bankruptcy/Closure (bankruptcy through restructuring - closing of the company), Business expansion (restructuring with the aim of growth and development of the business of the company), Closure (closing of the company), Internal restructuring (restructuring with the aim of internal changes to the business model), Merger/Acquisition (restructuring with the aim of growth and development through mergers and acquisitions of companies), Offshoring/Delocalisation (restructuring of the strategy with the aim of moving business to other countries), Outsourcing (restructuring with the aim of improving business on the basis of external resources), Relocation (restructuring in order to deploy business units in the direction of realizing strategy goals), Other (other forms of restructuring of structure, strategy or market position) (EMC: Eurofound, 2022).

Based on the previous criteria, with a confidence coefficient of $(1-\alpha)=95\%$, that is, with an error risk of $\alpha=0.05$, we evaluated the participation interval and the total number of companies in Bosnia and Herzegovina that were restructured. Based on these criteria, we identified 147 companies, and 81 of them were restructured. The specified sample with the basis of election from the basic assembly $f=0.11574803$, while (66 companies (44.90%) were not restructured). This leads us to the fact that 81 companies from the sample (55.10%) were restructured, with the share of selection from the basic set $f1=0.0379$. Through a more detailed analysis, we find that 66 companies (44.90% of the number of analyses), with a share of selection from the basic

set $f_2=0.0519685$, have not been restructured. Based on the previous sampling, we identified 81 companies that implemented the restructuring process. This formed the basis for testing the interest of stakeholders in the company restructuring process, as well as their influence on the strategic company restructuring process. 17 expert opinions, consultants, professors and assistants were included in the research. In the next part, we performed a statistical analysis and evaluation of the proportion of the basic set based on large samples, with a confidence coefficient of $(1-\alpha)=95\%$, that is, with an error risk of $\alpha=0.05$. The research methodology, which is based on large samples and the elements and characteristics of the basic foam, starts from a dichotomous classification of elements into those that have and those that do not have a certain characteristic both in the sample and in the basic assembly.

Table 1. Testing the proportion of the basic set based on large samples

	Value
<i>N value</i>	1270
<i>n</i>	147
<i>(1-α)</i>	0,95
<i>α</i>	0,05
<i>n/N ≥ 0,05</i>	0,115748
<i>n1</i>	81
<i>p value</i>	0,551020
<i>Sp</i>	0,038724
<i>Z value</i>	1,96
$\pi \geq$	0,4751214
$\pi \leq$	0,6269194

Source: Authors analysis

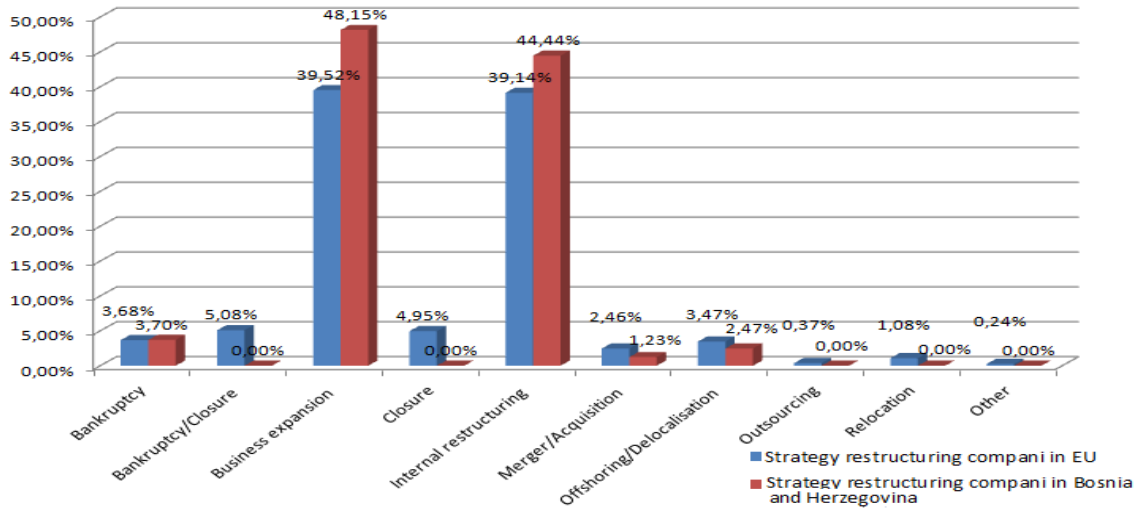
On the basis of the previous statistical assessment, and in accordance with the research that consisted of 147 companies ($n = 147$), the research and testing showed that it is statistically significant and large enough to make assessments and conclusions supported by the methodological concept. The research selection rate is $n/N = 0.115748 \geq 0.05$, in this regard, it is necessary to use the correction factor $\sqrt{(N - n)/(N - 1)}$, when calculating the standard error $sp\%$, sample proportions, intervals participation and the total number of companies in Bosnia and Herzegovina that were restructured within the research period. In this regard, the number of companies from the research sample that have a certain characteristic, i.e. restructured, is 81, i.e. $n1=81$.

Based on the given statistical analysis, the proportion of the sample is tied to the ratio of the number of elements from the sample that have a certain property and the number of elements selected in the sample, in this regard, p value: p value = $n1/n = 81/147 = 0.55102041$. ($Sp = \sqrt{p(1 - p)/(n - 1)} \sqrt{(N - n)/(N - 1)} = 0,038724$). Based on the above, the estimate of the standard error of the proportions is = 0.038724. The previous platform requires the application of the Z test statistic, so $Z\alpha/2=1.96$. Based on the obtained value, the statistically based estimate of proportions based on the relation $p - Z\alpha/2 sp \leq \pi \leq p + Z\alpha/2 sp$ is $0.47512144 \leq \pi \leq 0.62691937$ (Žižić, Lovrić & Pavličić, 2000). Based on the previous research, we conclude, with the risk of error $\alpha=0.05$, that the share of companies undergoing restructuring in the total number of companies in Bosnia and Herzegovina from the basic meeting is in the interval from 47.51% to 62.69%. If the obtained interval is multiplied by the size of the basic set, then it is: $603 \leq \pi N \leq 796$. Since in our research $n\pi > 5$ and $n(1-\pi) > 5$, the specified range refers to large samples, we confirm that our research sample is large and statistically representative for the given scientific research.

3. Results of research, discussion and comparison

Based on the defined research methodology, we will present the research results. Below is a comparative analysis of the types of company restructuring strategies in the EU and Bosnia and Herzegovina. Research in the EU covers the period from 1.3. 2001. year - 1.9.2022. year and includes 28,446 companies from the EU and 81 companies from Bosnia and Herzegovina.

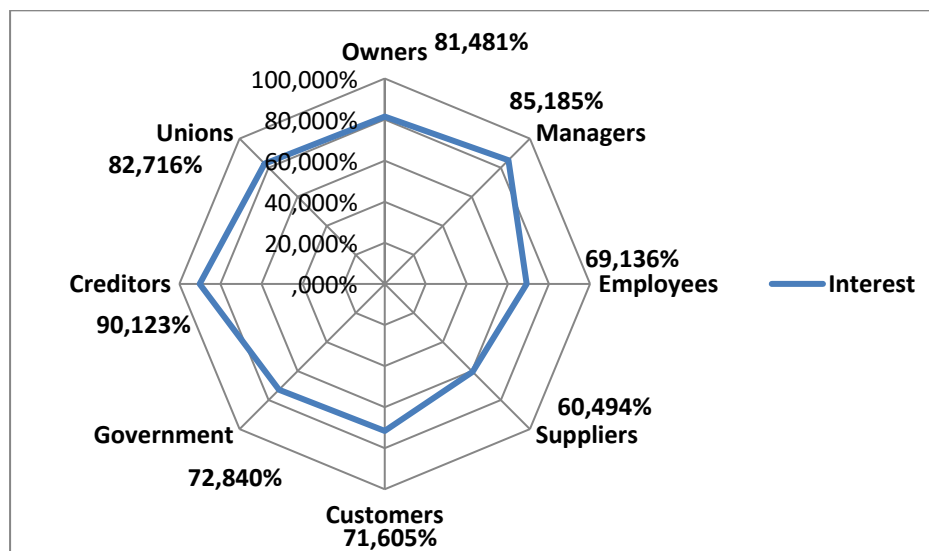
Chart 1. Strategies restructuring of companies in the EU and Bosnia and Herzegovina



(EMC: Eurofound, 2022 and author's research)

According to the research results, companies in the EU mostly use the restructuring strategy Business expansion (39.52%) and the strategy Internal restructuring (39.14%). Companies in Bosnia and Herzegovina also mostly use these two strategies of company restructuring, Business expansion (48.15%) and Internal restructuring (44.44%). In the continuation of the paper, a comparison of the results of the basic research that we have reached in the paper and the results of the given international study is shown.

Graph 2. Interest stakeholders in strategic restructuring companies in (%) in Bosnia and Herzegovina



Source: Author's research

The research results show that employees (69.14%) are most interested in salaries, bonuses, incentives, professional development, travel, etc. in the process of restructuring as a function of the growth and development of the company. Also, the Owners (81.48%) are interested in Profit, Return on Investment (ROI), Return on Equity (ROE), Profit Rates in the restructuring process as a function of the growth and development of the company. The results of the research show that the managers' main interest (88.89%) is the stability of jobs, wages, medical and health insurance, in the process of restructuring the company in order to get out of the crisis. Based on the previous data, we can confirm research hypothesis H1: For managers of companies in crisis, the greatest interest is stability of jobs, wages, medical and health insurance in the process of company restructuring. A summary comparative analysis of the results of the stakeholder interest research is given in the following table.

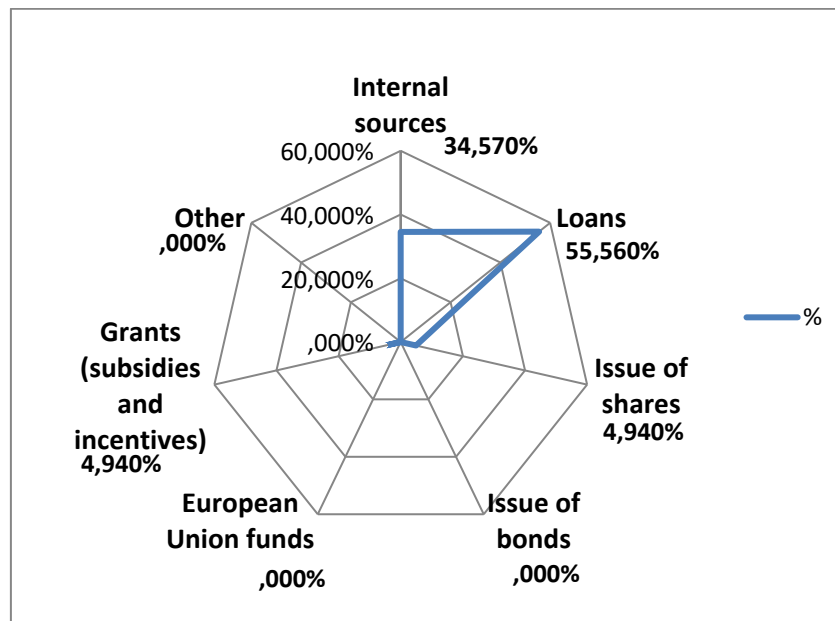
Tabela 1. Interest stakeholders in strategic restructuring company in Bosnia and Herzegovina

Interest stakeholders				
Stakeholders	Interest	Company in crisis	Interest	Growth and development of the company
Owners	69,14%	Stability of capital value or/and minimal consequences (In times of crisis), Profit, Return on investment (ROI), Return on capital (ROE), Profit rates	81,48%	Profit, Return on Investment (ROI), Return on Equity (ROE), Profit Rates
Managers	88,89%	Stability of jobs, wages, medical and health insurance	85,19%	Salaries, bonuses, incentives, representation, education and professional development, travel, etc.
Employees	66,67%	Stability of jobs, wages, medical and health insurance	69,14%	Salaries, bonuses, incentives, professional development, travel, etc.
Suppliers	59,26%	Input delivery, standard prices, standard delivery flexibility, standard delivery times, regular billing	60,49%	Larger deliveries, higher prices, adequate delivery times, regular payments
Customers	62,96%	Quality products, low prices, after-sales services	71,60%	Increasing quality, even lower prices, better after-sales services, wider range of products
Government	67,90%	Collection of taxes, fees and other revenues (with the possibility of deferred collection), protection of the interests of the Government and its institutions. Stable macroeconomic environment.	72,84%	Collection of taxes, fees and other revenues in accordance with the law, improvement of the macroeconomic environment.
Creditors	97,53%	Standard cash flow inflows, annuity collection, compliance with standard plans	90,12%	Larger placements, better collection of receivables, development plans, higher inflows
Unions	70,37%	Stability of jobs, wages, trade union rights, consumer protection, protection of the interests of businessmen and minority shareholders	82,72%	New jobs, higher salaries, bonuses, better quality products, better after-sales services, respect for corporate standards

Source: Author's research

The research results show that the main interest of suppliers (59.26%) in the process of company restructuring in the function of getting out of the crisis is input delivery, standard prices, standard delivery flexibility, standard delivery times, regular billing. Also, the research results show that the main interest of customers (62.96%) in the process of company restructuring in the function of getting out of the crisis is quality products, low prices, after-sales services. In the case of restructuring as a function of growth and development, the main interest of unions (82.72%) is new jobs, higher salaries, bonuses, better quality products, better after-sales services, respect for corporate standards. In the case of creditors (90.12%), the interest is represented by larger placements, better collection of receivables, development plans, higher inflows.

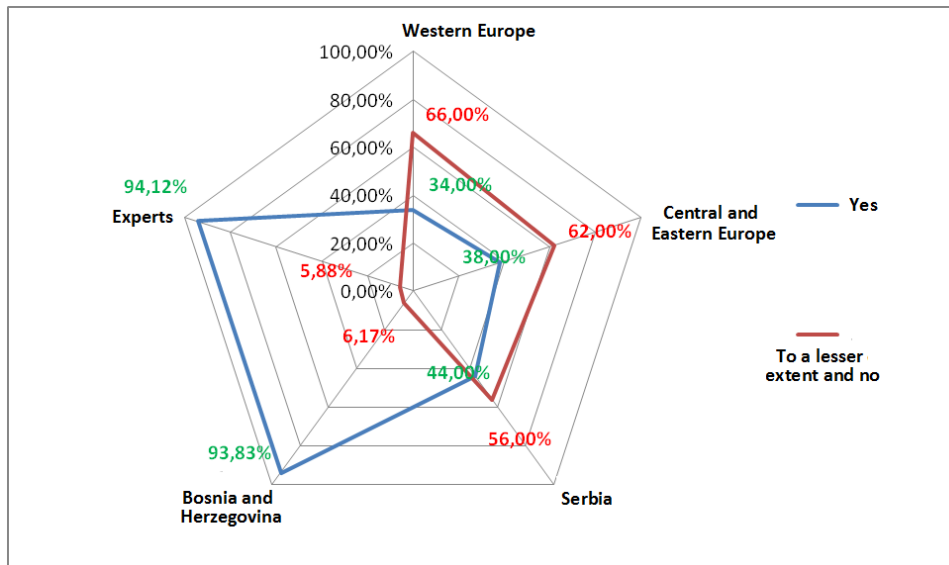
Chart 3. Evaluation of the financing structure in the process of strategic restructuring of companies in Bosnia and Herzegovina



Source: Author's research

The research results show that in the process of restructuring companies in Bosnia and Herzegovina mostly use bank loans (55.56%). Also, they use their own sources of financing based on the analysis of the basis of the current financial structure in the company (34.57%). Based on previous research results, we can confirm research hypothesis H2: Companies in Bosnia and Herzegovina mostly use bank loans as a source of financing in the process of strategic company restructuring. It is important to point out that companies in the process of restructuring in Bosnia and Herzegovina do not use corporate bonds at all, which is certainly not the practice in developed economies. Also, they do not rely on EU development funds, which are available for businesses, which is a significant source of financing. We will also compare the research results obtained with the results conducted by Roland Berger Strategy Consultants. Based on the obtained comparative analysis, we will test the significance of the differences based on the Pearson Chi-Square test.

Chart 4. Comparative analysis of the assessment of the importance of the financing structure in the process of strategic restructuring of companies in Europe/Serbia/Bosnia and Herzegovina



Source: Author's research

In the continuation of the work, based on the chi-square test (χ^2), we will test the significance of differences in the degree of importance of individual sources of financing in the process of company restructuring (Western Europe, Central and Eastern Europe, Serbia, Bosnia and Herzegovina and Experts). Taking into account the risk of error, and based on the reliability coefficient of $(1-\alpha)=95\%$, i.e. with an error risk of $\alpha=0.05$, we performed the given test. We will perform the testing for the base value $b=100$. In this regard, the null and alternative hypotheses are:

H₀: $\pi_1=\pi_2=\pi_3=\pi_4=\pi_5$

H₁: There are differences between at least two proportions of the basic sets

Table 2. Chi-square test (χ^2) - testing the significance of differences

	<i>Value</i>
<i>r</i>	5
<i>v</i>	4
<i>m</i>	0
<i>b</i>	100
<i>p value</i>	60,790000
<i>(1-α)</i>	0,95
<i>α</i>	0,05
<i>χ^2</i>	61,219326
<i>$\chi^2_{\alpha,v}$</i>	9,488

Source: Author's calculation

Based on the test results, we get that $\chi^2_{\alpha,v} < \chi^2$, based on which we reject the $H_0: \pi_1=\pi_2=\pi_3=\pi_4=\pi_5$ hypothesis and accept the alternative hypothesis H_1 : There are differences between at least two proportions of the basic sets. It represents the basis with a reliability coefficient of $(1-\alpha)=95\%$, i.e. with a risk of error of $\alpha=0.05$ that the sources of financing and

financial structures in the process of strategic restructuring of companies in Western Europe, Central and Eastern Europe, Serbia and Bosnia and Herzegovina differ significantly. On the basis of the previous research results, we can confirm the main research hypothesis of the work, Ho: There are significant differences in the sources of financing and financial structure in the process of company restructuring in Western Europe, Central and Eastern Europe, Serbia and Bosnia and Herzegovina.

4. Conclusion and implications

In times of crisis, the concept of restructuring gains more and more importance. For this reason, it is an area in which significant research interest has been expressed by many authors around the world. The given theoretical considerations and analysis of research results indicate the need for a strategic approach to the restructuring of companies in Bosnia and Herzegovina. As we have seen, strategic restructuring generates direct or indirect interests of a large number of stakeholders whose actions and goals must be respected, as well as their direct and indirect influences. Good management through the process of strategic restructuring can contribute to the balanced realization of the goals and interests of all stakeholders or most of them, because in practice it is often very difficult to reconcile all interests. At this point, it is necessary to point out that the crisis in the company generates consequences for the interests of numerous internal and external stakeholders of the company. For the success of the strategic restructuring, the cooperation of the top management with the middle and operational level of management is extremely important. Another reason for their great importance lies in the fact that they balance the interests of all stakeholders. That is why it is important that in the process of strategic restructuring you have managers who have a high level of knowledge, education, expertise, and experience and who can respond to the highest challenges of strategic restructuring. On the other hand, it is important for owners to properly balance the interests and goals of the company, employees, shareholders, and personal interests before making a final decision.

The research also showed that there are significant differences in financing and financial structure in the process of company restructuring in Western Europe, Central and Eastern Europe, Serbia and Bosnia and Herzegovina. Foreign experiences can be of great benefit to companies in Bosnia and Herzegovina in this area. The choice of adequate sources of financing for each company is one of the most sensitive issues. Practice has shown that our companies mostly use bank loans as a source of financing. Frequent irresponsible borrowing, loan rescheduling and new borrowing for the purpose of paying off old debts lead companies to over-indebtedness and debt slavery. On the other hand, company management based on strategic restructuring can contribute to the creation of value for interest groups, primarily shareholders, through portfolio planning, manage strategic value - management of drivers of strategic value, provide pervading philosophy - establishment of an overriding business philosophy and leading goal and structure - harmonization of organizational structures. They also represent key drivers of value in the process of strategic company restructuring. In addition to the ones listed, value drivers can also be concentrated in the market. Customers and consumers in a strategic restructuring can influence the creation of value, through a greater volume of sales.

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The Western Balkan'S Digital Integration: from the Digital Agenda to the Agenda on Research, Innovation, Education, Culture, Youth, and Sports

Andreja Mihailović¹

Abstract

The paper's main goal is to show how far the Western Balkans (WB) have come on the path to digital transformation. It pays special attention to the efforts and effects of two joint initiatives that work well together: the Digital Agenda and the Agenda on research, innovation, education, culture, youth, and sports. The European Commission, together with the six WB countries (Montenegro, Serbia, Albania, Bosnia and Herzegovina, Kosovo* and North Macedonia), launched the Digital Agenda for the WB region in 2018 at the Digital Assembly in Sofia, Bulgaria, with the aim of encouraging the region's shifting into a digital economy and incorporating the advantages of ICT, such as improved living standards, career opportunities, improved efficiency, and quality infrastructure. The Digital Agenda covers the growth of the information society in all its forms, from improving regional telecommunications infrastructure to vastly improving cybersecurity, trustworthiness, and the modernization of industry, as well as encouraging research and new ideas. Considering that the WB area is facing a prolonged digital literacy challenge, despite a high internet penetration rate ranging from 75% to 96%, the WB's economy is now experiencing a disorganized and slow recovery, alongside high rates of unemployment. Understanding the importance of research, innovation, education, training, and culture as key drivers of a green, comprehensive, inclusive, and digital transition economy, the EU-Western Balkans Summit in October 2021 launched the new comprehensive long-term strategy for EU cooperation and the WB - the „WB Agenda on Innovation, Research, Education, Culture, Youth, and Sport"—with the objective of delivering scientific excellence as well as the reform of the reformed region's educational landscape. The scope of measures in this agenda is categorized into three axes: political, regional, and thematic, which set the context for close coordination with the WB in the aforementioned areas while remaining adaptable enough to accommodate upcoming events or evolving interests. The agenda is driven by cross-knowledge fertilization, cutting-edge technology transfer, capacity-building activities, and evidence-based policy making. In accordance with the new priorities of the European Commission and the Economic and Investment Plan for the WB, the Green Agreement and its international dimension, the Digital Transformation, and the service user economy are crucial to the structural transformation and consolidation of the regional digital identity. Numerous organizational structures and processes have emphasized this concept, such as the Policy Support Instrument, the Berlin Process, the WB platform for Research and Innovation, Education and Training, and Smart Specialization Strategies. The aim of this paper is to demonstrate the great accomplishments of the WB's digital consensus as a key instrument for the accelerated innovation regional ecosystem systems based on smart use of digital

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technologies and upskilled workforce for sustainable and inclusive growth in line with the region's aspirations for EU accession and integration into the pan-European digital area.

Keywords: Digital transformation, Western Balkan, Integration, Research, Innovation, iDiplomacy, Digital Agenda.

The roadmap for the Western Balkans

Whenever it refers to the movement of the European economy, the WB countries are placed in a position of disadvantage in comparison to the rest of Europe. In point of fact, this is not necessarily a novel circumstance. This is a result of the remoteness between the areas of business activity, attributed to the region's troubled military history and political disintegration. As a natural consequence of this, the development of Euro-Atlantic assimilation and the advantages that are entailed with it, such as gaining access to a larger market and increased levels of safety, have been extremely unsteady and insufficient.

The anticipation of EU membership and the overall expansion of substantial economic growth encouraged policy reforms in the region throughout the early and mid-2000s. Unfortunately, the financial meltdown of 2007-09 and the subsequent European recession of 2010–13 both slowed the region's economic recovery and exacerbated labor shortages, especially among the young. Meanwhile, several unsolved legacies from previous conflicts hampered the process of transformation and advancement to EU accession in WB countries and increased ethnic tensions throughout the area (Dabrowski and Myachenkova, 2018).

Therefore, the EU maintains tight relationships with its partners in the WB region in order to achieve its goal of safeguarding liberal democracies that seem to be prosperous, resilient, and effective on their way to becoming members of the EU. The Union and the WB6 are working together with the goals of achieving streamlined governmental and economic governance; the optimum standards of the legal system; the endorsement of political freedoms; and the development of a stronger civil society. Policy changes are essential to progressing the European route, but even more crucially, they are fundamental to enhancing the mechanism in which governments provide the necessary benefits for their citizens.

iDiplomacy as a new paradigm of digital integration

The industries of the WB6 were challenged to raise their level of cooperation with their neighbors so that they could strengthen their level of integration with the EU. Even while it is clearly evident that the modest regional market would never be able to compete with the enormous EU market, it is nevertheless beneficial for the WB6 to develop their political and economic connections in the region. In particular, with respect to generating the weak produce of manufacturing and selling on the regional market, a place where specific interactions, familiar languages, and preferences of consumers can be capitalized on, this may be accomplished in order to showcase the European devotion to cooperation and harmony in their mission toward EU membership. The regulatory investment framework, the promotion of the common investment area, the financial system, and smart growth strategies are the major target categories that have been recognized in order to accomplish the vision of a recognizable investment opportunity amongst the industries of the WB region (RCC, 2020).

Conducted research analyses showed that perspectives that companies in WB6 have toward the government range from moderate dissatisfaction to moderate satisfaction, with considerable numbers of respondents keeping a neutral stance on a variety of issues. While questioned about the behavior, ethics, accessibility, or responsibility of their administrations, or whether or not

their governments are willing to involve them in the decision-making process, people have a tendency to demonstrate dissatisfaction while simultaneously becoming more reserved. Despite this, companies acknowledge the achievements made by authorities to improve basic infrastructure, increase information systems, and digitalize public services. The public still has a very strong and, in certain situations, even stronger perception of corrupt practices. As more of a result, the safeguarding of the rule of law must therefore continue to be a primary priority of those who implement policy (ACIT Centre & Finance Think, 2021).

Besides that, participation from the widest possible cross-section of the population in the deliberation and choice-making processes is required to ensure that the policies that are ultimately put into effect can be trusted. Thanks to ICT advancements, people can now communicate with one another in a direct and horizontal manner, so they are no longer merely recipients of information in a passive role.

Keeping that in mind, the evolving nature of diplomacy in the twenty-first century is based on improvements in information technology in modern communication. Information operationalness, information circulation, and metadata management raise the energy of diplomatic activity; digital diplomacy can be a firm foundation for wealth creation by strengthening digital integration in the region.

iDiplomacy is a new paradigm of diplomacy in which new high-tech tools are used on a daily basis in diplomatic practice, both in terms of communication with external audiences and internally among diplomats and other stakeholders. Digital diplomacy, defined as "handling foreign policy problems via the Internet" (FCO), is not a replacement for existing means of communication but rather an extension of traditional diplomacy (Justinek et al., 2019). As a result, in contrast to conventional methods of diplomacy, digital diplomacy provides an opportunity for everyone and anytime to express a point of view.

The Digital Agenda for the Western Balkans

The Western Balkans six (WB6) have focused their efforts on two main targets in order to fulfill the concept of a Common Regional Market: the digital integration of the six regional economies and the innovation-driven transformation of their respective sectors (CRM). The goal of the CRM 2021–2024 agenda is to empower the modernization and recapitalization of the economies of the regional areas through "the integration of the WB6 digital economy into the EU Digital Single Market." (RCC, 2021). The three pillars that endorse the EU's Digital Single Market Strategy are:

1. **Accessibility:** Improving business and consumer access to digital products and services across Europe;
2. **environment:** fostering favorable conditions and a competitive environment for the introduction of innovations and telecommunication technologies;
3. **Optimizing the potential for expansion of the digital economy and society** (EU4Digital, 2022).

As a part of this effort, the European Commission, together with the six WB countries (Montenegro, Serbia, Albania, Bosnia and Herzegovina, Kosovo* , and North Macedonia), launched the Digital Agenda for the WB in 2018 at the Digital Assembly in Sofia, Bulgaria, with the intention of encouraging the region's transition into a digital economy and embracing

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the huge benefits of ICT, such as growth in the economy, employment, increased performance, and quality infrastructure. The Digital Agenda for the WB was developed with the purpose of empowering the establishment of the information society in its largest sense, from the digitalization of industry and the improvement of regional infrastructural development to significant increases in network security and reliability. Correspondingly, the Digital Agenda actively promotes research and technological advancements. The support of the Digital Integration initiatives as one of the four components of the Multi-Annual Action Plan for a Regional Economic Area (EC, 2017) was agreed upon by regional leaders at the summit that took place in Trieste (Italy) in July 2017. Therefore, the agenda emphasizes the importance of the following key aspects:

Investments in broadband connections are extremely important because the adoption of high-speed Internet in the WB requires stable infrastructural facilities. This will encourage strategic partnerships and contribute to the improvement of the economic structure. As one of the initial funding programs, the Western Balkan Investment Framework (WBIF) has so far given its full endorsement to Albania's providing of technical and financial assistance.

Strengthening information security, trustworthiness, and digital innovation in the economy: The EU and the WB region share the ambition of improving the online security and trust of their respective populations. The Digital Agenda for the WB will promote capacity building in trust and security as well as the digitalization of industry in the region to help ensure that all constituents of society are able to benefit from the advantages of digital advances.

Fostering the digital economy and society: The Digital Agenda encourages the establishment of models for eGovernment, eProcurement, and eHealth, in addition to positively affecting digital skills among all users, which will assist in the fostering of the digital economy and society. To meet this requirement, we will strive to enhance the WB'S cooperation and recognition in activities and policies organized by the EU. It therefore particularly includes the Digital Opportunity Traineeship for students and young individuals from the Western Balkans in order to enable them to acquire first-hand training in digital areas. Additionally, it is important to note that all nations that are members of the Union as well as parties that are members of the European Free Trade Association (EFTA) endorsed the "eGovernment Declaration" on October 6, 2017, in Tallinn. The Declaration represented a political commitment at the highest level towards the goal of providing high-quality, user-centric electronic public services for citizens as well as seamless cross-border public services for enterprises.

Boosting research and innovation: The Digital Agenda will assist in the setting up of regional research organizations and the promotion of state-of-the-art e-infrastructures in the WB region. These services and systems will also be fully integrated into a fast-evolving European Research Area. This will serve to stimulate research and innovation. Through these efforts, a new generation of researchers and engineers in Europe will get the best possible experience, and academic cooperation will be encouraged all over the region (EC, 2022).

Benefits of the digital transformation

ICTs are crucial for the development of the social and economic potential of society and each individual, and they are an indispensable component of strategic development policies in countries that strive for continuous societal development and high standards of education. That is why digital transformation has evolved into a strategic priority on leadership agendas (Hess et al., 2016). So far, it has launched a wide spectrum of possible opportunities for organisations

to engage customers, which has already inspired unforeseen and novel innovative business models (Chesbrough, 2010).

The launch of the digital revolution has accelerated the process of evolution that is occurring all across the planet. The emergence of the digital age has brought about profound changes in the ways in which businesses function, as well as in the ways in which individuals participate in both the public and private sectors, share information and valuable goods. The contemporary scientific literature provides a wide range of different definitions for the concept of digital transformation. According to Fitzgerald et al., "the application of emerging digital technologies (social media, mobile, analytics, or embedded devices) to enable big business benefits such as better meeting clients' needs, optimizing processes, or introducing new business models" (Fitzgerald, 2014). In a similar manner, Liu et al. proclaim that digital transformation should be seen as an inevitable process of "organizational change that incorporates digital technology and business processes in a digital economy." (Liu et al. 2011). Warner and Wager, M., give a definition of digital transformation that is based on evidence. They say that digital transformation is "an ongoing process of strategic renewal that uses advances in digital technologies to build capabilities that refresh or replace an organization's business model, collaborative approach, and culture" (Warner and M. Wäger, 2019). That said, strategic renewal can go in a plethora of different directions, including the utilization of new technology, the digitalization of repetitive and low-added-value processes, a new recruitment policy focusing on the skills and new talent of digital highly-skilled professionals, or the development of partnerships with incubators or other innovation key players, which leads to further expansion of an overall culture of innovation at all levels. When a company has a culture of innovation, it encourages its employees to take on new challenges and actively work on learning new skills.

The labor market has been profoundly affected by the digital revolution. To maintain a competitive advantage and stay ahead of the competition, companies must enhance their business strategy and service offerings by integrating technological innovations to enable new capabilities (Van Den Broek and Van Veenstra, 2018). The primary aim of a digital transformation is continual optimization—an organization that can anticipate market dynamics and respond swiftly.

Outlining the optimum approach to transformation – whether a substantial redefinition of the value creation concept, a restructuring of the operations strategy, or a combining of each – involves a comprehensive analysis and consideration of the different aspects: accessibility, networking implementation, customer requirements, organizational activities by competitors in the marketplace, interconnection among growing technology processes, and existing conceptual functions through each step of the alteration (Berman, 2012). In addition, the spread of digital technology can occur at a rapid pace, which means that there is often a high level of unpredictability around the foundational ideas of digital transformation strategies. Therefore, reform efforts for digital innovation should be evaluated based on an ongoing performance review, which includes both the theoretical foundations and the transforming progress that has been made at a certain point (Matt et al., 2015).

This process of development typically occurs naturally and never by coincidence. In fact, digital transformation is a learning process, so each step requires a detailed plan – in this case, a digital strategy-driven plan for a smooth transition (Gobble, 2018).

The Agenda on Innovation, Research, Education, Culture, Youth and Sports

When it comes to the constraints that the WB area is facing in terms of its workforce, there are two big challenges that need to be acknowledged: the lack of overall digital illiteracy and the exodus of highly skilled professionals (brain drain). The continuing elevated level of depopulation, in particular of young talents, can represent a significant obstacle to the region's economic growth. This is because it is getting harder and harder for potential investors to find workers with the right skills in the local job market.

As a necessary consequence, regional digital integration should be able to enable the establishment of national research capacities and the development of state-of-the-art e-infrastructure in the WB6, and it will also integrate these countries into the developing digital European research space. This will be accomplished by encouraging research and innovation. To enable the opportunity for the next wave of academics and technologists to get the highest education while simultaneously fostering inter-disciplinary collaboration across Europe.

A dedication to the Digital Agenda would then give individuals the chance to comply with the requirements of economic and social development. In addition, it will help revitalize the governance of the country; optimize interoperability; fortify the data protection of online content; and continue improving the environment for business. Strengthening potential in areas such as research and innovation has been highlighted as one of the most important aspects that necessitates prompt attention throughout the area. With the support of the European Commission and the Regional Cooperation Council, the governments in the WB have established a new strategy for research and innovation in order to encourage synergies between their corresponding initiatives.

The WB's forward-looking agenda has a focus on innovation, research, education, culture, youth, and sport that looks toward the future. The engagement essential for the formation of the agenda is both extensive and intended to be implemented over the foreseeable future. The Western Balkans Agenda and the activities that it proposes will contribute to the region's broader societal growth and integration through improved investments in research, education, culture, youth, and sport (EC, 2018).

The Agenda is built on three primary pillars:

The Political Agenda: Recognizing the region's strategic significance and consolidating the progress it has made toward integration, the EU has intensified its participation in terms of encouraging regional initiatives that tend to generate employment; cultivating societies that are built on knowledge and governance that is guided by information; providing assistance for the partnership with all of the Union's programs encompassing Research, Innovation, Education, Culture, Youth, and Sport; designing the basis for the implementation of systemic modifications and reforms;

The Thematic Agenda is fostering stronger convergence with the EU strategic priorities; changing the landscape of the regional environment for research and innovation; addressing the effects of climate change and facilitating the transition to a digital economy; and supporting the regional participation in the EU Green Deal implementation process.

The Regional Agenda promotes deeper regional economic inclusion by methods of structured investment portfolios in the advancement of human resources and digital transformation; improving the overall standard of educational and employment programs; increasing the potential of personal capacity building; closing the gender gap and the digital divide; increasing the amount of mobility and connectivity; and supporting cultural and national engagement (EC, 2021).

The overarching goal is to amplify the positive influence that research and innovation have on the expansion of the economy and the creation of a new labor force. The promotion of regulatory reform at the national scale and cooperative investments in selected regional initiatives are both components of this strategy. By putting together regional resources and funding regional projects and institutions with these combined investments, the WB can reach a critical mass that will make it easier to use smart specialization (EC, 2018).

Conclusion

The digital revolution is a multidimensional and evolving process that has a big influence on a variety of aspects, including how economies work, including how organizations structure their operating models. As a natural consequence, among many other elements, the sector in which a certain company exists would rapidly deteriorate as technology is utilized (EC, 2012). The tendency of WB countries to access the EU provides a motivation for those countries to accelerate their proposed reforms. Transformations are essential for making progress in the direction of Europe, but far more crucially, they are critical for improving political and economic integrity, the legal system, the freedom of the media, and social movements.

The EU and WC countries are intricately intertwined. The EU accounts for the majority of wb import and export trade: around 70 percent of WB economies' imports come from the EU, which confirms that the EU is the most essential business partner in the region. Therefore, the region is significant to the EU in terms of safety, stability, economy, and transport networks because of its strategic location. As a result, the economic and political opportunities of the Western Balkan countries, as well as their prospective within a European framework, should remain a major priority for the EU. All of the WB6 countries have signed Stabilization and Association Agreements with the EU. Such arrangements have notably contributed to liberalizing business bringing the region into alignment with EU standards. The EU's interactions with the Western Balkan states are governed by an overarching framework in order to effectively address common security and economic concerns. The Union offers the countries within the region both financial and political assistance, with the purpose of cultivating friendly relations with their neighbors and generating inclusive growth through regional integration. Throughout its comprehensive political support for the WB and the Berlin Process, the EU provides funding to regional cooperation organizations with the aspirations of fostering economic growth, enhancing connectivity, strengthening international stability, and achieving a wide range of additional benefits for the region in general (EUEA, 2022).

WB countries were already driven by digital transformational change whilst highly aware of the present and potential risks to their essential systems, infrastructural facilities, industries, and corporate entities, as well as regional stability, that might result from the widespread abuse of communications technology and insufficient resilience. While dedication to the Digital Agenda would then give individuals the chance to comply with the requirements of economic and social development, in addition, it will support the revitalization of the governance of the country; optimize interoperability; fortify the data protection of online content; and continue improving the environment for business; the new forward-looking will contribute to the region's broader societal growth and integration through improved investments in research, education, culture, youth, and sport.

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A Comparative Analysis of Export Promotion Strategies in the Six Countries of the South-East Europe Region

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Abstract

Openness of trade gives small economies an opportunity to overcome their limitations, and one of the main advantages of trading internationally is the ability for producers from small countries to place their products on larger markets. Countries often use export promotion instruments to create a desirable image of domestic products, as well as producers, and thus encourage the placement of their products on the international market. Export promotion instruments aim to help companies identify potential markets and products, present their products abroad, and identify other opportunities to trade abroad. In most countries of the world, national export promotion agencies have been established to coordinate these activities. The aim of this research is to analyse the strategies and programs for export promotion that are in use in the six non-EU countries of South-East Europe – Bosnia and Herzegovina, Serbia, Northern Macedonia, Montenegro, Moldova, Albania and also in Kosovo* (in accordance with United Nations Security Council resolution 1244). The paper provides an overview, and comparative analysis of export promotion strategies in the above-mentioned economies, as well as a proposal for their improvement.

Keywords: export promotion, international marketing, South-East Europe Region

Introduction

Starting in the 80s, globalisation and trade liberalisation initiated a new paradigm regarding economic development – a strategy based on export orientation. It has at high extent replaced the import-substitution strategy, which was widely favoured from the 50s to 70s amongst the developing countries. Dissatisfied with this strategy that has not shown expected results in regard to the economic growth, many developing countries have consequently implemented the reforms towards the trade liberalisation.

One of the main benefits of export orientation, as Salvatore (2013) indicates, is that it overcomes the smallness of the domestic market and allows a developing nation to take advantage of economies of scale which is particularly important for the many developing countries that are both very poor and small. Furthermore, according to Salvatore, production of manufactured goods for export requires and stimulates efficiency throughout the economy which is especially important when the output of an industry is used as an input of another domestic industry. Finally, the expansion of manufactured exports is not limited (as in the case of import substitution) by the growth of the domestic market.

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Krugman (2012) points out the three important gains of free trade in case of small, developing economies, beyond the conventional cost-benefit analysis. First one is a gain from the economies of scale which discourages companies from concentrating mainly in protected industries that consequently have a higher probability of becoming inefficient. Secondly, Krugman states that free trade, as opposed to the “managed” trade, offers more opportunities for innovation and learning, by supporting entrepreneurs to seek new ways to export. The third argument suggests that a move to free trade makes the economy more efficient as a whole, since there is a tendency for more productive enterprises to engage in export activities, whereas the less productive ones remain within the limited domestic market.

As a result of the opting to the export orientation, many countries have developed strategies in order to promote export activities. Small countries are facing various challenges when it comes to entering foreign markets – particularly due to the lack of resources, support, and technical assistance. Regarding the stated drawbacks which arise from the specific position of small open economies, policy actions are implemented in order to support export promotion, integration into global value chains and opening digital sales channels.

In this paper, we focus on the six countries (seven economies) in South-East Europe: Bosnia and Herzegovina, Serbia, Northern Macedonia, Montenegro, Moldova, Albania and Kosovo* (in accordance with United Nations Security Council resolution 1244), evaluating the strategies that these countries have implemented towards the export promotion. The paper is divided into three sections. Firstly, we examine the strategies in general, on different levels - the government and company level. In the second part we analyse evidence in each of the stated countries. In the third part conduct the comparative analysis of the above mentioned countries. Finally, in the conclusion we evaluate the efficiency of the implemented strategies and suggest the possibilities of improvement.

State Level Export Promotion

According to Rakita (2009), there are different levels of interest when it comes to export promotion: state interest and support to small and medium-sized enterprises.

- State interest is one of the primary reasons for export promotion. By increasing the export of products and services, the development of an open economy is encouraged, it ensures the inflow of foreign currencies and the development of domestic companies. All this indicates that the promotion of exports must and should be one of the main national interests, therefore states must harmonize their macroeconomic policies. For many developing economies, exports are mainly commodity and primary products. Therefore, an initial export strategy focuses on enhancing and consolidating the volume of export into existing markets as well as diversifying to other exports markets (Okwu et al., 2013).
- Apart from the state interest, a significant factor is helping small and medium-sized enterprises to discover their potential and to become competitive in foreign markets. The essence of this measure is support for small and medium-sized enterprises that have not yet encountered exports, to be precise, logistical assistance during the entire process, in order to enable the easiest entry to the foreign market. Gençtürk and Kotabe (2001) noted that the use of government export promotion programmes are an imperative determinant of companies’ export performance in a direct manner. Such interaction determines companies’ export involvement behaviour. The further mentioned that the direct effect unambiguously models the hypothesis that government export promotion

programmes are an essential resource for constructing the knowledge and experience needed for successful international market involvement.

The government sets the overall economic direction and trade development strategy. Establishing the export dimension of this strategy in terms of appropriate economic instruments and export promotion measures is critical to national export performance. Therefore, the design of relevant trade policies is the key to a successful national export promotion strategy (Okwu et al., 2013)

Institutionalization of export promotion mostly refers to Export promotion agencies (EPAs) which provide services that aim to help firms sell their products abroad. EPAs may provide market information related to export markets, promote image of the country or region, usually through advertising campaigns, promotional events, and advocacy and provide consultancy services to firms such as technical assistance. Lederman et al conducted research studying the impact of EPAs in 104 developing and developed countries and results show that on average they have a strong and statistically significant impact on exports. For each \$1 of export promotion, \$40 increase in exports for the median EPA is estimated.

According to Lederman et al, EPA's services can be divided into four categories: 1) country image building (advertising, promotional events, but also advocacy); 2) export support services (exporter training, technical assistance, capacity building, including regulatory compliance, information on trade finance, logistics, customs, packaging, pricing); 3) marketing (trade fairs, exporter and importer missions, follow-up services offered by representatives abroad); and 4) market research and publications (general, sector, and firm level information, such as market surveys, on-line information on export markets, publications encouraging firms to export, importer and exporter contact databases).

Enterprise Level Export Promotion

According to Czinkota (1996) a company can produce more, and by doing so more efficiently, broaden its market reach and serving customers abroad. When interacting and dealing with international customers, it can lead to the improvement of existing products and the development of new ones. Market diversification, which is taking advantage of different growth rates in different markets and gaining strength by not being excessively reliant on one particular market, is one other example of the benefits that accompany exporting. Exporting activities enable a company to be sensitive to various demand structures and cultural diversities, to learn from the competition and demonstrate its ability to endure in a less familiar environment in spite of higher transaction costs. These enhance the firm/industry's international capabilities.

Export support is particularly important for small and medium-sized companies, which make the majority of enterprises in all observed countries and significantly contribute to the employment of the workforce and the value added. Due to the lacking of technical assistance and resources SMEs struggle while competing in foreign markets. Taking that into account, in the continuation of the research, the focus will be on export promotion in the context of small and medium-sized enterprises in the observed countries.

Possible Limitations Regarding the Export Promotion

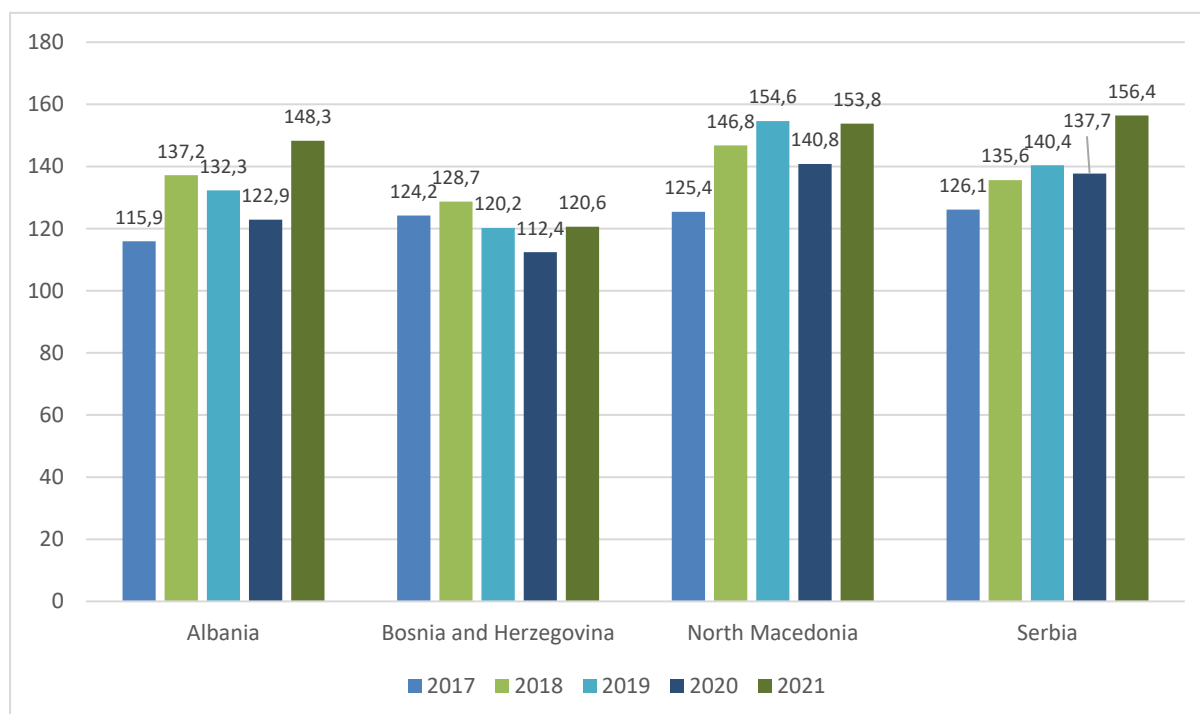
Despite all the benefits that can be gained by export promotion strategies, it is important to take into account the limitations of export promotion country's strategies. Those in favour of export promotion argue that the competitive position and export performance of companies are

attributed to the private market forces and not to government promotion programmes. Furthermore, claims of considerable improvement in export performance credited to these programmes are considered self-serving post-hoc rationalizations by many critics, since most states do not have reliable evidence or crucial statistics to either support or contradict the claims. (Nothdurft, 1992).

Export Promotion Activities – Evidence from Selected Countries

Taking into account the export trends in the previous five years, it could be said that they are positive for most of the countries for which there are available data on the volume of exports. After the significant decline in export volumes caused mainly by COVID-19 I 2020, the signs of recovery are evident in 2021. Merchandise export volumes have increased in all countries, with Serbia performing 56.4% increase in export volume in 2021 in comparison to 2015.

Figure 1. Merchandise export volume - base indices (2015=100)



Data Source: World Trade Organization

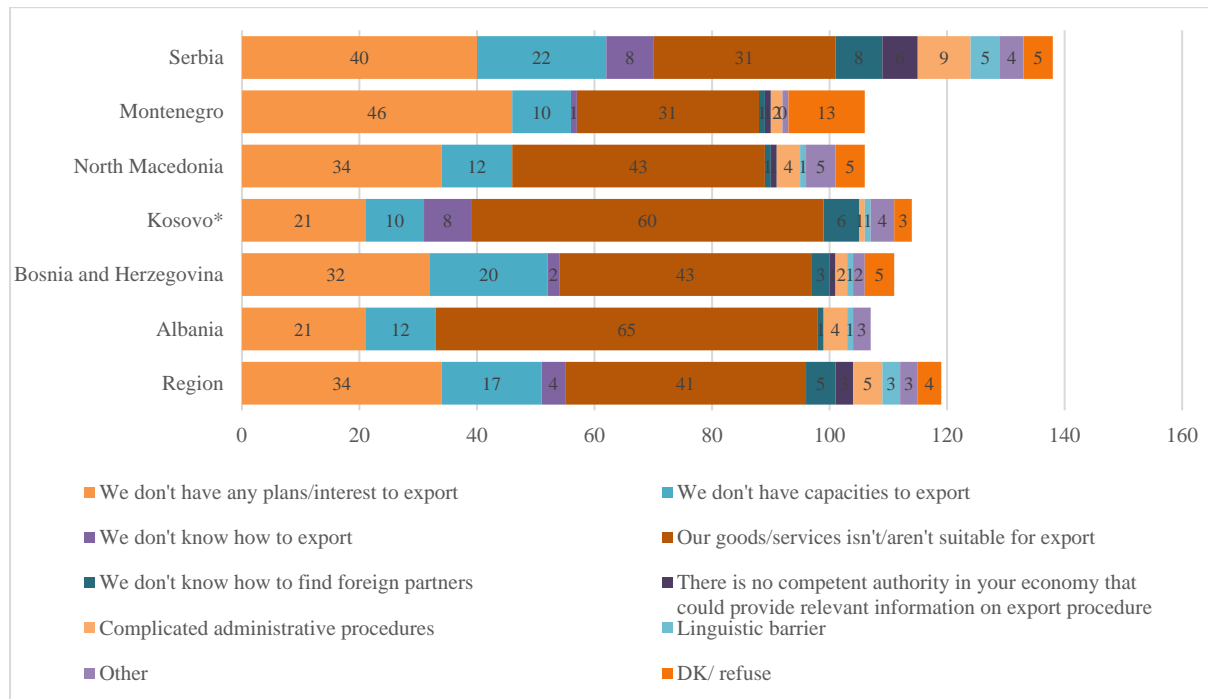
*Note: There are no available data for Kosovo**

According to the Balkan Barometer – annual survey of public opinion and business sentiments in six Western Balkan economies (commissioned by the Regional Cooperation Council) 84.7% of them responded they have been selling only domestically in 2022. Only 6.3% exported to the Western Balkans, 7.1% in the EU and 1.9% elsewhere. Within-region variation is limited, the only exception being Bosnia and Herzegovina whereby companies manifested higher propensity to export (10.6% said they exported to the EU) and Kosovo* (13.2% exported to the Western Balkans).

Although it is difficult to establish a direct link between export promotion efforts and export trends, and due to the fact that it may be only one of the affecting factors, our research is primarily based on a detailed review of actions each economy has implemented in the last 5 years to support the export promotion activities, mostly regarding the SMEs.

Before evaluating the government strategies to improve export promotion, it is necessary to consider the reasons *why companies in observed economies do not export*, from the companies' perspective. According to Balkan Barometer (Figure 2), 41% companies that did not export revealed their goods/services aren't suitable for export, which is the main reason for not exporting in 2022. The second-ranked reason (41%) is the lack of plans to export. These two reasons top the list in each of the Western Balkan economies, albeit they are quite pronounced in Albania (65% and 21%, respectively) and Kosovo* (60% and 21%, respectively) and less so in the other four economies. This results differ from survey conducted in 2021, where the one of the most stated reasons was that companies do not have capacities to export.

Figure 2. Reasons why companies do not export (% of total)



Note: Data for Moldova are not available, since Moldova is not included in the Balkan Business Barometer Survey. Data Source: Balkan Barometer 2022 <https://www.rcc.int/balkanbarometer/results/1/business>

Firm level data, such those stated above are important to consider the targeted export promotion strategy because, as Makioka (2018) stated, it is necessary to analyze the precise effects of export promotion measures (what types of measures are effective for what types of firms). Also, it would be useful to analyze not only effects on firms that receive support but also spillover effects on those that do not.

In the following, the existing strategies related to the export promotion, with focus on small and medium enterprises in the mentioned countries will be discussed.

Albania – The Business Development and Investment Strategy (2021-2027) is the main strategic document regulating export promotion activities in Albania and it is set to be adopted in November 2022. According to OECD (2022) support services for SMEs are offered (apart from Albanian Investment Development Agency) by both the Union of Chambers of Commerce and Industry of Albania and the Chamber of Commerce and Industry of Tirana. Services that are offered include: vocational training, workshops, conferences, certificates of origin support, and intellectual property protection assistance. In comparison to the previous period, this renewed strategy provides measurable, realistic targets on SME internationalisation that enabled Albania to set a strategic framework for supporting SME efforts in foreign market

expansion, global value chain integration and linkages with Multinational Enterprises, which represents the most visible advancement. (OECD, 2022). While the Business Development and Investment Strategy (2021-2027) envisions digitalising the application process, in order to further facilitate access to programmes and finance. It would be also beneficial if AIDA would straighten its collaboration with local chambers of commerce and business associations outside of Tirana. Establishing and developing online platforms to assist Albanian companies in their online activities and information search is crucial for boosting exports and increasing competitiveness. Coordinating information exchange between the central AIDA office and other relevant state bodies, such as the tax office or local municipalities, could help SMEs in their application process by reducing the administrative burden they face. Establishing and developing online platforms to assist Albanian companies in their online activities and information search is highly beneficial to boosting exports and increasing competitiveness in this country. (OECD, 2021)

Montenegro – Montenegro is the only observed economy that does not have a separate Agency responsible for export promotion activities. Alternatively, all of the activities related to the export promotion are coordinated by the Ministry of Economic Development, precisely by the Directorate of Competitiveness Enhancement. There are three strategic documents that regulate these activities: the Industrial Policy of Montenegro (2020-2023), the NSSD (2016-2030) and the MSME Strategy (2018-2022). Montenegrin economy relies widely on tourism and it was hit by COVID-19 pandemic. Accordingly, the focus was to prioritise maintaining SME liquidity and employment and ensure their survival.

The government made progress in monitoring the implementation of the strategic documents and programme lines related to export promotion. It assesses the effectiveness of each strategy's initiatives using a set of clearly defined indicators (e.g. evolution of assortment, volumes and values of beneficiary's exports, productivity, increase in profitability, foreign market participation, number of employees, etc.). (OECD 2022). Montenegro has introduced a co-financing scheme for SMEs to develop their export capacity through participation in international trade fairs and events. The government provides promotional materials and co-funding for education and information support. Strategic documentation is being monitored, but most goals are not quantified, hampering further efforts to assess support programs and their impact. Potential risks of this centralised approach, where one entity is responsible for policy design, implementation and evaluation, include a lack of specialisation within the ministry and challenges reaching out to different segments of the business population (e.g. SMEs, start-ups, young firms) due to the distance between the central government and local entrepreneurial communities.

Montenegro can improve its economic diversity by focusing on the production of base metals, electronic equipment, machinery and chemicals (OECD, 2019). These sectors align with the type of FDI Montenegro is attracting, increasing the opportunities for SMEs to enter the international market through linking to the supplier network of MNEs. Also, this country should introduce non-financial support for SMEs aiming to form a cluster. With this form of enterprise collaboration, country aim to ensure greater connection and access to training, expertise and technology.

Serbia – There are several strategic documents regarding the export promotion in Serbia - SME Development Strategy (2015-2020) and the newly adopted Industrial Policy Strategy (2021-2030). The Development Agency of Serbia (RAS) is a government organisation responsible for promoting and increasing exports. In addition to RAS, export promotion activities are also supported by the Chamber of Commerce and Industry of Serbia (CCIS). RAS implements export support programmes according to its annual work plans, and provides guidance for the

implementation of support programmes. They inform enterprises interested in engaging in the export activities on how to qualify for financial support and the procedures of the process. According to the last OECS report, the efforts of both organisations to inform SMEs about available support mechanisms, raise awareness about foreign market expansion and provide educational and informational services are notable.

Even though in the previous period Serbia included dedicated steps in order to further strengthen the strategic framework for export promotion, Serbia did not meet key targets relating to export promotion, according to the OECD data. The share of exporters in the SME sector reached 3.8% in 2020, and the total share of exports in the total turnover of SMEs amounted to 9.2% in 2020, not being able to reach established targets of 7% and 14%, respectively. Out of 35 activities planned under this pillar, 27 were realised over the course of the strategy, which amounts to 77.1%; 5 were partially implemented; and 3 were not realised at all (OECD 2022). The potential reason might be the regulatory burden including the absence of clear procedures, complex requirements, low infrastructure capacity and difficult inspection procedures. (UNECE, 2021)

The legal framework related to the e-commerce is developed in this country. However, strategies should offer capacity building for digitising SMEs sales channels. The rise of e-commerce practices among SMEs remains below target, despite its popularity among consumers. While Serbia has already reinforced its legal framework, it could also further strengthen data protection and e-payment systems. Further developing SMEs' digital skills and promoting digital literacy can also prove crucial to increasing the adoption of e-commerce practices among SMEs. (OECD, 2022)

North Macedonia – Strategic documents which are governing export promotion in North Macedonia are Strategy for Export Promotion (2022-2026) and SME Strategy (2018-2023). The Agency for Promotion of Entrepreneurship of the Republic of North Macedonia (APPRM) is in charge of export promotion and support. SME growth and development and included it as one of the main targets in its strategic documents. In the North Macedonia, where SMEs still struggle with competitiveness, business support services (BSSs) are a key element in improving their productivity on a national and international level. Although they recognized this area as important, there was little improvement for enterprises and their business processes. North Macedonia does not conduct regular training needs analysis and has not conducted a demand and supply analysis of BSSs, risking a mismatch between SME needs and offered support services. They made advancement in terms of creating strategic documents, and defining new, revised aims, but also there was slow improvement in the area of digitalisation, and this area requires more effort to reach goals.

Priority sectors for export promotion in North Macedonia (IT, agribusiness and food processing, wine, textiles, automotive components and the electro-metal industry) have high potential for industrial clustering and shifting to higher value-added activities. The programmes should have proper monitoring and evaluation systems in place to ensure effective implementation, since there is no evidence of these systems in a strategic context. On the other hand, companies should be given support in processes of digitalisation and ensuring new technologies which will enable North Macedonian companies to enter the foreign markets. Invest North Macedonia should have sufficient resources, authority and capacity to adequately meet the needs of potential investors and to assist SMEs in creating productive linkages with them in order to benefit from knowledge and technology transfers, improve their competitiveness and move up the value chain (OECD, 2022)

Kosovo* – Document that is still regulating the export promotion field is the National Development Strategy (2016-2021). It is important to note that this document has expired in

2021 and as this country is satisfied with its performance, it is still valid, but needs to be revised in the next period of time. The strongest progress of Kosovo* can be observed in expanding the range of publicly provided BSSs and reinforcing KIESA's (Kosovo* Investment and Enterprise Support Agency) institutional capacity to improve the quality of its services. According to the OECS (2022), limited advancements are noted in the area of conducting regular training needs analysis. The last results of the SME landscape and SMEs' business support services demand was conducted in 2017. Therefore, the results are no longer relevant, particularly in light of the changes brought by the COVID-19 pandemic.

Kosovo* advanced in the field of export promotion, especially in digitalisation and forming business clusters which should enable easier entry to foreign markets. The government identified three priority sectors: wood and metal processing; plastic; and furniture. It conducted sectoral studies on the possibilities of clustering. Kosovo* formed clusters in the wood and metal processing sectors, and further analysis is planned for 2022-24. Kosovo* has an EU-harmonised legal framework in place for the promotion of ecommerce. The Kosovo* Digital Economy programme, introduced in 2018, aimed to improve digital connectivity within the economy. Enhancement in this area is limited, because Kosovo* will miss target aims regarding implementation of digitalisation.

Kosovo* has already made important advances in digitalising export promotion support, allowing SMEs to apply for grants and programmes online, which significantly improves and regulate procedures. Nevertheless, in light of the COVID-19 pandemic, the majority of export promotion activities in Kosovo* had to be cancelled, as the infrastructure to conduct them on line was lacking. These points should develop a digital environment for SMEs and improve their capacity remotely. Therefore, expanding digitalisation efforts to online training and online export support for SMEs would further reduce the administrative burden and reduce the cost for enterprises.

Also, Kosovo* could leverage its e-Kosovo platform, which has already digitalised many government services, to allow SMEs to apply for digitalisation and e-commerce support and inform SMEs about programmes promoting e-commerce practices and relevant policies and developments.

Bosnia and Herzegovina – There are three relevant documents that can be recognised as strategic, export promotion, documents in Bosnia and Herzegovina. First one (Development Strategy of the FBiH (2021-2027)), is regulating entity policy of Federation of Bosnia and Herzegovina and other two (SME Development Strategy (2021-2027) – Industry Development Strategy (2021-2027)) entity policy of Republic of Srpska in area of export promotion.

OECD (2022) in their report stated that SMEs in Bosnia and Herzegovina continue to encounter difficulties accessing Business Support Services to improve their competitiveness. Little progress has been made in matching BSS demand to BSS supply. Republic of Srpska conducted an assessment of training needs in collaboration with the Chamber of Commerce, but details on the results are lacking. No progress has been made in analysing SMEs' training needs in the Federation of Bosnia and Herzegovina. Strategic documents are adopted on each level of government, and both entities ensured important information on their portals regarding export promotion, cluster and other internationalisation support programmes. However, the main indicator that there is lack of support is data that shows that more than 90% of enterprises³ reported that they did not receive public support from international partners in 2018-20. On the other hand, the export support programmes might be focused not only on financial support but

³ Balkan Barometer 2021 - Business Opinion: Analytical Report, Regional Cooperation Council,

also on building the labour capacities capable to respond to international market demands. In order to leverage a broad export base and make exports more competitive globally, Bosnia and Herzegovina should introduce targeted non-financial support with the goal of shifting to a skills based labour force and positioning the export offer in a more competitive position on foreign markets (WTO, 2019). It would be beneficial for both entities to match the supply of business support services available to satisfy the needs of SMEs, evaluated on a regular basis from the angle of their expertise, stage of development and experience, and with export support activities tailored to the specific characteristics of local SMEs. That being said, the comprehensive policy mix, which complements financial support with a skills development programme, could contribute to increased productivity and international competitiveness.

Moldova – An important role in supporting domestic producers and exporters in the Republic of Moldova belongs to the Investment Agency of the Republic of Moldova (former MIEPO). This is a central administrative authority subordinate to the Government, the only institution amenable to promote the image of the Republic of Moldova related to the economic and investment dimension.

The basic functions of the Investment Agency are:

- “– Promoting the image of the country;
- Promoting exports;
- Promotion of tourism;
- Supporting investment activity and protecting investments;
- Strengthening and implementing economic diplomacy” (Brad, 2021)

The recently established Moldovan Investment Agency (MIA) implements a series of B2B projects and missions to support producers from the key sectors of the Republic of Moldova. However, according to OECD (2020), Moldovan Investment Agency lacks both the human and the financial resources necessary to cope effectively with the needs of Moldovan businesses willing to export. It is further stated that inadequate funding and lack of staff prevent the agency from expanding the range of services specifically targeted at exporting SMEs, such as training, market intelligence and consultancy services – all necessary to promote SME internationalisation. At the same time, ODIMM, the leading government institution offering training, consulting, and information support to SMEs, currently provides only informational advice for SMEs that are interested in exporting. Overall, the evidence suggests that SMEs are lacking a comprehensive form of support explicitly intended to deal with the challenges of small and medium enterprises.

According to Olaru (2014) the National Development Strategy (NDS) Moldova 2020 represents the overall strategic development vision for the Republic of Moldova and covers the period from 2012 to 2020. One of the main features of this strategic document is shifting from consumption-based growth model towards export-led, as well as export promotion and support to SMEs. To be more precise, this document has set these aims:

Support to the development of the SME sector by creating the necessary business infrastructure (Business Incubators and permanent training programme for SMEs);

Export promotion and sustainable support related to the penetration on third markets by existing and potential Moldovan exporters;

Drafting of a new strategy on: “Export promotion and investment attraction” based on new tools and approaches such as banking guarantees for export operations, factoring, the elimination of unnecessary barriers to trade, providing special conditions and facilities in obtaining working capital;

Design and promote specific (sector) export-oriented business development services;

Support in developing export-oriented manufacturing and processing industries in view of maximising their foreign market access

Moldova is at a stage where it is necessary to review existing export promotion policies and implement new policies. As Brad (2021) argues, not only export promotion bodies but also the government and local public bodies must contribute to the promotion of domestic products and make proposals and reforms in this direction. In order to open up new markets for SMEs, Moldova needs to conclude several trade agreements specifically aimed at exporting local products. Moldovan SMEs struggle to find information on potential export markets. For these reasons, trade agreements can help by requiring governments to set up one-stop shops online for information on national rules and regulations.

Conclusion

The economies of the selected South-East European region are dominated by micro and small enterprises, which can hardly join global value chains and compete on the foreign market unless they are given support of government structures at some extent. When it comes to export promotion strategies, despite pandemic being a major challenge to implementing export promotion activities, selected countries made certain progress in the past five years, but are still uneven.

In perspective, one thing that is essential for expanding export in all economies is creating and developing online platforms to assist companies in their online engagement and information search, and accordingly, this issue needs to be given the strategic importance. Besides, emphasis should also be on establishing, as well as evaluation and monitoring of legal framework in e-commerce. Although there is a noticeable improvement in some countries in this field (Serbia, Albania, North Macedonia, Kosovo*), Bosnia and Herzegovina and Montenegro do not have legal framework regarding the e-commerce.

Governments have set up strategic frameworks in order to increase SMEs' participation in global value chains by incentivising SME linkages with multinational enterprises. However, despite the existence of comprehensive strategies, there are still limitations in the area of either implementation of programmes, or monitoring activities. Export promotion agencies may pay more attention to is the creation of realistic and measurable targets and indicators on the basis of which implementation of the activities could be monitored. Albania, Kosovo* and Montenegro have made some progress related to this issue, as it was previously discussed. Moreover, it would be useful to continuously evaluate the reasons why companies do not export in the first place, and the difficulties faced by companies when exporting.

Strategies in the observed countries should be targeted and adjusted to fit the production structure of the company's exports or the type of company. On the basis of the obtained data, it is concluded that strategies could be more sector specific, with the export support programmes focused not only on financial support but also on building the labour capacities capable to respond to international demands. Some countries (such as Moldova) have already included sector specific export-oriented business development services in their future strategy.

All observed countries are small and open economies, for which the export-oriented policy of companies, especially SMEs, represents an important strategy for inclusion in the global production chain. In order to achieve their targets, more effort should be made both in the field

of digital engagement and e-commerce, as well as countries' sector specific adjustments related to export promotion.

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Citizens' Perception of the Role of Government in the Economy: Survey in the Republic of Srpska

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Abstract

This paper researches social attitudes to economic issues in a post-transition society, the Republic of Srpska. The transition from command to market economy in the Western Balkans went ahead of the transition of social attitudes to economic issues, especially to economic freedoms and the role of government in the economy. We researched the attitudes of citizens of the Republic of Srpska in Bosnia and Herzegovina to these issues, by conducting a national survey with a representative sample of 1050 respondents and applying multiple statistical methods to pair demographic characteristics with social attitudes. We further dissect this data into demographic groups to analyze differences in their attitudes. Despite the economic transition, most people in the Republic of Srpska still perceive the economy and government's role in it from the interventionist, i. e. past socialist positions. Additional analysis shows that there is no significant difference in attitudes regarding the age structure of respondents, which was expected to be present. In addition to the above, the perception of the respondents to the FDIs compared to domestic investments was examined, leading to the conclusion that respondents still favor domestic investments to a greater extent than FDIs.

Keywords: economic freedom, transition, FDI, economic survey, economic attitudes, Western Balkans, Republic of Srpska

1. Introduction

Societies in Eastern and South-eastern Europe that had previously organized their economies as command or semi-command have gone through a transition to market economies from the end of the 1980s. Some of them have completed this process at a faster pace than others and transformed the underlying principles of their economies until the end of the 20th century, becoming EU member-states, while countries in the Western Balkans (a common term coined by the EU for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia) have been particularly slow at fully transitioning their economies to market economies. Nevertheless, the economic side of transition from the socialist, i. e. interventionist and

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command model, to a market-led one has been mostly completed in Western Balkan countries as well together with most previously communist countries (Peev & Mueller, 2012).

Despite the economic transition that occurred in these societies, a transition in social attitudes was much slower and more difficult to make. This kind of transition has two important aspects. First, if a change in social attitudes also happens, it propels the economic transition as citizens support the idea of the market, private equity, etc., and pressure lawmakers and government to conduct the transition more quickly. Second, economic agents will be more willing to adopt the new way of their behavior in the economy, which will consequently mean a more efficient market. However, the economic transition does not necessarily need to be fully followed by a transition of social attitudes, as this process requires a much larger group of institutions: governments and government agencies, non-governmental organizations (NGOs), education institutions, families, and more. Additionally, values are much more difficult to be changed than laws in a country.

Our research focuses on social attitudes toward the economy and the government's role in it in a society that has mostly completed the economic transition process, Bosnia and Herzegovina, more specifically in its part Republic of Srpska. Apart from companies that provide public services or extract natural resources, most companies in the Republic of Srpska are privately owned and operate on a market basis. Our goal was to examine how citizens perceive the role of the government and its treatment of investors and to see whether it corresponds with the way how its economy now functions, after reforming from a socialist economy at the end of the 1980s to a market economy now.

Our research was conducted using a telephone survey with a sample size of 1053 respondents, representative of the population of the Republic of Srpska⁴. Similar research has not been conducted in the Western Balkan or neighboring countries such as Croatia or Slovenia, especially since the beginning of the 2008 crisis. However, the topic of social attitudes toward the role of government in an economy emerged again with the 2020 COVID-19 crisis and the efforts to mitigate its effects and the effects of the 2022 war in Ukraine.

2. Literature review

Literature that directly covers social attitudes and popular beliefs on economic issues in transition economies is very scarce. Much of the work in this field is focused on changes in the political system and trust in democracy and democratic institutions. However, there is very little available literature on the perception of market economy and pro-market reforms in post-transition countries, apart from biased magazine and newspaper sources. This is especially the case for countries in the Balkans, which are in the focus of this paper. However, since the political system and democratic institutions are vital to the functioning of a market economy, these papers are also included in the literature review as they could help in explaining the popular views of the economy and the government's role in it.

According to (Djankov & Hauck, 2016) there was a significant divergence between economic transition and a political one, which could also have affected social attitudes towards economic issues. These authors explain that in certain countries, economies regressed following the reforms. Furthermore, they state that the key reason why economic transition i. e. privatization and deregulation was not followed by a political transition is the fact that political elites did not change in those countries where there were no lustration laws (such as former Yugoslavia

⁴ 2013 census in Bosnia and Herzegovina was used as a benchmark

countries); corruption was widespread in these economies during the transition and it decreased the level of trust in the new system; short-term economic developments were negative (Djankov & Hauck, 2016). Grosjean et al. studied how exposure to the 2008 financial crisis shaped social attitudes toward politics, economics, and reforms in post-transition countries (2013). According to the survey from this paper, social attitudes toward a free-market economy in the Western Balkans are more pro-market than in Central and Eastern Europe in 2010 after the financial crisis, thus their results show that there was an inverse correlation between the quality of the market and democratic institutions and trust in the market economy (Grosjean et al., 2013). What they conclude when comparing their results and the Life in transition survey is that social attitudes toward economic issues are harshly shaped by the business cycle and economic hardship, especially among youth. Lawson et al. found that economic freedom is shaped by two groups of factors: civil freedoms and inequality (2020). They find that inequality negatively affects economic freedom, while the level of civil freedom acts as a catalyst for economic freedom (Lawson et al., 2020). Two previously mentioned papers might shine an answer to the low level of support for economic freedom in the Republic of Srpska, an economy hit by global economic hardship due to the COVID-19 crisis and the war in Ukraine.

There is other evidence that inequality negatively affects economic freedom. Hall et al. claim that economic freedom that leads to economic growth stems from inequality (2013). This could also be viewed from a national perspective, where countries that lag behind the developed ones with higher levels of economic freedom perceive economic freedom negatively, as it is the reason why they lag behind. The relation between migration and economic freedom is interesting as well, as higher educated individuals tend to migrate to areas with higher levels of economic freedom (Hall et al., 2015). This consequently means a drop in support for economic freedom in areas from which these individuals emigrated. However, it is important to note that these findings are for North America and the study did not include post-transition countries.

De Haan and Sturm (2003) explain the link between democracy and economic freedom, with an emphasis on market liberalization as the key feature of economic freedom. They find that an increase in levels of democracy increases the level of economic freedom, however, for some countries, it was beneficial to first have economic liberalization before democratization in order for their economies to operate on full-scale market principles (De Haan & Sturm, 2003). Former Yugoslavia and its republics first saw democratization (first multi-party elections held in 1990) and then economic liberalization.

Pugh provides a detailed insight into the post-war economic and political system of Bosnia and Herzegovina, explaining how countries oligarchs distanced the economy from democratic institutions, which are key to a liberal market economy (2016). What is especially eye-catching is that this system was named the oligarchy of entrepreneurs and that these oligarchs captured the transition process in Bosnia and Herzegovina, distancing it from the population and by doing this undermining not only trust in entrepreneurship, transition, and market economy, but also undermining the peacebuilding process (Pugh, 2016). This paper also provides evidence on how communist directors or later warlords played a significant role in the transition economy of Bosnia and Herzegovina (Pugh, 2016), which is in line with what Djankov and Hauck (2016) claim when saying that countries that conducted lustration performed better in transition. Furthermore, Pugh argues how pre- and war elites controlled the privatization processes in the country which led to the fall of many pre-war large enterprises, which consequently diminished trust in privatization and private enterprises in Bosnia and Herzegovina (2013).

Dokmanović and Cvetićanin (2020) claim that in small countries such as the ones in the Balkans, too much deregulation and liberalization leads to endangering of human rights, which further explains why there is resistance to a free-market economy concept in these countries. They explain how freedom and openness for large enterprises and wealthy businessmen meant the opposite for workers and the majority of the population in the Balkans (Dokmanović & Cvetićanin, 2020). Exactly developments like these help explain the results of our research given in the paper.

Some authors tried to find other variables, besides economic ones and the general transition experience that could explain social attitudes toward the market economy in post-transition countries. One of these factors is also religion. Minarik finds that religion in post-communist countries definitely shapes social attitudes towards economic and political issues and that religiousness is positively correlated to pro-market attitudes (2014). Additionally, he finds that Western Christianity is more pro-market oriented than Orthodox Christianity and Islam (Minarik, 2014) which are the two dominant religions in Bosnia and Herzegovina. However, this is a part of a long-lasting debate started by Max Weber on how religion, or culture in a wider sense, affects economic performance and is subject to an ideological bias.

Literature on what shaped social attitudes on economic issues in post-transition economies, especially in Western Balkans and Bosnia and Herzegovina is almost non-existing, while the only survey that measures social attitudes towards the market economy is the Life in Transition Survey conducted by the European Bank for Reconstruction and Development (EBRD) in 2010 and 2016 that captured attitudes on whether a market or planned economy is preferred, where more than a third of respondents preferred a market economy, while less than a quarter preferred a planned one (EBRD, 2016). However, this survey did not capture the effects of recent crises. Our work could be beneficial for future research on this topic as it is a small cornerstone upon which our and the work of other authors on this or similar topic could be built upon.

3. Research methodology

The analysis aims to examine the attitudes of respondents regarding the role of government in the economy of the Republic of Srpska. The additional intent is to examine whether there is a difference in attitudes between respondents of different age groups, gender, and employment status. The research is based on the quantitative and qualitative analysis of primary data using descriptive statistics, and graphic visualization to present the results.

The research was conducted on primary data collected in March 2022, using CATI (Computer Assisted Telephonic Interview) method. The questionnaire was designed by the authors and it is divided into two sections. The first section consists of 5 demographic questions used as control variables (gender, age, employment status, residence, and socioeconomic status). The second section consists of 4 questions related to the topic of research. Most of the questions were designed using a Likert scale since the research is based on attitude and perception measurement. The sample size includes 1053 respondents from the territory of the Republic of Srpska. Population Stratified Random Sampling was applied in order to obtain a sample that represents better the entire population being studied. The population is divided into sub-categories (aka *strata*) using the following criteria listed below (*Table 1*).

Table 1. Sample Stratification Criteria

Criteria		Percentage of respondents in the sample
Gender	Male	51.53%
	Female	48.47%
Age	18-25	13.38%
	25-35	15.67%
	35-45	15.86%
	45-65	35.56%
	65 and more	19.53%
Employment status	Invalid - unable to work	0.97%
	Student	5.80%
	Unemployed	34.20%
	Employed (public sector)	22.10%
	Employed (private sector)	11.20%
	Entrepreneur	2.10%
	Retiree	22.10%
Territorial distribution	Farmer	1.53%
	Prijedor	10.32%
	Gradiška	10.85%
	Banja Luka	22.57%
	Derventa	5.50%
	Doboj	9.75%
	Bijeljina	14.76%
	Zvornik	9.63%
	Istočno Sarajevo	6.83%
Trebinje	9.80%	

Source: Authors' calculation

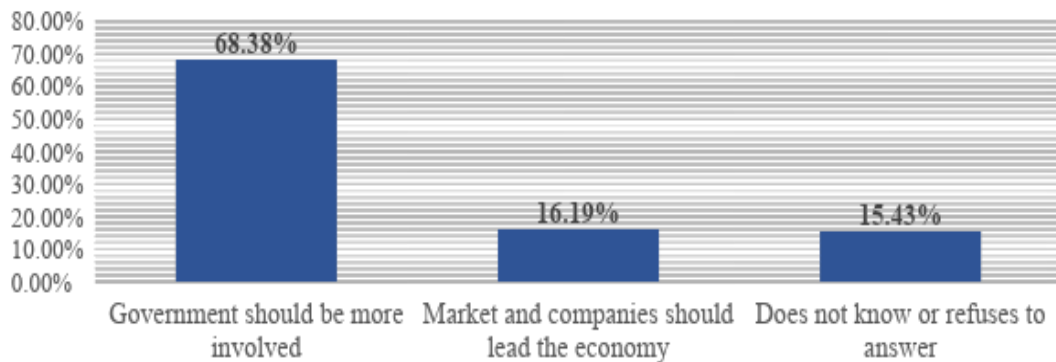
Research limitations

One of the possible limitations of the research might be the usage of the CATI data collection method. The number of questions in the questionnaire is less than it could be, to achieve an acceptable length of the survey per respondent. Overcoming this limitation could be possible by combining different methods of data collection, including CATI, CAWI (Computer Assisted Web Interview), and field data collection. Furthermore, the research did not include the attitudes of the population under the age of 18, which could distort results to some extent.

4. Results and discussion

In order to examine the general attitude towards the extent of the potential government involvement in the economy, the first topic question in the survey is stated as follows - *“Do you think that the government should be more involved in the economy, or it should be led by the market and companies?”* (Figure 1). More than two-thirds (68.38%) of respondents believe that the government should be more involved, as opposed to the 16.19% that believe it should be led by the market and companies.

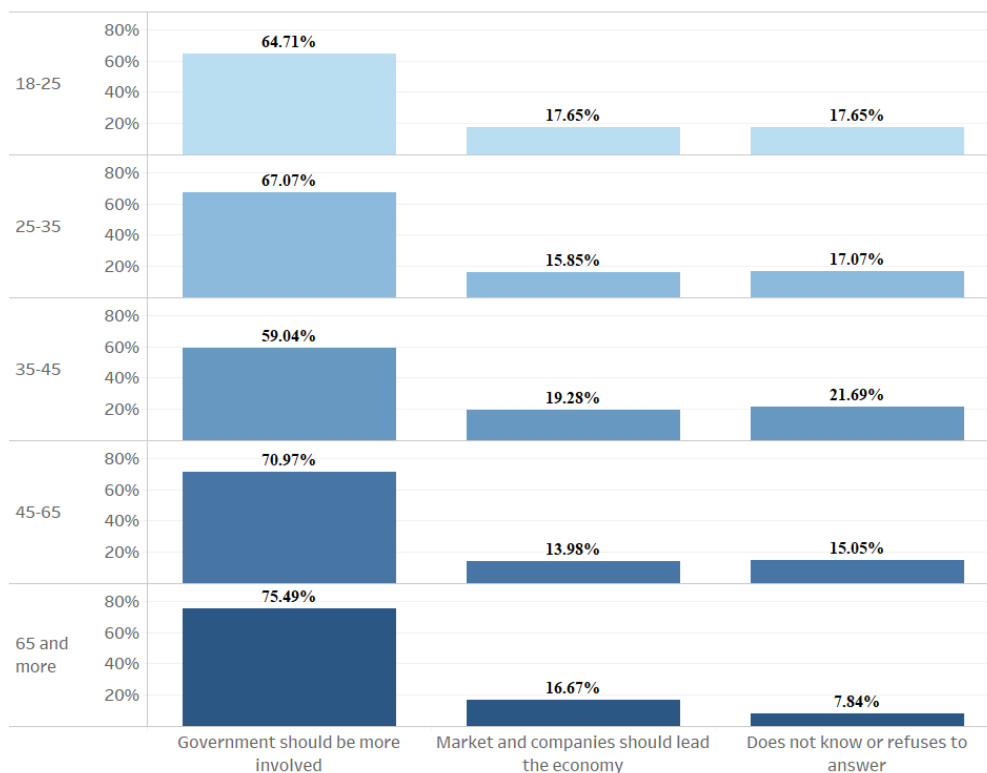
Figure 1. Do you think that the government should be more involved in the economy, or it should be led by the market and companies?



Source: Authors' calculation

Further calculation shows that respondents aged between 35 and 45 believe that the government should be involved in the economy to a lesser extent than other participants (Figure 2). However, more than half of this category of respondents is still in favor of state intervention, so it can be concluded that there is no significant difference in attitudes towards the government involvement in the economy regarding the age structure of respondents, even though it was expected.

Figure 2. Do you think that the government should be more involved in the economy, or it should be led by the market and companies? Responds by the age category

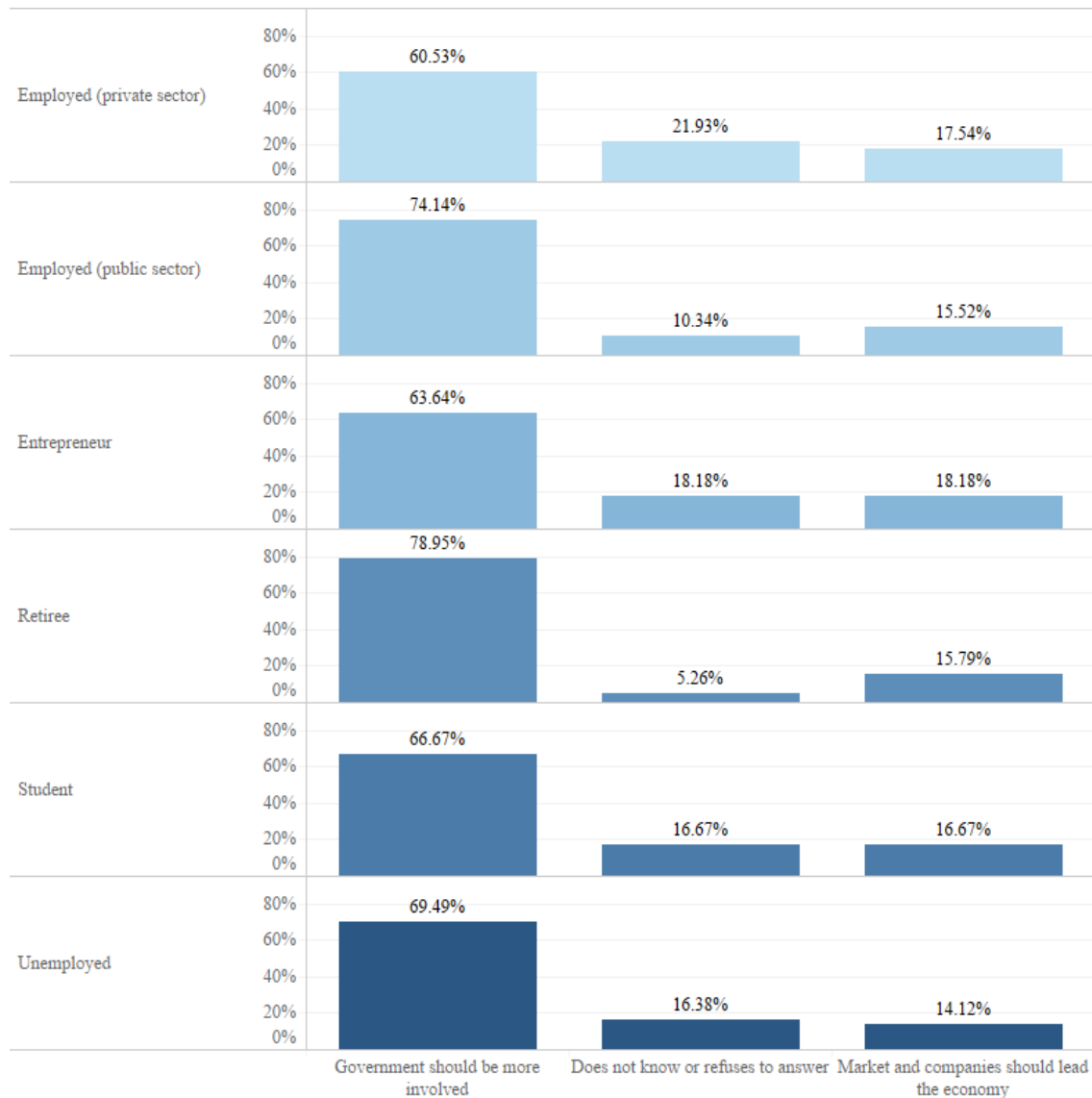


Source: Authors' calculation

Below are the results considering different employment statuses, by relevant categories. Results show that there is no significant variation in attitudes towards this matter. Retired

surveyees are the ones that believe to a greater extent that the government should be more involved in the economy, in comparison to the other respondents (Figure 3).

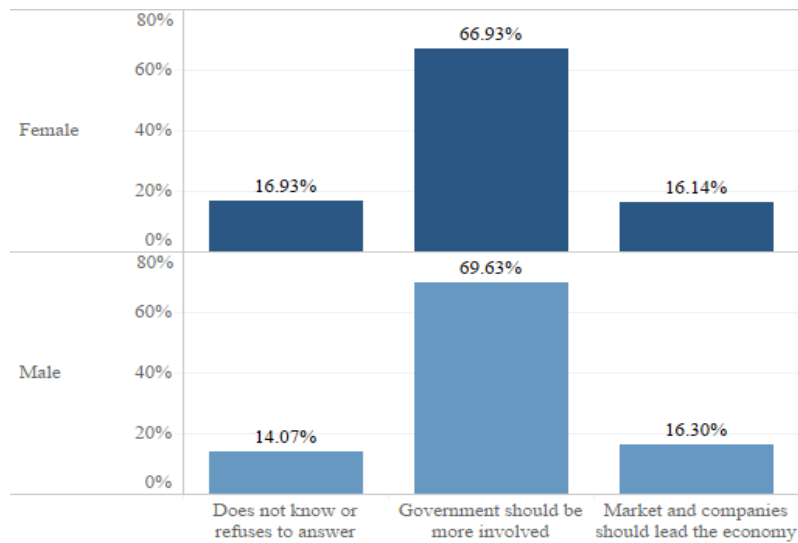
Figure 3. Do you think that the government should be more involved in the economy, or it should be led by the market and companies? Responds by the employment status



Source: Authors' calculation

As it is presented in Figure 4, the gender of the respondents does not significantly determine their attitudes on this issue. A similar percentage of male (69.63%) and female (69.93%) respondents think that the government should be more involved in the economy, rather than companies and market themselves.

Figure 4. Do you think that the government should be more involved in the economy, or it should be led by the market and companies? Responds by the gender



Source: Authors' calculation

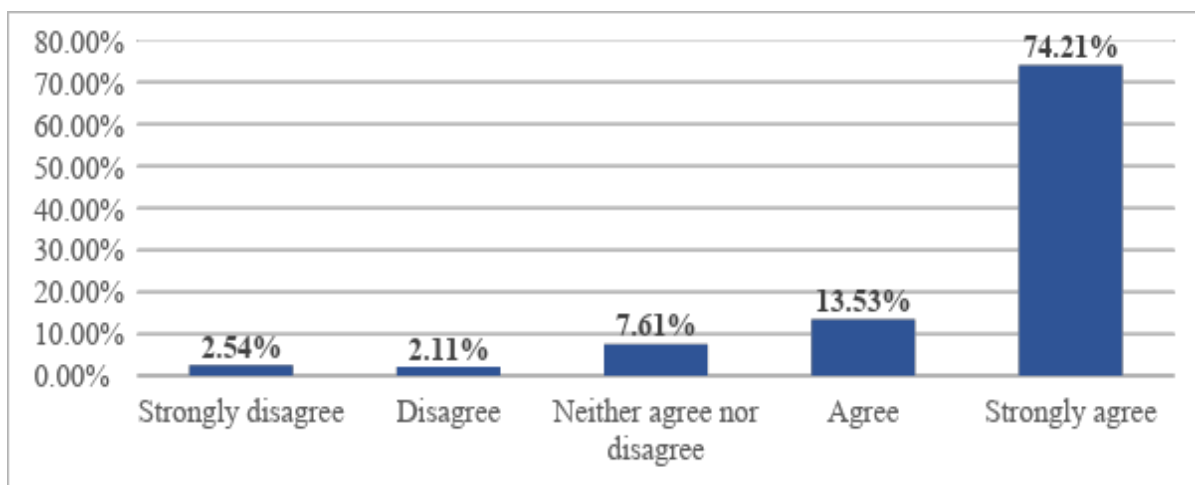
In order to examine to what extent respondents agree with certain statements, the latter are designed using the Likert scale. Three statements are given as follows:

1. The Government of the Republic of Srpska should provide subsidies and incentives for investments and employment.
2. The government should limit the increase in commodity prices, even if that results in shortages.
3. Foreign investors should be favored over domestic ones.

The responses vary from 1 (strongly disagree) to 5 (strongly agree).

As in the previous question, the results show that the respondents' attitudes are clearly more interventionist leaning. 74.21% of respondents believe that the Government of the Republic of Srpska should provide subsidies and incentives for investment and employment (Figure 5).

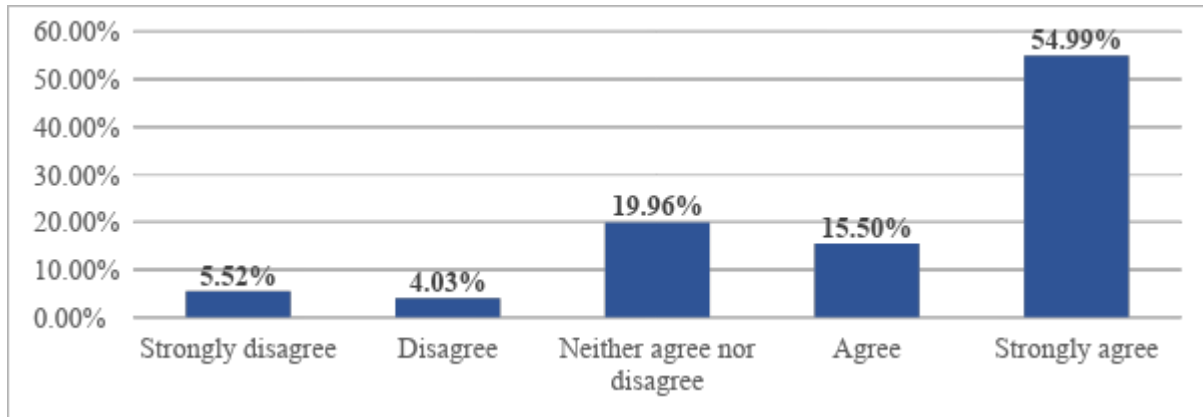
Figure 5. The Government of the Republic of Srpska should provide subsidies and incentives for investments and employment



Source: Authors' calculation

Moreover, more than half of respondents (54.99%) and 15.5% of them think that the government should limit the increase in commodity prices, even if that results in shortages (Figure 6).

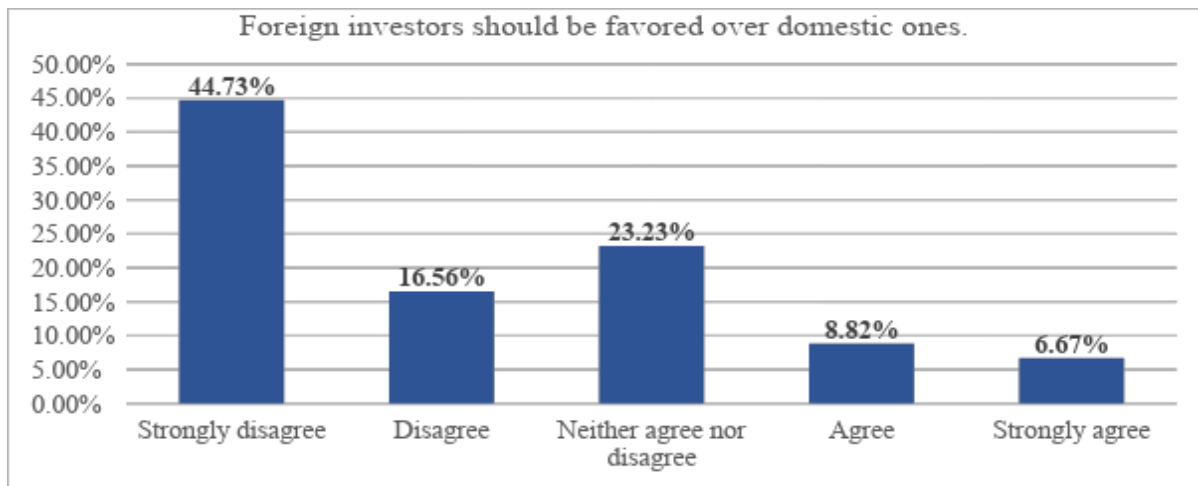
Figure 6. The government should limit the increase in commodity prices, even if that results in shortages.



Source: Authors' calculation

When asked whether foreign investors should be favored over domestic ones, 44.73% of respondents strongly disagree with the statement (Figure 7). It is evident that surveyees are more indifferent to this question in comparison to all of the others (23.2% of them neither agree nor disagree with this statement).

Figure 7. Foreign investors should be favored over domestic ones.



Source: Authors' calculation

In addition, correlation analysis was applied to identify a potential direct relationship between the surveyees' age and their responses to the previous statements. The results (Figure 8) show that there is no significant correlation between age and attitudes toward the mentioned questions ($-0.7 < r < 0.7$).

Figure 8. Correlation analysis

	Age	Subsidies	FDI	Pricecontrol
Age	1.0000			
Subsidies	0.1206	1.0000		
FDI	-0.0247	-0.1335	1.0000	
Pricecontrol	-0.0411	0.1780	0.0132	1.0000

Source: Authors' calculation

Finally, it would be useful for the research conclusions if there was a previous study conducted on the same topic with which obtained results could be compared.

5. Conclusions

Thirty years after the beginning of the dissolution of the Socialist Federative Republic of Yugoslavia, whose Republic of Srpska and Bosnia and Herzegovina have been parts of, and 27 years after the end of the war in Bosnia and Herzegovina, dominant social attitudes toward economic issues and the role of government in the economy are still strongly interventionist. Responses collected with the survey indicate a presence of economic views and ideas that are characteristic of the former economic system in the country. This is in spite of the reforms that have taken place in the country with the help of capitalist countries with market economies, the European Union, and the United States in the first place. These reforms have helped Bosnia and Herzegovina's economy transition from a centrally governed economy to a market economy, where public enterprises are mostly present in the energy sector and other primary resource exploitation industries, and in public services.

However, the public in the Republic of Srpska shows significant signs of support for government intervention in multiple fields, from price regulation, to investor discrimination, subsidizing, and general control of the economy by the government instead of the market. Furthermore, these attitudes do not differ much from one demographic group to another, even though it could be expected from the age group 18-25 to show more support for a market, or capitalist system, as this age group was born and raised after the fall of socialism in their country. Another interesting aspect is that entrepreneurs are also in support of government intervention. One possible reason for these social attitudes by citizens of the Republic of Srpska could also lie in the fact that the survey was done amid a global economic, i. e. inflation crisis in 2022 and at the end of the COVID-19 crisis, which once again brought government intervention under the economic policy spotlight. Additionally, these attitudes might have been shaped by the feeling of uncertainty and a need for help, and the feeling of being safeguarded in times of economic turmoil. Having the possibility to compare social attitudes toward the role of government in the economy prior to the 2008 economic crisis, the COVID-19 pandemic and the war in Ukraine would be very significant, however, surveys like this have not been previously taken. This would enable us not only to have a benchmark for measuring these attitudes but would also be useful for measuring the effects of these events and policy responses to them on the Republic of Srpska's population's views on the role of government in the economy. However, our research can be used for comparison in the future, for checking the presence of old economic doctrines in current public beliefs and stances on economic issues.

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ENTREPRENEURSHIP

Impact of COVID-19 pandemic on Entrepreneurship in Adriatic-Ionian Region

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Tatjana Stevanović⁴

Abstract

This paper investigates the impact of the COVID-19 pandemic on total entrepreneurial activity (TEA) in Adriatic-Ionian Region in 2020 and 2021. Impact of the COVID-19 pandemic was measured through the following factors: a decrease in household income, starting a business is more difficult than a year ago, entrepreneurs pursuing new opportunities due to the pandemic, and increased use of digital technology to sell products or services. Using data for 13 EU countries, 4 in the Adriatic-Ionian Region and 9 in the other part of the EU, we found that changes in household income and recognized market opportunities have had a significant impact on TEA in the Adriatic-Ionian region, as well as in the other part of the EU during COVID-19 pandemic. Furthermore, this research pointed out, that decrease in household income encouraged entrepreneurship driven by necessity during the pandemic. Also, recognized market opportunities encouraged the establishment of a new business regardless of the difficulties caused by the pandemic. Recommendations are given on how to revive the economy by encouraging the development of entrepreneurship.

Keywords: entrepreneurship, COVID-19 pandemic, post-pandemic recovery, Adriatic-Ionian Region.

1. Introduction

COVID-19 pandemic has been a great challenge for entrepreneurs and SMEs. Many small businesses were closed by December 2021, due to a decrease in household income and market demand changed individual's lifestyles, culture, and social interactions, as well as living and working conditions (Ratten, 2020). Especially firms in hospitality, retail, personal services, entertainment, and the arts industry, were affected due to close contact between individuals as part of their business models (Belitski et al., 2021). The changed circumstances in society, in times of pandemic, in many industries made it more difficult to start a business than a year ago. On the other hand, changes in the market provided new opportunities for entrepreneurs. For example, rapidly evolving medical technologies and new ways of handling the COVID-19 crisis offered opportunities for entrepreneurs to start new businesses (Kuckertz et al., 2020).

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Additionally, the emergence of digital technologies has significantly reduced the costs of entrepreneurs and offered opportunities for new businesses during the COVID-19 pandemic, due to the changes in people's lifestyles (Liguori & Winkler, 2020). This led to an increase in the number of entrepreneurs (Liguori & Winkler, 2020).

Bearing in mind the fact that the pandemic caused a large number of challenges on the development of entrepreneurship, but at the same time created numerous opportunities, it is still not completely clear what the overall effect of the pandemic on entrepreneurship is. At the time of the paper release, the outlook for the pandemic and the situation in entrepreneurship remains highly uncertain. For this reason, it could be very important to identify factors that have a significant impact on entrepreneurial activity and propose measures whose implementation can encourage the development of entrepreneurship in the post-pandemic period, and this is the aim of the paper. The focus of the research in the paper will be the impact of the COVID-19 pandemic on Entrepreneurship in the Adriatic-Ionian Region, but the obtained results will be compared to the situation in the EU. The paper supports these considerations with statistical analysis, based on cross-sectional analysis for 2020 and 2021 in the sample of 13 EU countries. The aim of the paper is to identify factors that can force the development of entrepreneurship and economic recovery in the Adriatic-Ionian Region in the post-pandemic period.

The paper first gives an overview of the literature that researches the development of entrepreneurship under the conditions of COVID-19. The next part of the paper presents the methodology, the obtained results, the discussion of results, and recommendations to macroeconomic policymakers. The final part of the paper presents concluding remarks.

2. Literature review and the hypotheses development

The COVID-19 pandemic has endangered the lives and well-being of millions on the planet (Worldometers, 2021) and has reshaped humanity as we know it (Parnell et al., 2020). The effects of this disease have caused the collapse of numerous healthcare systems around the globe and led the World Health Organization to declare a worldwide pandemic on the 11th of March 2020. As there was no known pharmaceutical cure or treatment for the disease, measures, such as social distancing, self-isolation, hand washing, personal hygiene, and lockdowns were promoted in many countries, in order to prevent the virus from spreading rapidly (Ratten, 2020). Such measures helped to stop the spread of the disease but, at the same time, they changed people's lifestyles significantly and caused a lot of restrictions (mobility restrictions, closures of playgrounds, schools, and universities).

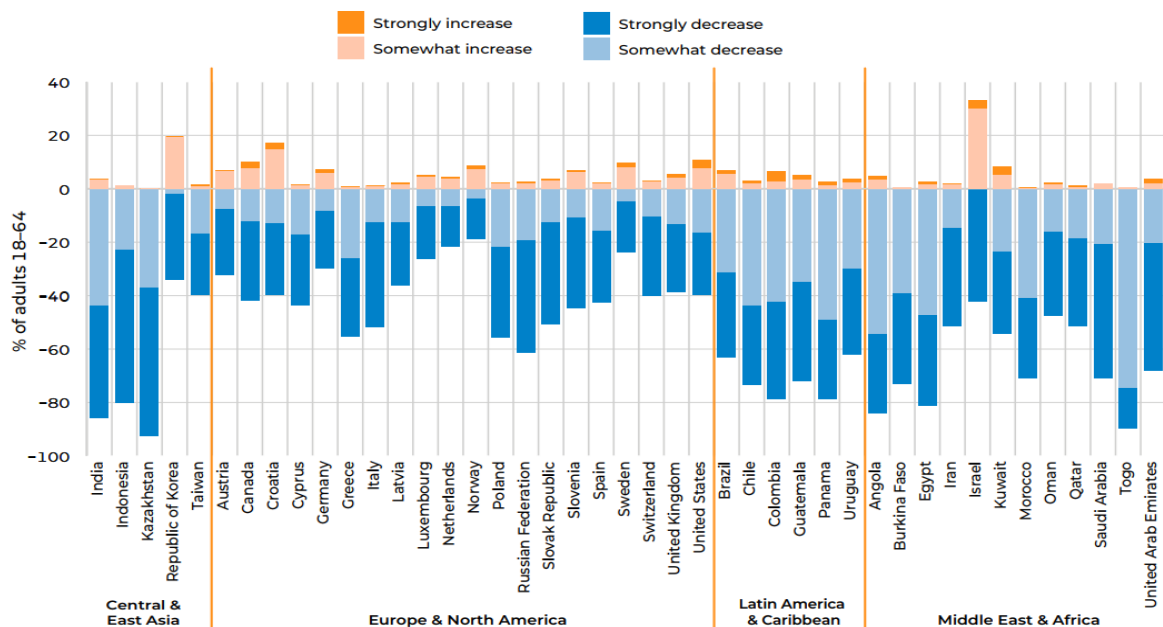
The pandemic had flow-on effects on the whole society, as well as on the economy. Measures, promoted during the pandemic changed working conditions in all organizations –protective masks and social distance at workplaces were mandatory, and digital forms of communication and working from home were promoted (Kuckertz et al., 2020). Mobility restrictions, promoted during pandemic and lockdowns of many countries had a great influence on the global economy, particularly on the tourism and hospitality industries. Due to travel restrictions (a lot of countries closed their borders) international travel stopped and a lot of SMEs were closed (in the areas of tourism, hospitality, transportation, services, etc.). Reduced travel and work from home decrease demand for many products (primarily clothing, footwear, cosmetics...), which reduced the operational activities of production companies (Ratten, 2020).

Many companies had to restrain their business activities completely which caused a decrease in revenue and profit (Fairlie, 2020). Also, a lot of companies faced difficulties in accessing financial capital and often lacked physical resources (Belitski et al., 2021). Due to these and a

large number of other problems, the pandemic has led to massive layoffs and closures in many countries, which caused a decrease in the economy, as well as in total entrepreneurial activity (TEA). According to Global Entrepreneurship Monitor (GEM) Reports (Bosma et al., 2020, p.16; Hill et al, 2021, p.17) the level of TEA has generally dropped during the pandemic. Some of the key factors that have been identified as causes of the decrease in TEA are the following: pandemic has led household income to decrease and starting a business is more difficult due to pandemic, than a year ago. On the other hand, some factors such as new opportunities due to the pandemic and intensive use of digital technology to sell products and services, encourage the development of entrepreneurship. We will analyse the impact of each of these factors in this paper.

Previous research shows that one of the key constraints to starting and developing new businesses is the lack of capital (Stefanovic et al., 2013). Entrepreneurs all over the world have traditionally been facing the problem of the provision of initial capital (Kerr & Nanda, 2009). Start-up bank loans are often seen as unfavorable because of the high risk that the entrepreneurial business involves and the long period of return on investment in innovation (Moskowitz, 2002). Besides, entrepreneurs’ access to market capital is difficult, which is why the provision of funding sources can be viewed as a serious problem in the development of entrepreneurship. A large number of entrepreneurs use their own funds to start their businesses (Bálint, 2013). Own funds are directly dependent on household income. According to GEM Reports (Bosma et al., 2020, p. 16), household income has taken a substantial knock-on hit – across the world – because of the pandemic. Out of 43 economies that carried out GEM’s Adult Population Survey, there are only six, where less than one in three adults reported a decrease in household income due to the pandemic in 2020. It is shown in Figure 1.

Figure 1: The impact of the pandemic on household income in 2020
(% of adults aged 18-64 in each category)



Source: Bosma et al., (2020) Global Entrepreneurship Monitor Report, Global Entrepreneurship Research Association, p. 28

The situation was even worse in 2021. In 22 of the 47 economies, included in GEM research, more than one in two adults agreed that their household income had decreased (Hill et al., 2021,

p.17). A decrease in household income caused a large number of businesses to exit. At the same time, due to the decrease in household income and the increase in fear and uncertainty during the pandemic, a large number of people gave up their entrepreneurial intentions.

In addition to the decrease in household income, the COVID-19 pandemic has created a lot of other challenges for entrepreneurs. Many economies were in lockdown, with international travel restricted or banned, and many shops, restaurants, and hotels closed. This has created a huge number of problems for entrepreneurs in these areas. In addition, people were increasingly encouraged to work from home. For these reasons, many established businesses were hit hard, as orders drained away, and many new businesses were inevitably still born as markets evaporated (Ratten, 2020). Also, starting a new business has become more difficult compared to the situation before the pandemic. Due to all of the above mentioned, we assume that the decrease in family income and the worsening of the conditions for starting a business had a negative impact on entrepreneurship. Our first hypothesis is:

H1: Decrease in household income and bad conditions for starting a business significantly impacted the decrease in total entrepreneurial activity during COVID-19 pandemic in Adriatic-Ionian Region.

At the same time, changes in people's lifestyles, during the pandemic, increase opportunities for some entrepreneurs (*Parnell et al., 2020*). As it is known, entrepreneurs are individuals who exploit a business opportunity through some form of innovation (Kirzner, 2009). It means that entrepreneurs foresee a gap in the market that can be filled by a new form of product, process, or service that will lead to profit (Williams et al. 2017). Entrepreneurs may introduce important innovations, by entering markets with new products or production processes; enhancing knowledge of what is technically viable and what consumers prefer; introducing variations of existing products and services in the market (Van Stel et al., 2018; Williams et al., 2017). The business creativity and innovations involved in agile and resilient new businesses can help entrepreneurs to find opportunities in the upheaval that the pandemic has caused globally (Zahra, 2021). Also, resulting learning process can speed up the discovery of the dominant design for product-market combinations enabling knowledge spillovers, stimulating economic growth and revitalization of the economy in the post-COVID-19 period. During COVID-19 pandemic new opportunities emerged with an initial and ongoing massive consumer demand for sanitizing products and protective personal equipment, followed rapidly by demand for online education and entertainment, then for online sales (Ivanović-Đukić et al., 2022). These new opportunities provided a chance for entrepreneurs to start new businesses or expand existing ones. Therefore, we assume that this factor had a positive impact on entrepreneurship. Our next hypothesis is:

H2: The recognition of new opportunities during the COVID-19 pandemic has had a positive impact on total entrepreneurial activity in the Adriatic-Ionian Region.

One of the special opportunities that has arisen in most industries during the pandemic is the use of digital technology to sell products and services or start completely new businesses (Meurer et al., 2021). Before the virus started there was already a trend toward digitalization. This trend was accelerated when the pandemic started. Entrepreneurs have begun to use the possibilities offered by digital technology to adapt their businesses to new consumer demands related to the changed lifestyle (for example, online shopping and home deliveries, takeaway food deliveries, online education, and entertainment) (Acs et al., 2021). During the pandemic, most of the existing entrepreneurs adopted digital technologies and developed strategic, managerial, and digital skills to increase their efficiency (Audretsch & Belitski, 2021). At the

same time, the emergence of the use of digital platforms by customers during pandemic has encouraged a lot of entrepreneurs to start a new business online (using social networks, online platforms for sale, or creating their own websites), taking advantage of the reduced costs of starting a business on the Internet (Liguori & Winkler, 2020), as well as digital communication and support of online communities in order to resolve problems, reframe problems, reflect on situations, refocus thinking and efforts (Meurer et al., 2021). Many entrepreneurs have even started online business, working from home, in order to get rid of frustration, loneliness, worry about the future, and improve financial performance (Banerjee & Rai, 2020; Zhang et al., 2022). In addition, the development of new technologies such as artificial intelligence, the Internet of Things, cloud computing, etc., have provided opportunities for entrepreneurs to offer completely new digital solutions and launch fast-growing innovative businesses. Entrepreneurs able to create a platform-based ecosystem, have become a force of “creative destruction” (Acs et al., 2021), very often working from home (Block et al., 2021). ***This has given rise to more location-independent entrepreneurs and digital nomads that can work from any location, which is also a stimulus for starting a new business and become an entrepreneur.*** Due to of all the above, we believe that the use of digital technology has had a positive impact on the development of entrepreneurship. Our last hypothesis is:

H3: The usage of digital technology during the COVID-19 pandemic has had a positive impact on the total entrepreneurial activity in the Adriatic-Ionian Region.

3. Data and methodology

3.1. Research context

Adriatic-Ionian Region is a functional area primarily defined by the Adriatic and Ionian Sea basins, including more than 70 million people and 8 countries. There are very noticeable socio-economic differences across the countries in the Region between countries (in the level of unemployment; gross domestic product (GDP) per capita, road, rail, and maritime infrastructure, etc.). On the other side, there are numerous common needs of the region, such as energy networks to ensure a secure and efficient supply across the Region, protection of bio-ecosystems that are under intense pressure due to the ever-increasing human use of marine and coastal space, over-fishing, untreated waste, oil and gas pollution and the illegal hunting of migratory birds. In terms of economic potential, the tourism sector is not optimally managed or exploited and could benefit from better coordination. The region has great potential. For example, the sea basin provides a natural waterway penetrating deep into the EU, also, there are natural beauty and rich cultural, historic, and archaeological heritage (EU regional strategy, 2014, p. 3).

In order to address a number of pressing socio-economic and environmental challenges the European Commission adopted a macro-regional strategy for that region which was endorsed by the European Council in 2014. The aim was to promote economic growth and prosperity in the Region by improving its attractiveness, competitiveness, and connectivity, protecting the sea, coastal and inland environment, and ecosystems, and better integrating into the EU both candidate and potential candidate countries across the Region (EU regional strategy, 2014, p. 7).

The new EU Strategy for the Adriatic and Ionian Region (EUSAIR), facilitating the enlargement process of the Western Balkans, was adopted in 2020. One of the main aim of this strategy is to encourage research, innovation, entrepreneurship, and SMEs in the region (EU Strategy 2020, p. 20). A large number of action plans have been adopted in the direction of

achieving this goal, which are expected to encourage the development of entrepreneurship, especially innovative ones in the region.

3.2. Sample characteristics

As stated above, Adriatic-Ionian Region includes 8 countries – four EU Member States: Croatia, Greece, Italy, and Slovenia, and four non-EU countries: Serbia, Bosnia and Herzegovina, Montenegro, and Albania. Our research sample will include only four EU Member countries, due to the availability of data. We will also include in the research sample 9 other EU countries for which there are available data, which will be used as a basis for comparison. The list of selected countries is presented in Table 1.

Table 1: Countries included in the study and TEA in 2020 and 2021

EU countries from Adriatic-Ionian r.			Selected EU countries		
Country	TEA 2020	TEA 2021	Country	TEA 2020	TEA 2021
Italy	1.9	4.8	Cyprus	8.6	8.4
Slovenia	6	6.7	Germany	4.8	6.9
Croatia	12.7	12.4	Latvia	15.6	15.1
Greece	8.6	5.5	Luxembourg	8	7.3
			Netherlands	11.5	14.2
			Poland	3.1	2
			Slovakia	13.9	6.4
			Spain	5.2	5.5
			Sweden	5.3	9

Source: Bosma et al., (2020) Global Entrepreneurship Monitor Report, <https://www.gemconsortium.org/>

3.3. Research model and variables

In order to verify defined hypotheses, correlation and regression methods were applied. We examined the correlation between TEA on one side and the impact of COVID-19 pandemic on the other side in 2020 and 2021. Impact of COVID-19 pandemic is measured through the following factors: decrease in household income, starting a business is more difficult than a year ago, entrepreneurs pursue new opportunities due to pandemic, and increased use of digital technology to sell products or services. Models include the control variable National Entrepreneurship Context Index (NECI). The variables employed in the regression models are presented in Table 2.

Table 2: Variables employed in the correlation and regression models

Variable	Variable Type
Total early-stage entrepreneurial activity (TEA)	Dependent
National Entrepreneurship Context Index (NECI)	Control
Pandemic has led household income to decrease	Predictor
Starting a business is more difficult than a year ago	Predictor
Use more digital technology to sell products and services	Predictor
Pursue new opportunities due to pandemic	Predictor

Source: Authors' presentation

Entrepreneurship is measured as GEM total entrepreneurial activity rate (TEA), defined as the percentage of individuals aged 18-64, who are either nascent entrepreneurs or owner-managers

of a new business – younger than 42 months (Hill et al., 2021). The National Entrepreneurial Context Index (NECI) in 2020 is used as a control variable. NECI assesses the average condition of an economy's entrepreneurship environment on a national level. The NECI score for every economy is the arithmetic mean of that economy's EFC scores, therefore it is also assessed on a Likert scale from 0 to 10. Predictors were answers to pandemic-related questions, asked each adult respondent, introduced the first time by GEM in 2020: 1. The pandemic had decreased your household income; 2. Starting a business is more difficult than year ago due to pandemic; 3. The pandemic has provided new opportunities that you want to pursue with this business; 4. The pandemic encourage usage more digital technology to sell products and services. The response options were: 1. “strongly agree”, 2. “somewhat agree”, 3. “neither agree nor disagree”, 4. “somewhat disagree”, 5. “strongly disagree”. (Bosma et al., 2020).

4. Results and discussion

4.1. Results

In Table 3 the descriptive statistics are presented.

Table 3: Descriptive statistics

Variable	Adriatic Ionian Region				EU			
	Mean	Std. dev.	Min	Max	Mean	Std. dev.	Min	Max
Total entrepreneurial activity	7.32	3.77	1.9	12.7	8.38	4.12	2	15.6
Decrease in household income	43.44	9.96	26.8	55.1	35.22	13.77	18.1	59.5
Starting a business is difficult	22.71	15.06	6.4	47	25.14	16.29	6.3	57.5
Use more digital technology	45.06	10.77	25.4	57.4	34.47	12.95	17.2	50.3
Pursue new opportunities	34.35	8.79	20.6	46.3	36.67	8.19	17.2	57.4
NECI	4.25	0.33	3.7	4.7	4.95	0.69	4.1	6.3

Source: Authors' calculations

The average TEA during the pandemic in the Adriatic-Ionian region was 7.32 (minimum was 1.9 in Italy, maximum 12.7 in Croatia). It was slightly smaller compared to the average TEA in the whole EU which was 8.38 (minimum 2 in Poland, maximum 15.6 in Latvia). The average decrease in household income in the Adriatic Ionian region was 43.44 (minimum was 26.8 in Croatia, maximum 55.1 in Greece). It was significantly larger compared to the average decrease in household income in the whole EU which was 35.22 (the minimum was 18.1 in Netherland; the maximum was 59.5 in Poland). The average value of the use more digital technology to sell products or services was 45.06 in the Adriatic Ionian region (minimum was 25.4 in Slovenia, maximum 57.4 in Greece). It was higher compared to the EU average of 34.47 (minimum of 17.2 in Luxemburg and Slovakia, maximum of 50.3 in Spain).

The method of correlation analysis is applied in order to examine the relationship between TEA on one side and the decrease in household income, starting a business is more difficult than a year ago, entrepreneurs pursue new opportunities due to pandemic, increased use of digital technology to sell products or services on the other. The results of the conducted correlation analysis are presented in Table 4.

Table 4: Correlation

	TEA	Decrease in household income	Starting a business is difficult	Use more digital technology	Pursue new opportunities	NECI
TEA	1.00					
Decrease in income	-0.42 (0.03)	1.00				
Starting a business is difficult	-0.19 (0.35)	0.16 (0.42)	1.00			
Use more digital technology	0.07 (0.73)	0.03 (0.89)	0.32 (0.11)	1.00		
Pursue new opportunities	0.13 (0.53)	-0.38 (0.05)	0.43 (0.03)	0.18 (0.37)	1.00	
NECI	0.22 (0.28)	-0.54 (0.00)	0.14 (0.49)	0.01 (0.96)	0.46 (0.02)	1.00

Note: p values in ()

Source: Authors' calculations

The correlation between TEA and a decrease in household income is negative, moderate (-0.42) and statistically significant (at the level of 5%). The correlation between TEA and the other three factors is not significant statistically. There is a moderate (-0.38), inverse, and statistically significant correlation between the decrease in household income and the recognition of new opportunities. In other words, a decrease of household income is correlated to the increase in recognition of new opportunities (probably the decrease in household income encourages entrepreneurship driven by necessity). The correlation between recognition of new opportunities and starting a business in the pandemic is also moderate, positive, and significant (0.43). It means that recognized market opportunities encourage the start of a new business, regardless of the difficulties caused by the pandemic.

The method of regression analysis is applied in order to examine the impact of COVID-19 pandemic on TEA in the EU countries of the Adriatic-Ionian Region. The results of the conducted regression analysis are presented in Table 5 (Region).

Table 5: The impact of the COVID-19 pandemic on TEA

	Adriatic-Ionian Region	EU
Constant	34.68** (3.99)	-0.01 (-0.00)
Decrease in household income	-0.335** (-4.23)	-0.14* (-1.85)
Starting a business is difficult	0.033 (0.36)	0.008 (0.10)
Use more digital technology	0.015 (0.12)	0.06 (0.08)
Pursue new opportunities	0.37** (3.61)	0.31* (1.94)
<i>R-squared</i>	0.59	0.36
<i>Adj. R-squared</i>	0.37	0.16
<i>Prob F</i>	0.07	0.09

Note: t values in ()

*, ** 0.1 and 0.05 significance level respectively

Dependent Variable: TEA

Source: Authors' calculations

Model 1 shows that TEA in Adriatic-Ionian Region increases if household income increases as well as if entrepreneurs pursue new opportunities during the pandemic. If the household income increases by 1%, TEA will increase by 0.33%, holding all other variables constant. This impact is statistically significant at the level of 5%. It means that changes in household income can significantly impact TEA in Adriatic-Ionian Region. This proves our first hypothesis. An increase in number of recognized opportunities by 1% will increase TEA by 0.37%, holding all other variables constant. This impact is statistically significant at the level of 5%. It means that changes number of recognized opportunities can significantly impact TEA in Adriatic-Ionian Region. This proves our second hypothesis. The impact of more intensive use of digital technology on TEA during the pandemic was statistically insignificant. Our third hypothesis is not proven. The estimated model explains a 59 percent change in TEA and this model is statistically significant as confirmed by the F test.

According to Model 2, the situation is similar in the whole EU. Significant impact on the increase in TEA during the COVID-19 pandemic has had an increase in household income and recognized opportunities. The estimated model explains a 36 percent change in TEA and this model is statistically significant as confirmed by the F test.

4.2. Discussion and policy recommendations

The analysis of the data from GEM on a sample of 13 countries (4 in the Adriatic-Ionian Region and 9 in other parts of the EU) confirms that entrepreneurship was significantly influenced by changes in household income and recognized market opportunities, during COVID 19 pandemic. This is in accordance with GEM research (GEM, 2020; GEM, 2021), as well as with our expectations. The importance of these factors for encouraging entrepreneurship was understood by the creators of economic policies in a lot of countries. Their government offered different packages of financial support to entrepreneurs during the pandemic. The 2020 GEM report mentions that 54 national governments made emergency policy decisions and actions in order to support entrepreneurs in response to the COVID-19 pandemic (Bosma et al., 2020). For example, the German government's intent to protect new businesses and startups included taxation support, and state-supported short-time work compensation schemes (Block et al., 2020). In a lot of EU countries, there have been programs providing loans to entrepreneurs and small businesses through banks, credit unions, and other financial institutions to start new businesses and keep existing businesses open and retain (Fairlie & Fossen, 2021). For example, a lot of governments presented a package to support the digitalization of SMEs in the context of the crisis and a wide range of policy measures for startup stimulation, including deferred tax payments for SMEs, reduced rent costs, waived administrative fees, subsidized R&D costs for SMEs, social insurance subsidies, subsidies for training and purchasing teleworking services, and additional funding to spur SME loans (KPMG, 2020).

Many empirical studies, proved that the governmental response has had positive effects on TEA. For example, a study conducted in the US found a positive relationship between loan receipt per business and the number of businesses (Fairlie & Fossen, 2021). A study examining the effects of governmental policies on 42,401 entrepreneurs and SMEs in the UK demonstrated that government financial support may reduce the number of small businesses with negative earnings and allow extending the residual life of small businesses with negative earnings up to 194 days (Belghitar et al., 2021). Similar effects were found in Germany (Block et al., 2020). It can be recommended to implement similar measures in the post-pandemic period in order to revive the economy as quickly as possible through the development of entrepreneurship.

In order to overcome the consequences of the pandemic and further support the development of entrepreneurship, it is desirable to implement additional measures. Although the results in

our sample of countries did not prove the significant impact of digital technologies on TEA, the opportunities offered by digital technologies should not be neglected. For example, the use of digital technology can help entrepreneurs to increase the sale of their products on digital platforms, use digital tools like TikTok for marketing, and rely on platforms such as Kickstarter for funding. The use of online community support, can develop opportunities and help entrepreneurs to get assistance with problems, and find collaborators. Working together with entrepreneurs and experts from other countries, through digital social networks, can help entrepreneurs gain valuable experience, find business partners and expand the market. The use of the latest technologies of the so-called Industry 4.0 and robots can help entrepreneurs to offer radically new innovative products and business models, adapted to the changed needs of consumers in the context of the COVID-19 pandemic and improve their business. Finally, digital technology and robots can reconfigure production and service systems, which could be useful even long after the crisis is over (Meurer et al., 2021).

Working from home, as a new business practice, can help entrepreneurs to reduce costs, but also have a positive impact on the psychological state of their employees during the COVID-19 pandemic. A company's positive psychological state directly influences creative innovation during a crisis. Due to innovation and flexibility, they can quickly engage and implement small-scale creative innovations and thus adapt to the fast-changing circumstances arising from the COVID-19 pandemic (Kuckertz et al., 2020). Also, cooperation with other economic entities could be useful. Positive effects of the cooperation, like information and knowledge gathering (Wall & Bellamy, 2019), mobilization of bricolage (Kuckertz et al., 2020), and joint efforts (Markman et al., 2019), are visible.

5. Conclusion

The health pandemic caused by COVID-19 has dramatically changed society and posed huge challenges to the economy. Policymakers are persistently looking for appropriate economic solutions that will enable them to get out of the crisis and encourage sustainable development. Numerous previous studies show that entrepreneurship has a significant contribution to sustainable development, but entrepreneurship was significantly impacted by COVID-19 pandemic. We empirically examined the impact of the COVID-19 pandemic on TEA in 2020 and 2021. The impact of the COVID-19 pandemic was measured through the following factors: a decrease in household income, starting a business is more difficult than a year ago, entrepreneurs pursuing new opportunities due to the pandemic, and increased use of digital technology to sell products or services.

Using data for 13 EU countries, 4 in the Adriatic-Ionian Region and 9 in the other part of the EU, we found that changes in household income and recognized market opportunities have had a significant impact on TEA in the Adriatic-Ionian region, as well as in the other part of the EU during COVID-19 pandemic. The use of digital technology for online sales of products and services, during the COVID-19 pandemic, was insignificant in both the Adriatic-Ionian Region and the EU. We also found a statistically significant inverse correlation between household income and the recognition of new opportunities, a decrease in household income encourages entrepreneurship driven by necessity during the pandemic. Besides, the correlation between recognition of new opportunities and starting a business in a pandemic was also significant and positive, meaning that recognized market opportunities encourage the start of a new business regardless of the difficulties caused by the pandemic.

Bearing in mind that a large part of the economic effects of the pandemic is still unknown and that there is a fear of a serious economic recession, there is a need for science, government,

and social leaders to provide a timely response. In this paper, recommendations are given on how to revive the economy by encouraging the development of entrepreneurship. Besides, the paper contributes to raising the awareness of entrepreneurs to recognize risks and opportunities, which will enable them to understand the social and market needs of society.

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Entrepreneurship and Innovation Policy for EUSAIR Strategy. Evidence from Italian Regions.

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Abstract

This study analyses entrepreneurship and innovation policies adopted by the Italian regions belonging to European Union Strategy for the Adriatic and Ionian Region (EUSAIR). We investigate the operative role of regional policymakers in developing entrepreneurial ecosystems. Specifically, this work aims to answer the following research question: how do Italian regional ecosystems approach EUSAIR challenges through entrepreneurship and innovation policy? To this purpose, we analyse and apply a Thematic Content Analysis (TCA) on the Regional Operational Programmes (ROPs) that include the EUSAIR objectives and select three Italian regions to compare their policies to evaluate the policy style applied by each region. The main results show three policy approaches (transition, architect, and promoter) during the phases of ecosystem development (potential, mature, and evolved).

Keywords: entrepreneurial ecosystem, ecosystem governance, regional policy

1. Introduction

Entrepreneurship and innovation are important for competitiveness, social development (Ianioglo, 2022), and regional development (Crudu, 2019). They are drivers for an EE, defined as the sets of actors, institutions, social structures, and cultural values that produce entrepreneurial activity (Roundy, 2016).

The Adriatic and Ionian Region - the area defined by the Adriatic and the Ionian Sea basin - is composed of ten countries and many regions (European Commission, 2017) highly diversified in the socio-economic and physical dimensions (Krzykowska-Piotrowska *et al.*, 2022). EUSAIR strategy supports and guides the regions on specific topics and actions to improve the macro-region's attractiveness, competitiveness, and connectivity (Migkos and Onsoy, 2020). Some studies focus on specific issues related to EUSAIR as sustainable transport (Krzykowska-Piotrowska *et al.*, 2022) or agro-waste production (Liuzzi *et al.*, 2021). Other

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works underline EUSAIR objectives as a means of increasing the level of cooperation and networking within and between the regions of the area (Migkos & Onsoy, 2020).

This study analyses entrepreneurship and innovation policies adopted in three Italian regions of EUSAIR (Lombardy, Molise, and Calabria) from 2014 to 2020 to evaluate the development levels of the regions from a policy style perspective. We investigate the Italian approach to addressing EUSAIR challenges in new firm creation and dynamics; university-industry collaboration; academic entrepreneurship; innovation; entrepreneurial and SMEs financing. It means analysing the operational role of regional policymakers in designing policies for aligning regional objectives with those of the EUSAIR.

The work is positioned within the academic field that explores the governance of entrepreneurial ecosystems (hereafter EE) and the role of institutions in the development of EE (Mack and Mayer, 2016; Colombelli, Paolucci, and Ughetto, 2019). Many studies present an evolutionary model of EEs (Mack and Mayer, 2016; Stam and Van De Ven, 2019), and others underline the importance of different kinds of policies for diverse ecosystems (Brown and Mason, 2017; Panetti, Pietronudo and Ferretti, 2021). However, no studies concern the analysis of policy styles according to the different development levels of EEs.

This work aims to fill this gap to deepen how the EE works and how to apply the policies effectively. Furthermore, we investigate governance approaches, i.e., policy measures adopted in the EE. This study aims to answer the following research question: how do Italian regional EE approach EUSAIR challenges through entrepreneurship and innovation policies?

Since the Regional Operational Programmes (hereafter ROPs) include the EUSAIR objectives, we analyse ROPs to trace the Italian approach.

The analysis of the policies is done through a Thematic Content Analysis (hereafter TCA), with which we observe and investigate the contents of a regional strategy.

We derive policy approaches based on the economic and innovation level, the target of ecosystem actors, and the measures applied.

The paper is organized into the following sections. Section 2 describes the theoretical background; section 3 presents the methodology used; section 4 shows the results; section 5 focuses on the discussion, and section 6 concludes.

2. Theoretical background

An EE includes cooperation among the actors, which create a network of relationships (Flores, Pereira, & Graca, 2017) as they contribute to the productive performance of a territory (Spigel and Harrison 2018), making the network of relationships one of the structural elements of an EE (Spigel, 2017; Ianioglo, 2022). EEs are analysed at different geographical scales (Mack and Mayer, 2016; Spilling, 1996); in this study, we undertake a regional perspective. The region is considered an appropriate scale due to its institutional and political boundaries that facilitate the implementation of target policies for increasing the local development and levels of innovation (Wei, 2022). The region, indeed, plays an important role as it reflects the characteristics of the context in which the EE was born and developed; and determines the configurations, relationships, and actors, giving rise to EE with different elements and profiles (Spigel, 2017; Spigel and Harrison, 2018) and different outcomes (Stam, 2015). Moreover, some important regional social and cultural factors could positively create entrepreneurial activity (Brown and Mason, 2017).

The actors are an EE's component and include firms, government, capital providers, the academic sector, markets, and social communities (Isenberg, 2011; Mason and Brown, 2014). This study focuses on the role of the government as a key actor in driving the development of an EE (Mack and Mayer, 2016). There is evidence supporting the important role of government institutions in nurturing entrepreneurship at the regional level (Xing, Liu, and Cooper, 2018); indeed, the attitude, characteristics, and performance of startups and SMEs are influenced by the institutional context (Bosma *et al.*, 2018). The literature defines the governance institution as the actor who establishes the rules and norms (North, 1990) to coordinate and guide entrepreneurial activity, "influencing relationships to obtain a competitive advantage, coordinating, motivating and governing the entrepreneurial network" (Colombo, 2019). By adopting this perspective, the role of government institutions can be seen as a "feeder" (Stam, 2015) in the creation and enabling conditions that allow the EE to develop through policies and measures that facilitate and help businesses and the level of innovation in a region; and as a "facilitator" in the creation of innovation networks (Mahmood and Rufin, 2005) or with targeted measures and initiatives for certain types of firms such as startups (Witte *et al.*, 2018); and finally, as an "enricher" (Sun *et al.*, 2019) which nurtures and promotes interactions, knowledge sharing, and links between and with other actors in the promotion of innovation. According to Colombelli, Paolucci, and Ughetto (2019), the government could be seen as a regional anchor because it promotes the evolution of EEs and collaboration between the public and private sectors. The role of the anchor tenant changes as the EE faces the various stages of its development: birth, transition, and consolidation. As the EE evolves, governance also changes, from hierarchical (the birth phase) to relational (the consolidation phase). Hierarchical governance includes a hierarchy of authority in which an actor takes the leadership role in defining the rules and governing interactions. Relational governance, instead, refers to the sharing of cooperative norms and informal routines, and subjects define them mutually.

Regional governance institutions act through an important tool, namely policies (Shearer *et al.*, 2016). This study explores the role of regional policies in creating and developing an EE to understand how and whether the policy orientation changes according to the different evolutionary EE stages and its characteristics. A local policy maker must decide what policies and measures to adopt to achieve the objectives. The definition of entrepreneurial policies is complex since entrepreneurial action depends on individual motivations and the context in which they are inserted (McMullen and Shepherd, 2006). Without considering the landscape of EEs and the specific determinants that stimulate entrepreneurship in each context, policies could become imperfect, ineffective, or defocused (Pita *et al.*, 2021). The challenge faced by the EE governance institutions is complex because of the diversity of the actors involved with different, sometimes opposing, and therefore conflicting objectives (Colombo, 2019).

3. Methodology

The EU created the macro-regional strategies to effectively address the common challenges and criticalities of all the countries involved while supporting potentialities and best practices. In 2014 the strategy for the Adriatic Ionian macro-region, EUSAIR, was approved. It fosters cooperation for the benefit of the ten countries of the Ionian Adriatic area. This study focuses on Italy, analysing three regions that belong to this area. EUSAIR promotes growth and economic prosperity by improving its attractiveness, competitiveness, and connectivity. It also safeguards the sea, coastal environment, hinterland, and ecosystems. Four pillars are articulated on the action priorities contained in the EUSAIR: Blue Growth, Connecting the region, environmental quality, and sustainable tourism. There are also two transversal pillars: Research, Innovation, and Development of SMEs; and Capacity Building and Communication.

This study explores the operative role of governments in EEs' development, analysing regional policies. We conducted a qualitative analysis in the Italian context of EUSAIR, analysing policy programs and measures adopted by three regions (Lombardy, Molise, and Calabria), representing different EE scenarios and facing development challenges. To compare programs and measures, we carried out a TCA inspecting ROPs. The TCA organizes and describes data sets in (rich) detail, identifying, analysing, and extracting themes within data (Braun and Clarke, 2006). TCA supported our analysis in organizing and describing measures and tracing regional policy orientation. Our dataset comprises ROPs documents containing a series of measures and policies applied by regions to increase regional development. Coherently with the paper's purpose, we selected only policy programs and measures related to the EE.

3.1. Data source

ROPs describe how regions use the European Regional Development Fund (ERDF) to implement economic growth. Documents cover seven years (2014-2020) and represent the most important and descriptive program of the strategic plan that a region develops and applies.

Each document has a specific structure composed of a) thematic objectives; b) priority axes; c) specific objectives; d) expected results; and e) actions.

A group of thematic objectives (hereafter TO) composes a “priority axis.” Each “priority axis” represents regional investment priorities based on the analysis of the socio-economic context. Each investment priority is linked to one specific objective. Then, the document reports the expected results, actions, and allocated resources for each specific purpose.

Table 1 presents the documents' characteristics for each region.

Table 1: Programs structures

Programme Structure					
Regions	Pages	Priority axes	Specific objectives	Priority axes related to entrepreneurship	Specific objectives related to entrepreneurship
<i>Period 2014-2020</i>					
<i>Lombardy</i>	291	7	18	6	13
<i>Molise</i>	395	11	28	7	18
<i>Calabria</i>	550	14	46	8	19

3.2. Data analysis

The analysis focused on measures related to regional entrepreneurial development. According to Friese, Soratto, and Pires (2018), researchers may not necessarily code the content of the entire data set; in fact, we focus only on objectives and measures that stimulate EE assets. These elements were codified and examined with a Computer-Assisted Qualitative Data Analysis Software (CAQDAS), namely Atlas.ti.7. Following the TCA process, we selected the quotations in ROP paragraphs that describe in detail the specific objectives and actions, then we associated codes at the level of sentences and families at the level of codes.

The units of analysis are codes and families. Codes are essential for organizing, structuring, and retrieving data, supporting the identifying themes for document interpretation. Many codes already exist in the literature on policy design (Stevenson and Lundström, 2007; Mason and Brown, 2014). We have created others inductively to cover all aspects of the topic under investigation. Our codification process produced 65 codes, considering specific objectives and

actions included in ROP documents. Codes are grouped for the themes they represent. These groups of codes are defined as families. This study highlighted 14 families.

Table 2 illustrates codes and families.

Table 2: Description of Codes and families

Family	Codes
Competitive advantage	Attractiveness; Competitiveness; Internationalization; Promotion; Investment attractiveness.
Education	Culture of innovation; Education; High-education; Specialised education.
Finance	Access to finance; Credit expansion; Foreign investment; Innovative finance; Micro-finance; Public guarantee; Risk capital; Venture capital.
Firm creation	Entrepreneurship; Micro-entrepreneurship; Social entrepreneurship; Spinoff; Startup.
High-tech industry	Knowledge intensive; Strategic industries.
Infrastructure	Tangible asset; Logistics&Transport; Research infrastructure; Urbanization.
Knowledge production	Emerging industry & Technology; TechDevelopment; Industrial research; Innovation; Research&Development; Research&Innovation; Social innovation.
Knowledge transfer	Diffusion of innovation; Diffusion of technology; Digitalization; Knowledge transfer; Open innovation; Technology transfer.
Labor force	Labor force; Skilled people.
Low-tech industry	Agriculture&Fishing; Craftsmanship; Cultural heritage; Natural resources; Tourism; Incumbent; Traditional industry.
Networking	Micro supply-chain; Proximity; Public-private partnership; Private-private partnership.
Social issue	Gender equality; Social equality, Legality.
Sustainability	Sustainability.
Technology adoption	High-technology; Modernization; Technology; Technology innovation.
Value added services (VAS)	Business services; Innovation support.

The codification followed a validation process. Two scholars have been involved in the process: scholar 1 provides a first group of codes, and scholar 2 validates codes and families selected and associated with objectives and measures.

To analyse codes and families, the groundedness and the weight of codes to value families are used as a metric. The code frequency represents groundedness. The sum of the codes' frequencies that make up the family represents the weight of the family.

4. Results

This section presents the results of our analysis.

Lombardy is one of the most developed Italian regions whose per capita GDP is higher than 90% of the EU average. The families with higher weight are “Competitive Advantage,” “Knowledge Production,” and “Technology Adoption.” The region pays little attention to the families of “education,” “labor force,” and “social issue.” No measures for the High-tech Industry family. Analysing the ROP, we note that Lombardy contributes to the EUSAIR strategy mainly through Axis IV (CO 2 reduction) and Axis VI (Tourism strategy of inland areas). However, we find that the focus on entrepreneurship, innovation, R&D, and SMEs,

which represent the transversal pillars of EUSAIR strategy, are included in all Axes of this region. This means that Lombardy has effectively and efficiently integrated the EUSAIR objectives within the regional documents, placing them alongside the other territorial development objectives.

Molise implements the synergies with EUSAIR in Axis I (for TOs: 1.1 Increase of business innovation activity; 1.2 Strengthening of the regional and national innovation system; 1.4 Increase in the incidence of innovative specializations in knowledge-intensive application perimeters); Axis 2 (for the TO 2.2 Digitization of administrative processes and dissemination of fully interoperable digital services); Axis 3 (for the TO 3.3: Consolidation, modernization, and diversification of territorial production systems); Axis 4 (for the TOs 4.3 Increase in the share of energy needs covered by distributed generation by developing and implementing intelligent distribution systems); and Axis 6 (for the TOs: 6.6 Improvement of the conditions and standards of offer and use of heritage in areas of natural attraction; 6.7 Competitive repositioning of tourist destinations). In 2014 Molise was still a region in transition (according to EU classification) because it had a GDP between 75% and 90% of the EU average. The region presents measures and actions still important in the "labor force" code. This code often co-occurred with the "education" and "entrepreneurship" codes. Therefore, the policy maker tried to increase the employment rate by creating new businesses and the specialization of human resources in firms. Molise invests in innovation and technology; indeed, the "innovation" and "technology" codes are the most common in the analysis for this region. "Innovation" often co-occurred with "R&D" code and "technology" with "tangible asset.". Concluding, the region focused its efforts on the following families: "Knowledge production," "Competitive Advantage," "Technology Adoption," "Low-tech Industry," and "Firm creation." Less attention was given to the families of the "High-tech Industry," "Social Issue," and "Knowledge Transfer." No measures for the "Sustainability" family.

In connection with the EUSAIR goals, Calabria promotes new forms of cooperation and opening processes of the regional territory based on more significant involvement of the local systems and civil society. The EUSAIR perspective is more present in some POR's OTs, such as the OT for Axis 1 (Research, technological development, and innovation); Axis 5 (Climate and environmental risks); Axis 6 (Environmental protection and enhancement of cultural and environmental resources); Axis 7 (Logistics, and in particular transport); and Axis 11 (Institutional capacity). Calabria is one of the less developed Italian regions, with a GDP per capita of less than 75% of the EU average. It presented measures still focused on the "labor force" code. In 2013, the region had an unemployment rate higher than 15%, predominating unemployed women. This code often co-occurred with the "education" and "entrepreneurship" codes and, to a lesser extent, with the "gender equality" code. The explanation for this co-occurrence was that the policy maker tried to increase the employment rate by launching new firms and the qualification of human resources and granting more gender equality for women. There are measures related to the families of "Competitive Advantage," "Firm Creation," and "Knowledge Production." Significant efforts also occurred in the "Low-tech Industry," "Infrastructure," "Technology Adoption," and "Knowledge Transfer" families. At the same time, the region paid little attention to "Sustainability," "Social Issues," and "High-tech Industry" families.

Table 3 presents the results of the analysis for the three EUSAIR regions.

Table 3: Metrics of the Regional Operational Program 2014-2020: comparison between regions

Codes	Lombardy	Molise	Calabria	Family	Lombardy	Molise	Calabria
	Groundedness				Weight of Family		
Competiveness	4	4	6	Competitive advantage	18	9	16
Promotion	5	2	4				
Internationalization	2	1	2				
Attractiveness	5	2	2				
Investment attractiveness	2	0	2				
Education	2	4	5	Education	2	6	7
High-education	0	1	2				
Culture of innovation	0	0	0				
Specialised education	0	1	0				
Access to finance	1	1	0	Finance	6	3	6
Foreign investment	0	0	0				
Credit expansion	0	1	1				
Innovative finance	2	0	1				
Micro-finance	0	0	1				
Public guarantee	1	0	1				
Risk capital	1	1	1				
Venture capital	1	0	1				
Entrepreneurship	4	4	8	Firm creation	9	8	17
Micro-entrepreneurship	1	0	2				
Social entrepreneurship	1	1	2				
Spinoff	1	1	2				
Startup	2	2	3	High-tech industry	0	1	2
Knowledge intensive	0	1	1				
Strategic industry	0	0	1				
Research infrastructure	1	1	2	Infrastructure	6	6	14
Tangible asset	4	5	12				
Logistics&Transport	0	0	0				
Urbanization	1	0	0				
Industrial research	1	2	2	Knowledge production	16	15	20
Research&Development	3	2	4				
Research&Innovation	1	0	3				
Innovation	8	7	6				
TechDevelopment	1	2	1				
Emerging industry & Technology	2	1	0				
Social innovation	0	1	4				
Knowledge transfer	0	0	1	Knowledge transfer	6	1	11
Diffusion of innovation	2	0	2				
Diffusion of technology	2	1	1				
Digitalization	1	0	4				
Technology transfer	0	0	2				
Open innovation	1	0	1	Labour force	2	6	8
Labour force	2	6	7				
Skilled people	0	0	1				
Agriculture&Fishing	1	0	1	Low-tech industry	9	8	12
Craftsmanship	0	0	0				
Cultural heritage	3	2	4				
Natural resources	2	2	3				
Tourism	3	4	4				
Incumbent	0	0	0				
Traditional industry	0	0	0	Networking	6	6	13
Micro supply-chain	0	0	1				
Proximity	0	0	3				
Public-private partnership	2	4	5	Social issue	2	2	3
Private-private partnership	4	2	4				
Legality	0	0	0	Sustainability	5	0	2
Social equality	2	0	0				
Gender equality	0	2	3				
Sustainability	5	0	2	Technology adoption	11	9	13
Technology	7	6	6				
Technology innovation	1	1	4				
Modernization	1	0	2				
High-technology	2	2	1	Value added services (VAS)	6	3	9
Business services	5	3	6				
Innovation support	1	0	3				

5. Discussion

This section discusses the results of the TCA. Each ROP differs in the measures and actions as it responds to the different regional development and acts on the peculiarities of the territory to which it refers. The EUSAIR regions add specific objectives and measures related to the EUSAIR goals to the common objectives of ROPs.

The Calabria ROP focuses on supporting the economic and social conversion to promote Calabria's development and structural adjustment, which experienced developmental delays. The measures refer to the infrastructure creation and equipment for private and public firms, still educational programs for unemployed people, incentives for firm creation, business services to facilitate recruiting, and investments in knowledge production and knowledge transfer. The ROP presents measures to increase the competitive advantage, the firms' access to finance, and actions to stimulate technology adoption for all businesses.

The Molise document focuses on the attractiveness and competitiveness of firms through investments in technology and innovation, infrastructures, and networking. The ROP supports economic development and employment through programs for the modernization and diversification of economic structures and creation of stable jobs. Through its promotion within firms, measures related to strengthening R&D and innovation are included in the program and actions to foster innovation and entrepreneurship in all sectors. Besides, the ROP supports and grants better access to finance by SMEs, creates new firms, and promotes cooperation between firms and research institutions.

The Lombardy ROP presents measures for increasing the competitive advantage with actions aimed at firms' competitiveness and attractiveness, promoting innovation and technology adoption. It includes actions to foster knowledge production, strengthen traditional sectors, and financial incentives to allow firms to invest in innovation, R&D, and technology to create a more robust and competitive entrepreneurial climate. There are measures related to sustainability as firms aim to be more sustainable and adopt best practices for increasing the level of competitiveness also at an international level. ROP encourages partnerships among actors such as universities and research structures with firms and big companies with SMEs and startups. Analysing the ROPs, we highlight governance approaches because the policy maker's role in EE governance can be explained through the policies applied in the region (Mack and Mayer, 2016). From the analysis, we also define the style that policymakers adopted.

The Calabria policy orientation presents policies that support the creation of actors' networks to promote innovation and increase the region's overall attractiveness and competitiveness. In this framework, the policy maker assumes a "transition" style. The policies and measures are driven by a strategy to invest in regional specializations representing the region's peculiarity and economic value to exploit the competitive advantage. The "transition" policymaker seeks to create an extended regional network, and the EE begins to have a stronger and more cohesive structure that allows the region to grow.

The Molise measures strengthen the competitiveness and attractiveness of the regions and foster new firms. Policies encouraged innovation and technology adoption within the firms. This type of approach is defined as "architect." The region attracts investments from external actors and, through policies to enhance competitiveness, prepares the EE to compete with actors outside the region. As an architect, the region covers an important position about the resources, including them into firms and industries and technological and innovative projects.

The Lombardy ROP shows more measures aimed at increasing technology, innovation, and diffusion of technology with many actions related to investments in R&D and the creation of partnerships between the public and business sectors. For these reasons, Lombardy adopted a different policy style defined as a “promoter.” The regional development level is higher than the other two regions, and the measures strengthen the firms’ competitiveness and attractiveness and adopt technology and innovation. In this analysis, the concept of evolution is conceived in terms of economic development, which is the yardstick for comparing the regions we analyse.

According to this perspective, the above policies respond to different EE development stages. The Calabria region, indeed, represents a “potential” EE, still in transition but with signs of development, based on policies on reinforcing and expanding the current entrepreneurial climate in traditional sectors, in the creation of new businesses, and in education and employment policies to increase these regional indexes. It also presents actions concerning technology, innovation, and R&D; infrastructures; creating partnerships between the private and public sectors, and actions for increasing the regional competitive advantage. Support measures for SMEs for adopting innovation, consultancy, and support services for businesses, in general, are included.

We define the Molise EE as “mature” based on the policies adopted. The region has a robust framework, with less investment in traditional sectors as the firms have a stronger structure, are more prominent, and already employed innovation and technology practices, which are strengthened in the ROP to act on the regional competitiveness and attractiveness. There are still measures for education and labor force sectors, especially for acquiring workers' skills and competencies, and actions to foster partnerships between public and private sectors to increase knowledge sharing and create a solid and cohesive regional network.

The Lombardy EE shows an “evolved” phase as its measures focus on achieving a key position in managing relational and financial resources by inserting them into firms, industries, and projects with high added value (such as technology and innovation). The region has a robust structure with productive and growing firms in the traditional sector, a low unemployment rate, and a good level of skilled workers. It paid attention to the sustainability issue presenting measures for firms and actions to increase further the level of technology and innovation and the competitiveness and attractiveness in international markets. The ROP also offered financial incentives for making access to credit faster and more convenient. *Table 4* shows EE policy styles and development stages referred to as targets, measures, and objectives.

Table 4: Entrepreneurial ecosystem policy styles

TARGET	Potential EE stage	Mature EE stage	Evolved EE stage
	Micro-firms; unemployed; SMEs.	SMEs; large companies.	Startups; SMEs; large companies.
MEASURES	▪ Supporting for manufacturing firms' infrastructure and equipment.	▪ Investment in regional transport and logistics infrastructure.	▪ Funding in startups' creation.
	▪ Incentives for new technologies' adoption.	▪ Investment in regional cultural amenities.	▪ Investment in startups' support programs managed by accelerators and incubators.
	▪ Financial incentives for new business generation.	▪ Financing the acquisition of new plants, machinery, and equipment.	▪ Funding opportunities for innovation projects.
	▪ Provision of business consultancy services.	▪ Financing R&D projects and new technology adoption.	▪ Financial acquisition of digital assets and new technologies.
	▪ Training programs for enhancing individuals' capabilities and skills.	▪ Funding in startups' creation.	▪ Investment in the diffusion of technology and in technology projects.
	▪ Financing and investment in R&D.	▪ Funding opportunities for innovation projects. ▪ Financing the establishment of networks for the R&D cooperation.	▪ Investment in innovation. ▪ Financial support for investments in emerging technologies.
OBJECTIVES	▪ Reduction of regional unemployment rates.	▪ Improvement of existing firms.	▪ Fostering the development of cutting-edge innovation throughout the whole community of the ecosystem.
	▪ Empowering human resources.	▪ Development of innovation-driven networks.	▪ Increasing the level of attractiveness and competitiveness of the ecosystems' actors at the international.
	▪ Strengthening the traditional areas of specialisation.	▪ Improvement of the region's overall attractiveness.	
Policy styles	TRANSITION	ARCHITECT	PROMOTER

6. Conclusion

This study aims to fill a literature gap on the role of governance institutions in the evolution of EEs. Most studies do not consider the dynamic function of government institutions within the development of EE (Stam, 2015; Roundy et al., 2017). This research highlights the policy approaches that change when an EE evolves. Three policy orientations emerged from the analysis of ROPs of three Italian regions that are part of the EUSAIR area: transition, architect, and promoter. We used TCA to gain insights about policy orientations according to measures, activities, and strategic plans created by regional governments. Besides, the following results emerged: transition style is typical of a potential EE; the architect characterizes mature EE, and promoter style is typically adopted in an evolved EE.

We contribute to extant literature from different perspectives. First, it provides a dynamic view of government institutions from a EE perspective. Secondly, it categorizes the policy orientation and measures typical in different EE's phases. Finally, it defines three policy approaches used by regional policymakers.

Limitations concern the qualitative approach, sample dimension (just three regions), and the regions' location (only the Italian context).

Future research may adopt a quantitative approach to analyse the documents. The small sample could overlook other policy orientations and peculiarities, so the analysis should be extended to the entire sample of Italian EUSAIR regions.

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The Comparison of Entrepreneurship Established by Both Native Entrepreneurs and Return Migrant Entrepreneurs

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Abstract

The goal of this paper is to gain an insight into the circumstances of entrepreneurships. The focus of the study is the comparison between the entrepreneurship set up by Albanian native and return migrant entrepreneurs. Entrepreneurship is supposed to be one of the engines of economic growth. The entrepreneurship set up by the return migrant entrepreneurs is still one of the main phenomena in South–Eastern European countries and Western Balkan countries, Albania included. Based on their foreign experiences, knowledge, money, ideas, achievements, and connections, they have decided to start up their own businesses in Albania. The pandemic situation significantly encouraged them to have something of their own. The paper reviews the theoretical literature on entrepreneurship and return migrant entrepreneurs. Based on literature review, a questionnaire is addressed to different entrepreneurs in Albania, focusing mostly to the native ones and return migrant entrepreneurs. Data were collected from 521 respondents. To better understand the situation and the challenges faced by the entrepreneurs, several questions were included in the questionnaire, even open-ended ones. The questionnaire was self-administered by the respondents. As underlined by them, it was challenging to start up and manage the entrepreneurship in their home country. Based on the data gathered, the findings show that entrepreneurs and especially return migrant ones had clear ideas about entrepreneurship. This study has its limitations regarding the number of respondents, or the factors included in the research. However, it fills up a gap, by comparing the entrepreneurship between the native entrepreneurs and return migrant entrepreneurs. In this paper, we are not focused on what was the difference or impact is based on the entrepreneurs being male or female. The exploration of the impact based on the entrepreneur's gender may be an area of interest for future study. This paper provides some strong recommendations to both the entrepreneurs and the government.

Keywords: entrepreneurship, entrepreneurs, native entrepreneurs, return migrants entrepreneurs etc.

1. Introduction

The purpose of this study was to contribute to the understanding of entrepreneurship by estimating the difference between native and return migrant entrepreneurs. Researchers have

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focused little attention on comparing success of native entrepreneurs with that of return migrant entrepreneurs. This study attempted to fill this gap, by investigating this difference.

In the recent years, there has been seen an increased interest among researchers on studying entrepreneurship. Entrepreneurship is an important key for progress and development in the economy. Many studies have been undertaken with the intention of testing the different variables and factors that influence the success of entrepreneurship. (Kraja Borici Y., 2018) studied success of entrepreneurship by considering the great potential of both intangible and tangible assets on the success. It was considered even the relationship of entrepreneurship's success and competitive advantage, the one achieved through differentiation and the other side through low cost (Kraja Borici Y. & Osmani E., 2013). The study by (Souitaris V. et al., 2007) tests the effect of entrepreneurship programs on entrepreneurial attitudes and the intention of science and engineering students, in order to confirm (or disconfirm) conventional wisdom that entrepreneurship education increases the intention to start a business. In a research of (Sinatti G., 2022) the approach exemplifies the mindset of government institutions toward return and entrepreneurship and emphasizes development outcomes at the level of national economic growth and the other one focuses on the real-life experiences and transnational practices of migrants setting up businesses in the homeland. In another research done by (Marques S. et al., 2022) it was concluded that the knowledge and experience acquired in other countries allow these business people to look at the region differently, leading them to perceive unexplored potentialities and thus, contribute to regional development. Researcher (Tamwo S. et al., 2022) views immigrants as dynamic risk takers who are inherently more prone to becoming self-employed relative to others. This argument maintains that return migrant owners present human capital resources of greater value and rarity than native owners. At a more general level, this article addresses two theoretical approaches entrepreneurship and return migrants.

1.1. Entrepreneurship

Entrepreneurship is an attitude that manifests an individual's inspiration and ability to discover an opportunity and proceed with it, to fabricate new value or economic development (Pretheeba P., 2014). Therefore, promoting entrepreneurship has become an accepted insight in any country. One of the crucial elements in promoting entrepreneurship is the ability to motivate individuals to become entrepreneurs and equip them with the right skills to translate opportunities into successful business ventures (Pretheeba P., 2014). Entrepreneurship is a risky career option, as most entrepreneurs fail (Heilbrunn A. et al., 2010). There are other important elements that also must be considered. According to (Rodriguez, 2017) entrepreneurship education should begin at the youngest age possible.

According to the literature, the intention to be an entrepreneur would be the single best predictor of actual firm-creation behavior (Fayolle A. & Gailly B., 2004). In this sense, an entrepreneur would make his decision based on three elements: his personal preference or attraction towards entrepreneurship; the perceived social valuation of that career option; and, thirdly, his perceived feasibility (self-efficacy perceptions). If an entrepreneur is made not born (Gartner, 1988), entrepreneurship can be understood as a learning process (Rodriguez, 2017). The issue of perceived feasibility of becoming an entrepreneur is significant, especially for immigrants who often face difficulties entering the host country's labor market, and who meet many constraints in recruiting financial, informational, and social resources for setting up businesses (Heilbrunn and Kushnirovich, 2007). Despite the initiative to face challenges, entrepreneurs have to spend more time on management and strategies, because this will help to understand the current situation and make safe steps towards the future (Kraja Borici Y. & Osmani E., 2013). Entrepreneurs must be aware of what they are doing. The issue of perceived

feasibility of becoming an entrepreneur is of great importance, especially for immigrants who often face difficulties entering the host country's labor market, and who meet many constraints in recruiting financial, informational and social resources for setting up businesses (Heilbrunn S. & Kushnirovich N., 2007). However, the decision to create a firm depends on knowing how to do it and on being able to do it. The initiative to create a firm depends on several essential elements that must be taken into consideration.

Creativity is a key factor for fostering innovation and also crucial in the entrepreneurship process, particularly in the current competitive climate (World Economic Forum, 2009). Leadership is a key factor in new business start-ups (Vecchio R., 2003) and comprises multiple attitudes required to ensure success (Timmons and Spinelli, 2004). Achievement is an attitude extensively highlighted in many studies as being closely associated with entrepreneurs (Caird S., 1991). Personal control, meaning the degree to which a person believes they have control over their own life (Athayde R., 2009), is a central dimension in theories of entrepreneurship (Robinson B. et al., 1991). Intuition refers to the entrepreneur's potential to detect and exploit opportunities, even when operating in ambiguous or uncertain environments (Krueger N., 1994). Entrepreneurship today is characterized by a complex relationship of different actors, so it is important to establish competitive advantages and create value by efficiently managing the missing resources in order to cope with fierce competition, and to successfully confront the challenges faced by entrepreneurs (Kraja Borici Y. & Osmani E., 2015).

1.2. Return Migrant Entrepreneurs

Migration is one of the essential phenomena that has accompanied Albania. For economic and political reasons, Albania has been traditionally known as an emigration country. For three decades, there was a massive migration of Albanians towards Western European countries especially to the neighboring ones, such as Italy and Greece. Today Albanians are everywhere. International Organization for Migration conducted a survey, in which were collected data on migration. It resulted that almost 350,000 people had left for a period of 9 years, 2011-2019.

Entrepreneurship and immigration are inextricably linked concepts (Kushnirovich N. et al., 2017). As entrepreneurs migrate, they bring with them attributes developed from one environment to another (Turkina & Thai M., 2013). Recently, scholars have begun to question whether immigrant entrepreneurs are entrepreneurs because they are immigrants or whether immigrant entrepreneurs are immigrants because they are entrepreneurs (Ensign P. & Robinson N., 2011). Existing literature has not addressed how estimating the impact of return migration on entrepreneurship is affected by double unobservable migrant self-selection, both at the initial outward migration and at the final inward return migration stages (Batista et al., 2017). Return migrant entrepreneurs, are quickly able to identify needs that customers have, and work hard to provide products and services that suit them. Not all the return migrants start business, but self-employment can be argued to serve as a sort of tool to avoid discrimination in the labor market (Minniti & Nardone, 2006). It is not an easy journey for return migrants, but rather a bitter-sweet one. It is challenging to overcome their problems. Also, the pandemic situation has affected every part of Albanian lives, including Albanian return migrants.

1.3. Sources of financial

Entrepreneurs need financial capital to start up their businesses and grow up it. Individuals who are more willing to take risks are more likely to start and be involved in business. According to (Kushnirovich N. et al., 2017) migrants, who took some risks in the past, were no longer tolerant to further additional risks, including the risk of setting up a business. Most native

entrepreneurs and migrant entrepreneurs have started their businesses by using their savings and the rest, by managing the capital from the bank loan. In the second phase of extension of growing their businesses, most of the respondents confirmed both methods. Managing risk is a fundamental concern for the entrepreneurs in today's dynamic global environment. Migrant entrepreneurs may be less risk averse, as evident in their decision to migrate, a risky activity itself (Neville F. et al., 2014). They argue to be more able to spot opportunities for new businesses as they already spotted opportunities for migration (Hart and Acs 2011). Kraus and Werner (2012) found that the less integrated migrants were into society, the greater their tendency to take a risk of starting a new business is.

2. Methodology

Theory and the survey are the two main pillars of the science. The methodology consists of a combination of primary and secondary research. Based on the literature review and our understanding of the concepts, we created a questionnaire which contains different questions regarding entrepreneurship, entrepreneurs, success rates, and even some open-ended questions. Questionnaire is sent in five important cities of Albania as: Shkodra, Lezhë, Durrës, Tirana and Vlora. Our sample has N=521, respondents, who have filled out the questionnaire. They were selected through a random sampling of participants. The questionnaire consists of three parts. The first part had questions on the demographic profile of the respondents. The second part consisted of questions eliciting information about entrepreneurial factors that mostly are the best contributors on their success. It was offered to them a list with questions as: leadership skills, creativity, financial support, family support, experience, achievement, leadership, individual characteristics, government connections, self-confidence, if they were risk takers etc. Respondents had to choose at least 5 of them according to their importance. The third part had open-ended questions, like: "What do you think make you different from the native entrepreneurs", or "What is your opinion regarding the government policies towards entrepreneurship". Additionally, they were invited to write about the main challenges that they were faced with.

2.1. Hypotheses

In this paper, we propose to examine the question of whether return migrant entrepreneurs contribute more to entrepreneurship than native ones. To examine this, we were focused more on the successes that native entrepreneurs have achieved comparing with that of return migrant's entrepreneurship.

H₁. Native entrepreneurs are more successful than return migrant entrepreneurs.

H₂. Native entrepreneurs are not more successful than return migrant entrepreneurs.

2.2. Descriptive statistics

The data set highlights the importance of entrepreneurship. Table 1 shows that 53.4% of all respondents were native entrepreneurs, while 46.6% of them had businesses that are owned by return migrants. Table 1 also shows that, in terms of business ownership, there are, however, significant numbers of return migrants that are entrepreneurs. The analysis sample is more concentrated in the five important cities. Table 2 indicates the geographic distribution of respondents in five cities in Albania as: Shkodra, Lezhë, Tirana, Durrës and Vlora. It is obviously seen that 31,5% were from Shkodra, one of the oldest cities in Europe, and one of the main cities in Albania; 20,3% of respondents were from Lezha, a city in northwestern

Albania, that had a lot of migrants and return migrants; 25,3% of respondents were from Tirana, the capital and the largest city in Albania; 13,2% of them were from Vlora city, that is the third most populous city in Albania, and 9,6% were from Durrës city, the second most populous city in Albania. However, there are even other important cities that for many reasons are not included in this study. Based on the descriptive analysis, and Table 3, we concluded that 27.3 % of the participants are involved in the service sector, 15.9 % of respondents are from the production sector, 37,2 % of them are from trade, 5 % of participants are engaged in the construction and the rest 14,6 % of respondents are entrepreneurs of different kind of businesses.

One of the questions in the questionnaire was regarding the main challenges entrepreneurs were facing in their businesses. The challenges shown in Table 4 have different colors. Starting from easy and simple ones. It depends on the entrepreneurs. It happened to them to lose their confidence, 3.1 % as it is shown in Table 4. For some of them, it was hard to manage the private and professional life. The pandemic made life more expensive than before, and businesses were facing with financial issues. However, nowadays, more than ever new entrepreneurs need to have family support on their crazy ideas and investment. But it happens that family members, especially parents get tired and lack the trust when it is the matter of investment, 9.8 % of respondents Table 4. Information was one of the priorities. If you want to be successful, you must be well-informed, 23.2% of the respondents in Table 4.

2.3. Results

Multiple linear regression analysis, the most common model is used to explore the relationship between variables. The typical goal was to build a model using the best variables to explain the greatest variability in the response, and to accurately parameterize regression coefficients for those variables.(Graham M., 2003)

Factor analysis was carried out, by using the Varimax rotation analysis method. Questions were measured based on a Likert scale from 1 to 5 (disagree - very much agree) and they resulted in a component. Table 5 shows, which were included in this component. It was obviously seen in Table 6, that this factor explained 58.468 % of the total variance. “Advantages of native entrepreneurs” was measured as the average of the five questions in Table 5. Cronbach’s Alpha, the reliability coefficient was computed and resulted 0.822.

While the component “Advantages of return migrant entrepreneurs” was measured as the average of the six items, it is clearly seen on the Table 7. By using exploratory factor analysis with rotation Varimax one of the items according to (Hair et al.,1998) was unacceptable. Its factorial weight was (0.374). After dropping that item and running another principal component analysis, we received the structure with factor loadings ranging as in Table 8. This factor explained 61.415 % of the total variance. The results of the reliability analysis indicated a Cronbach alpha of 0.841

A principal components analysis was performed. Variable “Success” was measured as average of the three questions as: ROI, profit, and market share Table 10. Table 9 also revealed that those three questions resulted in a component. It explained 67.358 % of the variance. The results of the reliability analysis indicated a Cronbach alpha of 0.758.

Multicollinearity refers to the correlation among independent variables as it was shown in Table 12. The Pearson Correlation was satisfactory to continue with the regression analysis, because of the values that were less than 0.7. Variables were not collinear, so regression analysis was done.

The R^2 squared correlation coefficient, is 0.303, which is also referred to as the determination coefficient. This value indicates the percentage of total variation of Y explained by two independent variables, predictors. Therefore, based on the results of our regression, the regression equation for our analysis can be written as:

$$\text{"Success"} = 1.347 + 0.138 \text{ Advantages of native entrepreneurs} + 0.384 \text{ Advantages of return migrant entrepreneurs}$$

The coefficients of the "Advantages of native entrepreneurs" and "Advantages of return migrant entrepreneurs" independent variables are positive, which entails that they have a positive impact on the SMEs success. Based on the regression analysis, it resulted that the independent variables account for 31.4 % of the total variance of dependent variable "success", and this is not by chance. The unstandardized coefficients are ($B_1=0.138$) and ($B_2= 0.384$). The results demonstrate that the regression model of the value $F(2,519) = 115.485$ becomes well-matched for ($p=0.00$) the significance level of (0.05), because in this case ($p=0,000$) is less than (0.05). By using statistical testing of controlling the individual regression coefficient, there were achieved the same results ($t_1= 3.929$ and $p=0.000$; $t_2=13.323$ and $p= 0.000$). These coefficients are different from zero and positive which means they contribute to this model, the increase in the level of the independent variables it will increase in the level of the dependent variable, but coefficient $B_2 > B_1$ which means B_2 has greater impact on the entrepreneurship success. Return migrants entrepreneurs were more likele to be successful than native ones. So, conclusion H_2 : is supported.

3. Limitation

One of the limitations of this study was the fact that we were focused on five cities in Albania. Extending it in more cities may be the case of further studies in the future. The second one, was the fact that we were focused more on some sensible factors. Of course, there are even other factors that might be considered. We hope that more studies will be conducted in the future, to further examine the difference in contribution on economic development.

In this paper, we are not focused on what was the difference or impact if the entrepreneurs were male or female. This may be the case for further study, exploring the impact based on the gender of the native entrepreneurs and return migrant entrepreneurs.

Conclusion

The objective of this research paper is achieved. It was to identify and to compare the entrepreneurship established by native entrepreneurs and return migrant entrepreneurs. Success factors that influence success of native entrepreneurs and return migrant entrepreneurs were ranked and evaluated by entrepreneurs. Based on the results obtained, appears that it was a positive correlation of those factors with success. But Covid-19, has changed the rules of the game, introducing entrepreneurs with difficult and unexpected situations and creating economic consequences.

Return migrant entrepreneurs are contributing more on the entrepreneurship success as it resulted even from empirical analysis. Their experience, knowledge, achievement, money, ideas, friendships, personal control, leadership skills, creativity, and other abilities, that they already possess, were successfully used. Based on the data analysis, the findings show that entrepreneurs and especially return migrant ones had clear ideas about entrepreneurship. Our

findings contribute to better understand the factors that influence success to entrepreneurship. This study fills up a gap, by comparing the entrepreneurship between the native entrepreneurs and return migrant entrepreneurs.

As it was mentioned from most of the respondents on the open-ended question. By answering “What do you think make you different from the native entrepreneurs or vice-versa from the return migrant entrepreneurs. 69 % of return migrant entrepreneurs, underlined that the main strong points of them were foreign experiences and international networks that provide them advantages over native owners.

Another open-ended question was “What is your opinion regarding the government policies?

Native entrepreneurs think that they know environment and the “rules of games” much better than return migrants entrepreneurs, while for return migrants it is really challenging. It is non-understandable for them to go on when someone break the rule.

Based on the open-ended questions, challenging for entrepreneurs was hiring employees; time management, financial problems, unfair competition, safety etc.

This paper provides even some strong recommendations to both entrepreneurs and the government. Entrepreneurs should be sensitive to their competitive advantages, and especially to their own advantages. The more confidence entrepreneurs have on their entrepreneurial competences, capabilities, the more successful they will be. However, in some circumstances, their confidence was shaken. It is reasonable to conclude that migrant entrepreneurs felt confident on what they were doing, because of their previous experiences. They should pay great attention to their strength points. Being an entrepreneur is challenging.

Entrepreneurs’ voices should be listened by the government, which on the other hand should support entrepreneurship. Corruption was the main problem for them. It discourages them to further go on. Entrepreneurs, as they have pointed out, are tired of it. The government must pay great attention to this. It must create positive environment for entrepreneurs to grow-up their businesses.

Table 1. Are you a native entrepreneur or return migrant entrepreneur?

	<i>Frequency</i>	<i>Percent</i>	<i>Valid percent</i>	<i>Cumulative percent</i>
Native Entrepreneurs	278	53.4	53.4	53.4
Return migrant Entrepreneurs	243	46.6	46.6	100
Total	521	100.0	100.0	

Table 2. Where is located your business?

	<i>Frequency</i>	<i>Percent</i>	<i>Valid percent</i>	<i>Cumulative percent</i>
Shkoder	164	31.5	31.5	31.5
Lezhë	106	20.3	20.3	51.8
Tiranë	132	25.3	25.3	77.2
Vlorë	69	13.2	13.2	90.4
Durrës	50	9.6	9.6	100
Total	521	100.0	100.0	

Table 3. What is your type of business?

	<i>Frequency</i>	<i>Percent</i>	<i>Valid percent</i>	<i>Cumulative percent</i>
Service	142	27.	27.3	27.3
Trade	194	37.2	37.2	64.5
Production	83	15.9	15.9	80.4
Construction	26	5.0	5.0	85.4
Other	76	14.6	14.6	100
Total	521	100.0	100.0	

Table 4. What were the challenges have you faced during the start-up phase in your business?

	<i>Frequency</i>	<i>Percent</i>	<i>Valid percent</i>	<i>Cumulative percent</i>
Corruption	121	23.2	23.2	23.2
Combining domestic and professional life	47	9.0	9.0	32.2
Doubt of self-confidence	16	3.1	3.1	35.3
Financial issues	51	9.8	9.8	45.1
Support from family	61	13.1	13.1	58.2
Lack of information	218	41.8	41.8	100
Total	521	100.0	100.0	

All questions were rated based on a Likert scale from: 1 disagree - 5 very much agree

Table 5. Factor Analysis: Total Variance Explained

	<i>Initial Eigenvalues</i>		<i>Extraction Sums of Squared Loadings</i>	
	% of Variance	Cumulative %	% of Variance	Cumulative %
1	58.468	58.468	58.468	58.468
2	14.462	72.930		
3	10.491	83.421		
4	9.404	92.826		
5	7.174	100.000		

Extraction Method: Principal Component Analysis.

Table 6. Factor Analysis; Extraction Method: Principal Component
Cronbach's Alpha=0.822

	<i>Component 1</i>
Personal control	..762
Was it easy for you finding financial support	.752
Leadership	.742
Achievement	.772
How much creative are they regarding management, product, services, motivation, promotion etc.	.794

All questions were rated based on a Likert scale from: 1 disagree - 5 very much agree

Table 7. Component Matrix; Factor Analysis; Extraction Method: Principal Component

	<i>Component 1</i>
Leadership	..772
Are you risk takers	.688
Personal control	..767
Achievement you have on years of experience	.500
Was it easy for you finding financial support	.806
How creative are they regarding management, products, services, motivation, promotion etc.	.837

All questions were rated based on a Likert scale from: 1 disagree - 5 very much agree

Table 8. Component Matrix Factor Analysis

	<i>Component 1</i>
Personal control	.789
Achievement they have on years of experience	.690
Leadership	.761
Are you risk takers	.827
How much creative are you regarding management, products, services, motivation, promotion etc.	.842

All questions were rated based on a Likert scale from: 1 disagree - 5 very much agree

Table 9. Factor Analysis: Total Variance Explained **Cronbach's Alpha=0.841**

	<i>Initial Eigenvalues</i>		<i>Extraction Sums of Squared Loadings</i>	
	% of Variance	Cumulative %	% of Variance	Cumulative %
1	61.415	61.415	61.415	61.415
2	12.822	74.237		
3	10.504	84.742		
4	8.123	92.865		
5	7.135	100.000		

Extraction Method: Principal Component Analysis.

Table 10. Factor Analysis: Total Variance Explained **Cronbach's Alpha=0.758**

	<i>Component 1</i>
ROI	.825
Profit	.822
Market share	.816

All questions were rated based on a Likert scale from: 1 disagree - 5 very much agree

Table 11. Factor Analysis: Total Variance Explained

	<i>Initial Eigenvalues</i>		<i>Extraction Sums of Squared Loadings</i>	
	% of Variance	Cumulative %	% of Variance	Cumulative %
1	67.358	67.358	67.358	67.358
2	16.640	83.998		
3	16.002	100.00		

Extraction Method: Principal Component Analysis.

Table 12. "Correlation": Predictor 1-Predictor 2

<i>Variables</i>	1	2
1. Pearson correlation	1	
Sig 2 tailed		
2. Pearson correlation	0.211**	1
Sig 2 tailed		

** Correlation is significant at 0.01 level (2- tailed)

* Correlation 0.05 (2-tailed)

Table 13. Model Summary

	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	0.550	.303	.300	.73764

a. Predictors (constant), Native Advantage of entrepreneurs & advantages of return migrant entrepreneurs

Table 14. ANOVA

Sig. .000

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>
Regression	122.407	2	61.204	115.485
Residual	281.847	518	.544	
Total	404.254	520		

b. Dependent Variable: Success

c. Predictors (constant), Native Advantage of entrepreneurs & advantages of return migrant entrepreneurs

Table 15. Coefficients

Sig. .000

	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficient</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>
1 (Constant)	1.347	.185		7.269
2. Advantages for native entrepreneurs	.138	.035	.147	3.929
3. Advantages for return migrant entrepreneurs	.384	.029	.500	13.323

A. Dependent Variable: Success

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Influence of Entrepreneurial Framework Conditions' Change to Entrepreneurial Activity

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Abstract

From the entrepreneurial point of view, difficulty in starting a business is generally observed as a negative side of the crisis, on one hand, while pursuing new opportunities is generally observed as positive side of the crisis, on the other hand. In order to identify if and how entrepreneurial activity conditions are changed, expert ratings of the entrepreneurial framework conditions (gained from Global Entrepreneurship Monitoring database) are analysed. In that sense, the significance of the difference in expert ratings of the entrepreneurial framework conditions in two observed periods 2020/21 and 2022/21 is tested. Relative changes in expert ratings of the entrepreneurial framework conditions in the observed periods are determined. Further those relative changes are correlated with percentage of Total early-stage Entrepreneurial Activity with claim that *Starting a business is more difficult than a year ago*. Also, those relative changes are correlated with percentage of Total early-stage Entrepreneurial Activity with claim that *are willing to Pursue new opportunities due to pandemic*. The second part of the analysis concerns sector distribution of new entrepreneurial activity. Based on the obtained results, countries included in the research are grouped into homogenous clusters. For performing mentioned analysis, the following methods are used: correlation and regression analysis, tests of significance of differences in mean values.

Keywords: entrepreneurial framework, entrepreneurial activity, conditions, difficulties, new opportunities.

Introduction

Entrepreneurs are very important entities in any economy. However, on the other hand, crisis situations make them vulnerable and thus a weak link in the economy. In that sense, the subject of the paper is the analysis of the impact of the latest, still on-going crisis on entrepreneurial activity or, more precisely, the analysis of the entrepreneurial sector response to the on-going crisis connected to COVID 19 pandemic and policy makers' measures to avoid the negative effects of the pandemic on employment and economic growth. Negative effects of this crisis were also transmitted through supply chain networks, leading many industry sectors to shut down their operations due to a lack of parts.

Beside the tertiary sector that was hit in all affected countries, the manufacturing industry was also the most severely affected. For this reason, it is considered useful to compare different economy sectors in order to discover whether there is the difference in their attractiveness as a response to the crisis.

One of the trends of consumer consumption during the COVID-19 pandemic has been panic buying and, therefore, the intensified imbalance and disequilibrium between supply and

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demand. Due to the product characteristics, the food supply chain is long which makes resilience efforts a daunting task for food firms. This was the problem for the food industry, especially SMEs in the food industry (Ali et al., 2021). Beside SMEs in food industry, the most negatively affected sectors are logistics, construction, and agriculture (Albonico et al., 2020). Fernandes (2020) found that countries with a larger proportion of service industries were more severely affected by the pandemic. He emphasized that the problems are particularly bad in hospitality related sectors and that the global travel industry—from airlines to cruise companies, from casinos to hotels—is facing reductions of activity of more than 90% (Fernandes, 2020). Negative effects of this crisis were also transmitted through supply chain networks, leading many industry sectors to shut down their operations due to a lack of parts. Beside the tertiary sector that was hit in all affected countries, the manufacturing industry was also the most severely affected (Goodell & Huynh, 2020).

Although entrepreneurship is a vital ingredient for providing economic development and an important determinant of present and future incomes and jobs, the nature and process of that economic development can vary considerably between economies (Reynolds et al., 1999). Therefore, beside comparison and analysis between the economy sectors, it may be useful to identify differences between economies, when it comes to response to the crisis. For mentioned analysis may be used data collected by the Global Entrepreneurship Monitor due to their comprehensiveness and constancy. The Global Entrepreneurship Monitor (GEM) is a large-scale international collaborative research organization that systematically and consistently measures entrepreneurship variables and its associated characteristics. This enables the rate and nature of entrepreneurship to be monitored through direct comparison between economies at the same time, as well as by tracing the evolution of entrepreneurship within the same economy over time (Bosma et al., 2020).

GEM data have been used for the last few years by different researchers in order to make some conclusions and recommendations for the economies and economy entities. Significant number of papers concern analysis of the GEM data in certain time periods. For example, in one of the papers, the transformation of Entrepreneurial Ecosystem (EE) is shown by a balanced panel approach based on the GEM dataset over 8 years (2010–2017), comprising 18 countries (Pita et al., 2021). Another study focuses on the 12 indicators of the EC defined by the Entrepreneurial Framework Conditions, related to the quality of the entrepreneurial ecosystem. Cluster analysis was used to identify the change in European experts' perceptions on the Entrepreneurial Framework Conditions of their home country between 2000 and 2019. The analysis showed that there are significant differences between the clusters obtained over the years and also that the distribution of the countries in each cluster considerably varies during time (Costa e Silva et al., 2021).

Some authors went a step further and analysed why some countries show high levels of entrepreneurship engagement than other countries, based on cross-country analysis. Based on ANOVA for Entrepreneurial Behaviour and Attitude factors, 11 significant factors were identified, and they are: Perceived Opportunities, Perceived Capabilities, Entrepreneurial intentions, Total early-stage Entrepreneurial Activity (TEA), Entrepreneurial Employee Activity, Motivational Index, Female/Male TEA, High Job Creation Expectation, Business Services Sector, High Status to Successful Entrepreneurs, and Entrepreneurship as a Good Career Choice (Kiran & Goyal, 2021).

Similar analysis, performed by Gomes and co-authors (2022), refers to a better understanding of the link between economic growth and the conditions for entrepreneurship in economies with different degrees of economic growth. Those authors tried to identify the impact of entrepreneurial framework conditions on economic growth based on the level of economic

development in two groups of countries: transition-driven economies and innovation driven economies.

Very few papers deal with the analysis of the GEM dataset in the last three years, during the crisis provoked by COVID-19 pandemic. The main objective of the research conducted in Slovenia was precisely to analyse and compare how the entrepreneurial sector responded to the first lockdown situation. The analysis was based on the data obtained from the GEM database and the results were compared with European countries. The main research question was whether the response of the entrepreneurial sector was to some extent dependent on the response of the government (Crnogaj, 2022). Beside this, there are other papers concerning the SMEs sector, but not based on GEM dataset. Belitski and co-authors (2022) concluded that COVID-19 pandemic is an unprecedented challenge for small businesses, but also that it brings new market opportunities. Other authors also came to a positive conclusion - that lockdown has accelerated both the digitization process and the work-life balance (Coduras et al., 2022).

Although it is obvious that crisis provoked by COVID-19 pandemic has different negative consequences on entrepreneurial activity, it also caused some positive effects – opportunities for the most vulnerable economy sector. Therefore, the objective of the research presented in this paper is to identify the intensity of COVID-19 pandemic on entrepreneurial business, based on the expert ratings of the entrepreneurial framework conditions for COVID-19 crisis period (2020-2022), with special focus on Total early-stage Entrepreneurial Activity (TEA).

Research methodology and hypotheses

In order to identify if and how entrepreneurial activity conditions are changed, expert ratings of the entrepreneurial framework conditions (gained from GEM database) are analysed. In that sense, the significance of the difference in expert ratings of the entrepreneurial framework conditions in two observed periods 2020/21 and 2022/21 is tested. This analysis should enable authors to identify the intensity of pandemic COVID 19 on entrepreneurial business. Relative changes in expert ratings of the entrepreneurial framework conditions in the observed periods are determined. Further, those relative changes are correlated with %TEA who claimed that *Starting a business is more difficult than a year ago*. Also, those relative changes are correlated with %TEA who claimed that are willing to *Pursue new opportunities due to pandemic*.

The second part of the analysis concerns sector distribution of new entrepreneurial activity. Entrepreneurial activity is observed in the following sectors: Business oriented services, Consumer oriented services, Extractive sector, Transforming sector. The change in the sector distribution of new entrepreneurial activity is compared to the %TEA who claimed that *Starting a business is more difficult than a year ago* and to the %TEA who are willing to *Pursue new opportunities due to pandemic*.

The standard GEM questionnaire is used for data collection by each national team. The specificity and significant advantage of GEM research is its focus on people, because the success of the entrepreneurial process is based on the activities and ambitions of individuals - entrepreneurs, in terms of starting a business, but also maintaining a job and bringing it to maturity (Hill et al., 2022). A particularly significant indicator for the purpose of this analysis and the achievement of the goal of this work is the level of TEA, or the proportion of the working-age adult population that is actively engaged in starting or running a new business. Specifically, TEA is the sum of those who are actively starting a new business (but who have not yet paid salaries, or any other payments, to founders or employees for three months or more) and those who have already started a new business (who have paid salaries or had other

payments, including payments to founders, three months or more, but less than 42 months), with a correction - reduction for those who fall into these categories (Akulava et al., 2020).

The other data set that this analysis is based on concerns Entrepreneurship Framework Conditions, presented in Table 1. These conditions indicate national environment for entrepreneurs and show whether they are supportive or constraining for entrepreneurs and those that plan to become one of them. These conditions influence how easy, or how difficult, it is to start a new business and then develop that new venture into a sustainable established business (Bosma et al., 2021).

Table 1: GEM's entrepreneurship context: Entrepreneurial Framework Conditions (EFCs)

A. ACCESS TO ENTREPRENEURIAL FINANCE. Sufficient funds are available to new startups, from informal investment and bank loans to government grants and venture capital.
B1. GOVERNMENT POLICY: SUPPORT AND RELEVANCE. Government policies promote entrepreneurship and support those starting a new business venture.
B2. GOVERNMENT POLICY: TAXES AND BUREAUCRACY. Business taxes and fees are affordable for the new enterprise. Rules and regulations are easy to manage, without undue burden on the new business.
C. GOVERNMENT ENTREPRENEURSHIP PROGRAMS. Quality support programs are available to the new entrepreneur at local, regional and national levels.
D1. ENTREPRENEURIAL EDUCATION AT SCHOOL. Schools are introducing ideas of entrepreneurship and instilling students with entrepreneurial values such as enquiry, opportunity recognition and creativity.
D2. ENTREPRENEURIAL EDUCATION POST-SCHOOL. Colleges, universities and business schools offer effective courses in entrepreneurial subjects, alongside practical training in how to start a business.
E. RESEARCH AND DEVELOPMENT TRANSFER. Research findings, including from universities and research centres, can readily be translated into commercial ventures.
F. COMMERCIAL AND PROFESSIONAL INFRASTRUCTURE. There are sufficient affordable professional services such as lawyers and accountants to support the new venture, within a framework of property rights.
G1. EASE OF ENTRY: MARKET DYNAMICS. There are free, open and growing markets where no large businesses control entry or prices.
G2. EASE OF ENTRY: MARKET BURDENS AND REGULATIONS. Regulations facilitate, rather than restrict, entry.
H. PHYSICAL INFRASTRUCTURE. Physical infrastructure (such as roads), Internet access and speed, the cost and availability of physical spaces, is adequate and accessible to entrepreneurs.
9. SOCIAL AND CULTURAL NORMS. (I) National culture encourages and celebrates entrepreneurship, including through the provision of role models and mentors, as well as social support for risk-taking.

Source: Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Guerrero, M., & Schott, T. (2021). Global entrepreneurship monitor 2020/2021 global report. *Global Entrepreneurship Research Association: London, UK*. p. 76.

The analysis is based on the available data from the last two GEM reports, 2020/2021 and 2021/2022, since those two reports include data concerning COVID-19. The data analysis is based on a sample of 37 countries. GEM for 2020/2021 contains data for 45 countries, while GEM 2021/2022 for 47. Despite the fact that the number of countries is almost identical, the structure of countries in the GEM reports differs, so only 37 countries can be analyzed for both observed periods.³

³ Brazil, Chile, Colombia, Croatia, Cyprus, Egypt, Germany, Greece, Guatemala, India, Iran, Israel, Italy, Japan, Kazakhstan, Latvia, Luxembourg, Mexico, Morocco, Netherlands, Norway, Oman, Panama, Poland, Qatar, Russia, Saudi Arabia, Slovak Republic, Slovenia, South Korea, Spain, Sweden, Switzerland, United Arab Emirates, United Kingdom, Uruguay, USA.

The subject of analysis are the following variables:

- Entrepreneurial Framework Conditions dimensions (11 dimensions, since in the database there is no value for the first dimension A. *Access to entrepreneurial finance*),
- %TEA who claimed that Starting a business is more difficult than a year ago,
- % TEA who Pursue new opportunities due to pandemic,
- Participation of Business services, Consumer services, Extracting sector and Transforming sector in 2020 and 2021.

In accordance with the set goal of the research, the following hypotheses will be tested in the paper:

1. There is a significant difference in expert ratings of the entrepreneurial framework conditions in 2022/21 compared to 2020/21,
2. Relative changes in expert ratings are correlated with %TEA who claimed that *Starting a business is more difficult than a year ago* and with %TEA who *Pursue new opportunities due to pandemic*,
3. The pandemic caused significant changes in the sector structure when it comes to the participation of Business services, Consumer services, Extracting sector and Transforming sector in 2020 and 2021.

The following methods will be applied in order to examine the claims: paired samples t-test, dynamic analysis, correlation analysis.

Results and discussion

In order to test the validity of the first hypothesis, the significance of the difference in the average values of expert ratings of the entrepreneurial framework conditions in two observed periods (2022/21 and 2020/21) was tested. For this purpose, a paired samples t-test was applied to a sample of 37 countries. After checking that the assumptions were met, the previously mentioned test was applied. The results are shown in Table 2.

Table 2: Paired samples t-test results

	Mean	Std. Deviation	Std. Error Mean	t-value	P-value
B12021 - B12020	-.26324	.63673	.10468	-2.515	.017
B22021 - B22020	.44135	.66196	.10883	4.056	.000
C2021 - C2020	-.01784	.56544	.09296	-.192	.849
D12021 - D12020	-.66703	.59221	.09736	-6.851	.000
D22021 - D22020	-.23784	.52577	.08644	-2.752	.009
E2021 - E2020	-.29838	.70681	.11620	-2.568	.015
F2021 - F2020	.32865	.49144	.08079	4.068	.000
G12021 - G12020	-.01081	.59987	.09862	-.110	.913
G22021 - G22020	-.12730	.62297	.10242	-1.243	.222
H2021 - H2020	.44865	.57525	.09457	4.744	.000
I2021 - I2020	-.01811	.66541	.10939	-.166	.869

Source: Authors' calculation based on GEM dataset

For most dimensions, the average values of the conditions are lower in 2021 compared to 2020, except for *Government policy: taxes and bureaucracy*, *Commercial and professional infrastructure* and *Physical infrastructure*. The largest decrease in grades refers to the dimension *Entrepreneurial Education at School* (-0.667), while the smallest one is related to *Ease of Entry: Market Dynamics* (-0.0108).

The average grades of the majority of dimensions (6 out of 11) are statistically significantly lower (p-value <0.05), while in the case of *Physical infrastructure*, the increase in average grades is statistically significant. The dimensions in which the ratings in 2021 did not significantly decrease compared to 2020 are: *Government Entrepreneurial Programs*, *Ease of Entry: Market Dynamics*, *Ease of Entry: Burdens and Regulation* and *Social and Cultural Norms* (Table 3).

Table 3: Rates of change of expert ratings in percentage points

	Minimum	Maximum	Mean	Std. Deviation
B1change	-44.63	13.59	-6.5380	14.37001
B2change	-24.03	53.85	10.2811	15.98857
Cchange	-32.88	20.73	-.8422	12.27582
D1change	-69.87	13.03	-19.2846	17.70492
D2change	-29.78	16.30	-5.1898	10.99580
Echange	-43.06	29.18	-7.5629	16.49978
Fchange	-16.94	21.52	6.3700	9.38335
G1change	-28.97	23.93	-.8437	12.60021
G2change	-37.91	37.50	-2.7086	13.72576
Hchange	-15.60	22.04	7.1431	9.34172
Ichange	-30.00	22.17	-.9417	13.21248

Source: Authors' calculation based on GEM dataset

Unlike the previous analysis, the analysis of the following claims is based on a sample of 35 countries (Mexico and South Korea did not participate in the 2021 Adult Population Survey). The variables that are the subject of analysis are %TEA who claimed that *Starting a business is more difficult than a year ago*, on one hand %TEA who *Pursue new opportunities due to pandemic*. Descriptive statistics of the given variables are shown in the following table (Table 4).

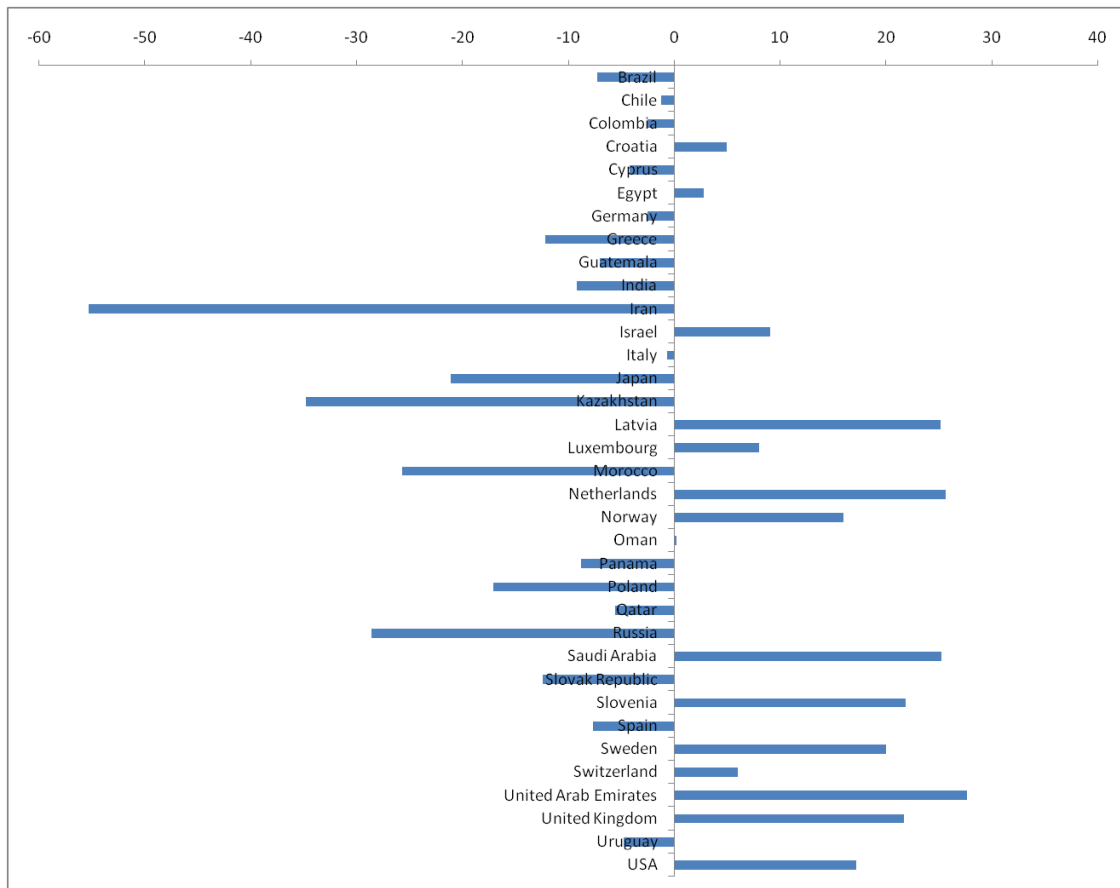
Table 4: Descriptive statistics

	Minimum	Maximum	Mean	Std. Deviation
<i>Starting a business is more difficult than a year ago</i>	9.80	89.30	44.4457	17.84702
<i>Pursue new opportunities due to pandemic</i>	21.00	77.60	43.3914	12.46417

Source: Authors' calculation based on GEM dataset

Although the average %TEA does not differ significantly ($t=0.332$, $p=0.742$), the range in %TEA is significantly greater for variable *Starting a business is more difficult than a year ago* (9.8% in Latvia, and 89.30% in Iran). For variable *Pursue new opportunities due to pandemic*, the lowest percentage (21%) is in Russia and the highest (77.6%) in India. The difference between %TEA that *Pursue new opportunities due to pandemic* and %TEA who claim that *Starting a business is more difficult than a year ago* is shown in Figure 1.

Figure 1: The difference between %TEA concerning new opportunities and difficulties



Source: Authors based on GEM dataset

Only in 14 out of 35 countries a difference in %TEA was recorded in favour of option *Pursue new opportunities due to pandemic*. It is the highest in the United Arab Emirates (27.7%), while the lowest is in Oman (0.70). Unfortunately, in the most of the countries, the %TEA for *Starting a business is more difficult than a year ago* compared to *Pursue new opportunities due to pandemic* is higher. The smallest difference is in Italy (-0.70), and the largest in Kazakhstan (-55.3%). This analysis shows that, even though, new opportunities during crisis existed, prevailing attitude is that crisis made it more difficult to start business compared to the previous year.

Table 5: Correlation coefficients

		<i>Starting a business is more difficult than a year ago</i>	<i>Pursue new opportunities due to pandemic</i>
B1change	Pearson Correlation	.243	-.047
	Sig. (2-tailed)	.159	.789
B2change	Pearson Correlation	-.354*	-.188
	Sig. (2-tailed)	.037	.280
Cchange	Pearson Correlation	.099	.033
	Sig. (2-tailed)	.572	.851
D1change	Pearson Correlation	.169	-.260
	Sig. (2-tailed)	.332	.131
D2change	Pearson Correlation	.192	-.133
	Sig. (2-tailed)	.269	.445
Echange	Pearson Correlation	.050	-.163
	Sig. (2-tailed)	.776	.349
Fchange	Pearson Correlation	-.200	-.012
	Sig. (2-tailed)	.249	.944
G1change	Pearson Correlation	-.169	-.112
	Sig. (2-tailed)	.333	.520
G2change	Pearson Correlation	-.026	-.048
	Sig. (2-tailed)	.881	.783
Hchange	Pearson Correlation	-.327	-.022
	Sig. (2-tailed)	.055	.902
Ichange	Pearson Correlation	.152	.032
	Sig. (2-tailed)	.383	.853

*Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' calculation based on GEM dataset

Relative changes in experts' ratings, according to the results from Table 5, in 7 out of 11 dimensions are positively correlated with %TEA which claims that *Starting a business is more difficult than a year ago*, which means that the increase in the change in experts' ratings (in the majority dimensions the change means decreasing grade) is followed by increasing %TEA. On the other hand, the difference (change) of experts' ratings for 9 out of 11 dimensions is inversely correlated with %TEA that *Pursue new opportunities due to pandemic*, which means that an increase in %TEA is followed by a decrease in the difference in experts' ratings in 2021 compared to 2020. The only dimensions where the connection is direct are Government Entrepreneurial Programs and Social and Cultural Norms. The analysis of the data from Table 5 indicates that the second hypothesis was only partly confirmed. Essentially, this means that the views of the experts and the claims of the performers of Total early-stage Entrepreneurial Activities do not match, as it was expected.

Apart from the consequences on entrepreneurial activity as a whole, the pandemic also had an impact on the sector structure of the economy of individual countries. In order to determine the impact on the sector structure when it comes to entrepreneurial activity, the change in the sector structure in the observed period was analyzed (Table 6).

Table 6: Minimum, maximum and mean sectors' share in total sector structure

Sectors	Minimum	Maximum	Mean
Business services 2020	3.50	43.60	22.6765
Consumer servise2020	34.30	82.20	50.2471
Extractive sector 2020	.30	41.00	5.8029
Transforming sector 2020	8.40	39.30	22.3647
Business services 2021	1.70	43.80	21.9057
Consumer services 2021	35.70	86.90	50.3057
Extractive sector 2021	.40	12.40	4.8600
Transforming sector 2021	5.60	39.20	22.4143

Source: Authors' calculation based on GEM dataset

The following analysis included testing of the significance of the difference in the average participation of the economy sectors in the two observed periods. The results of the paired samples t-test show that there is no significant difference in the sector structure (average participation of each sector) between 2020 and 2021. However, it is obvious that the average share of the first three sectors decreased, while the share of the Transforming sector increased (Table 7).

Table 7: Testing the significance of the difference in average sector participation

	Mean	Std. Deviation	t	df	Sig. (2-tailed)
BS2021 - BS2020	-.86761	8.59970	-.085	33	.933
CS2021 - CS2020	-.11765	7.43185	-.092	33	.927
ES2021 - ES2020	-.88235	7.72942	-.666	33	.510
TS2021 - TS2020	.54412	5.33168	.595	33	.556

Source: Authors' calculation based on GEM dataset

Changes in the sector structure are subject to analysis, too. In this case, the Transforming sector stands out from the others, too. Precisely, the smallest oscillations in participation refer to the Transforming sector, while the largest refer to the Extractive sector (Table 8).

Table 8: Changes in sector structure

	N	Minimum	Maximum	Mean	Std. Deviation
BSchange	34	-24.30	13.50	-.8676	7.49617
CSchange	34	-19.20	17.80	-.1176	7.43185
ESchange	34	-38.60	8.20	-.8824	7.72942
TSchange	34	-11.70	10.60	.5441	5.33168

Source: Authors' calculation based on GEM dataset

Finally, the subject of the analysis is the relationship between the changes in the sector structure and %TEA, which were the subject of the previously presented analysis. The results of correlation analysis are shown in Table 9.

Table 9: Correlation analysis results

		<i>Starting a business is more difficult than a year ago</i>	<i>Pursue new opportunities due to pandemic</i>
Business services	Pearson Correlation	-.115	-.023
	Sig. (2-tailed)	.511	.896
Consumer services	Pearson Correlation	.039	-.228
	Sig. (2-tailed)	.825	.187
Extractive sector	Pearson Correlation	-.118	-.118
	Sig. (2-tailed)	.500	.500
Transforming sector	Pearson Correlation	.204	.044
	Sig. (2-tailed)	.239	.802

Source: Authors' calculation based on GEM dataset

Changes in participation of the Business and Extractive sector in the analyzed sample are inversely correlated with %TEA for whom *Starting a business is more difficult than a year ago*, while changes in the participation of Consumer services and the Transforming sector are directly correlated with the observed percentage of TEA. On the other hand, %TEA that *Pursue new opportunities due to pandemic* is inversely correlated with the changes in participation of the first three sectors, while it is in direct correlation with the change in participation of Transforming sector. As this sector is the only one with an increase in average participation, it can be concluded that in the conditions of the pandemic, new opportunities have been recognized in this sector to the detriment of other three sectors.

Conclusion

Since business activities in the last two and half years have been hampered by various restrictions caused by COVID-19 pandemic, authors were specifically interested what happened with the ones that are generally observed as most vulnerable business entities – entrepreneurs. From this proceeded the objective of the research - to identify the intensity of COVID-19 pandemic on entrepreneurial business, based on the expert ratings of the entrepreneurial framework conditions COVID-19 crisis period (2020-2022), with special focus on TEA.

Based on the available dataset and performed analysis it may be concluded that COVID-19 has provoked negative consequences on entrepreneurs' business activities. Precisely, in 2021, there was a significant change in average expert ratings for the most dimensions of the Entrepreneurial Framework Conditions. This confirms the first hypothesis claiming that there is a significant difference in expert ratings of the entrepreneurial framework conditions in 2022/21 compared to 2020/21.

General conclusion is that there is a slightly higher participation of %TEA who claim that *Starting a business is more difficult than a year ago* than %TEA for *Pursue new opportunities due to pandemic*. The change in expert ratings is not significantly related to %TEA who claim that *Starting a business is more difficult than a year ago* neither to %TEA who *Pursue new*

opportunities due to pandemic, except when it comes to Government Policy: Taxes and Bureaucracy. This partially confirms second hypothesis claiming that relative changes in expert ratings are correlated with %TEA who claimed that *Starting a business is more difficult than a year ago* and with %TEA who *Pursue new opportunities due to pandemic*. Furthermore, this may be explained as a consequence of mismatch of the views of the experts and the claims of the performers of TEA.

In the conditions of the pandemic, there were some changes in the sector structure. The average share of Business services, Consumer services, and Extracting sector decreased in the analyzed countries, but not statistically significantly, while the average share of Transforming sector increased. This also partially confirms third hypothesis claiming that the pandemic caused significant changes in the sector structure when it comes to the participation of Business services, Consumer services, Extracting sector and Transforming sector in 2020 and 2021.

Bearing in mind previously mentioned possibility that the views of the experts and the claims of the performers of TEA do not match, the most important limitation of this analysis is the subjective nature of the responses of the national experts. This limitation has already been noticed by other authors in similar analysis (Rietveld & Patel, 2022), since they also pointed the subjective nature of the responses of the national experts as one of the main limitations of the research.

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What Hampers SMEs in the Western Balkan to Shift toward a Circular Business Model?

Brunilda Kosta¹

Abstract

Circular economy is at the spotlight of the European Union institutions. This new economic model has just lately gained attention in the Western Balkan countries (WB) where governments, businesses, academics, and practitioners are increasingly incorporating it into their respective agendas. Businesses play a pivotal role in successfully implementing principles of the circularity. Hence, this paper aims to build a landscape of the circular economy in the WB by investigating the implementation of circularity principles and uncover the barriers that hamper the transition from a linear to a circular business model, with a focus on SMEs. To do so, data is reported from a survey conducted in the Western Balkan countries with a sample size of 1181 SMEs. This survey was funded by the Regional Cooperation Council, during mid-February to mid-March 2022. Analysis revealed that “cost of implementing circular economy principles” was the most important barrier, followed by “lack of skills and experience” and the “lack of regulatory framework”. To overcome these barriers, a series of interventions are suggested for decision makers for circular economy adoption.

Key words: circular economy, circular business model, barriers.

1. Introduction

The circular economy (CE) is gaining interest from a rising number of academics and practitioners. Since the industrial revolution, businesses have embraced the linear economic model, which is based on the "take, make, and dispose" consumption pattern, in which final goods are created from raw materials, purchased, utilized, and eventually landfilled (Murray, 2017). This conventional approach is no longer viable for the planet due to the resource consumption and waste disposal linked to the real demand for products, which results in an imbalance between the supply of resources and the demand for goods (Marino and Pariso, 2020). Said that, firms need to shift from their linear business model to a circular business model. The adoption of the circular economy practices on a firm level, requires enormous commitment to transform the existing traditional linear model of take-make-dispose (Singh et al., 2020). Such transformation is accompanied with a lot of challenges which need robust strategies to be addressed (D'Amato et al., 2017). More particularly, small and medium-sized enterprises (SMEs) have persistent resource restrictions in terms of finances, human resources, and infrastructure, which makes the transition from a linear to a circular business model, more difficult. Sometimes these SMEs aren't even aware of the necessity to implement circular economy practices (Gandhi et al., 2018; Mishra, 2016). Both academically and practically, the adoption of circular economy practices in SMEs in developing countries is clearly still in its early stages (Rizos et al., 2016; Singh et al., 2018).

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The Western Balkan has been increasingly devoted as a geographic area for studies of the circular economy. However, most of the so far research work has been whether sectorial focused or circular economy was covered insufficiently. For example, Nadazdi et al., (2022) aimed at designing a framework for adoption of circularity in the construction sector while Pavlaković et al., (2022) described the situation with the renewable energy transition in the WB region with special focus on construction and exploitation of small hydropower plants. Besides sectorial analysis, some studies shed lights on the national situation of WB countries. For example, the impact of the aspects of the CE system on socio-economic sustainability in the context of Serbia has been researched by Popović, and Milijić (2021). Another article outlines the status quo of the circular economy in Serbia (Mihajlov et al., 2021). In addition, Bucea-Manea-Țoniș et al., (2021) take Serbia and Romania as cases to show how an EU and a non-EU country adopts the principles of the circular economy. Another research conducted by Rajić et al., (2022) deals with the application of the circular economy in industry in the context of Serbia. North Macedonia has also been researched in certain research studies (Janevski and Tasheva, 2019; Boshkov and Dzidrov, 2021). While in Bosnia and Herzegovina, some specific practices of the circular economy have been tackled by Figurek and Nurković (2021). The same for Kosovo* with a focus on the waste management and the path to the circular economy (Lulaj, 2020). Finally, there are some articles developed for Albania which deal mostly with a description of the situation with some specific cases which apply circular economy principles (Kosta and Memaj, 2019), the effective management of organic waste policy (Oncioiu et al., 2020) and factors that impact customers to buy green products (Gura et al., 2021).

This paper aims to investigate the status quo of CE practices among the Western Balkan (WB) countries' SMEs and identify the main barriers which prevent them to shift from a linear to a circular business model. To the best of my knowledge, there is not any prior research which investigates the barriers that prevent SMEs in the WB to shift their current business model from the traditional model of take-make-dispose (linear model) to the circular business model. Given the significance of circular economy practices in organizational operations, it is critical to first pinpoint the obstacles preventing SMEs from putting those principles into reality (García - Quevedo et al., 2020) and then define the strategies of doing that. This article has the following contributions. It identifies the main barriers the SMEs operating in WBs perceive as hampering factors that inhibit their current business model to transit toward a circular business model. These barriers serve as basis for policy makers and businesses to design effective policies to overcome them. In general, this article paves the way of other studies to come in underrepresented developing economies such are economies of WB where the circular economy is in its inception phase.

The rest of the article is structured as follows. Section 2 presents the literature review. Section 3 describes the methodology for developing this research. Section 4 describes the results of the study. Conclusions, limitations and proposals for future research are provided in Section 5.

2. Literature review

Pearce and Turner (1990) were the first to introduce the phrase "Circular Economy." They advocated for a circular movement of resources and value that would be regenerative for the ecosystem. According to Prieto-Sandoval et al., (2018), the circular economy has four distinct components. First, the circular economy refers to the recirculation of materials and energy, the decrease of resource consumption, and the attempt to extract as much value as possible from

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waste. Second, circular economy is a multi-level strategy that may be used at the micro (companies and consumers), meso (industrial districts and manufacturing networks), and macro (societies, countries) levels. Third, circular economy is seen as a way to achieve sustainable development. Fourth, the circular economy is closely related to how society innovates. Other authors explain the circular economy by using the "R" frameworks: the 3Rs meaning "Reuse, Repair, Recycle" (Ghisellini et al., 2016; King et al., 2006), the 4Rs meaning "Reuse, Repair, Recycle, Refurbish" (EU, 2008), the 6Rs meaning "Reuse, Repair, Recycle, Refurbish, Rethink, Remanufacture" (Sihvonen and Ritola., 2015), or even the 9Rs meaning "Reuse, Repair, Recycle, Refurbish, Rethink, Remanufacture, Repurpose, Recover, Reduce" (Van Buren, 2016). These frameworks are the most widely used when discussing the CE (Ekins et al., 2019).

Generally, there is a tendency to focus on large businesses when analyzing the implementation of circular economy practices (Salvioni et al., 2021). The underrepresentation of SMEs in studies of this nature, calls researchers to orient their interest into SMEs which makes up the majority of enterprises globally and play a significant role in employment creation and the expansion of the global economy. SMEs frequently exhibit undercapitalization, a lack of highly skilled staff, and minimal investment in research and technical innovation (Rubio-Mozos et al., 2019). Comparatively to bigger businesses, SMEs typically have fewer financial, human, and temporal resources and are less likely to implement transformational changes. In addition, they frequently have a poor understanding of how their actions will affect stakeholders (Negri et al., 2021). Despite these limits, SMEs have some advantages that make them the best candidates to lead the transition to a CE (Bajdor et al., 2021), including flexibility, creativity, and fast decision-making. In fact, if the implementation of circular economy practices relies only to large firms, the path to a more sustainable production system won't attain its goals.

SMEs in the Western Balkan make approximately 99 percent of all businesses, provide around 65 percent of all value added in the business sector, and employ 73 percent of all labor force (OECD/ETF/EU/EBRD, 2019). As a result, they make a significant contribution to the CE's goal of facilitating an effective shift to a production system that is environmentally sustainable. The large number of SMEs in the WB6 encourages scholar to take them into account in studying circular economy. However, the available research so far takes mostly a sectorial approach or describes the status quo of circular development in a specific context of WB (Popović and Milijić, 2021; Mihajlov et al., 2021; Bucea-Manea-Țoniș et al., 2021; Rajić et al., 2022; Janevski and Tasheva, 2019; Boshkov and Dzidrov, 2021; Figurek and Nurković, 2021); Lulaj, 2020; Kosta and Memaj, 2019; Oncioiu et al., 2020; Gura et al., 2021). Besides that, benefits of circular economy are widely echoed while forgetting all the barriers these SMEs face along their efforts to transit to circular business models (Salvioni et al, 2021).

Empirical and conceptual research determine possible barriers that may inhibit SMEs from implementing circular economy business models. Most of them falls under one of the following categories: company environmental culture, lack of financial resources, lack of government support/effective legislation, lack of information and knowledge, lack of technical and technological know-how, and lack of support from the supply and demand network. Below are further details on these categories.

Company culture barriers implies the philosophy, culture and attitudes of the company towards the application of circular economy business practices (Kirchherr et al., 2018). For example, it is a common practice in many MSMEs the manager to be the company owner as well who have an influential in many SMEs, the manager is also the company owner and has a substantial influence over its strategic choices. In this regard, some SME managers could see the circular economy favorably while others would not (Fernández-Viñé et al., 2010). In addition, prior to

implementing circular economy practices, decision-makers must determine the specific value propositions; evaluate the costs of circular measures while taking into consideration the risks of change in the existing business climate. In MSMEs, resistance to change can be a significant obstacle since it keeps business models stuck in their traditional configuration (Kok et al., 2013).

Lack of financial resources has been consistently recognized in the literature as one of the most significant impediments to SMEs adopting circular economy (Rizos et al., 2016; Agyemang et al., 2019; García-Quevedo et al., 2020). Transitioning from a linear to a circular production/business model necessitates activities such as distribution planning, inventory management, production planning, and management of a reverse logistics network (Kok et al., 2013), all of which require significant time and investment. The amount of upfront expenses, indirect expenditures, and estimated payback period are especially relevant for SMEs, since they are often more sensitive to any additional costs coming from circular economy (Hollins, 2011).

It is commonly acknowledged that a major obstacle to the adoption of circular economy practices is the lack of effective government support and legislation (via the provision of financial opportunities, training, appropriate taxation policy, rules and regulations, etc.) (Ranta, 2018; Farooque et al., 2019; Geng and Doberstein, 2008; Mathews and Tan, 2011; Benton et al., 2015; Singh et al., 2020). New prospects for circular business models are rarely included into innovation programs since their primary goals are incremental innovation and efficiency (Kok et al., 2013). Finally, it has been stated that not all environmental restrictions are being strictly enforced in some nations, which discourages businesses from looking for potential customers for their wastes.

Lack of information and knowledge about the benefits of circular economy has been widely acknowledged as another barrier of shifting from a linear to a circular business model (Agyemang et al., 2019). For example, a survey conducted with 462 citizens in Kosovo* , revealed that 60% of them had no knowledge about circular economy (Hapçiu, 2020). In the context of Albania, Kosta and Memaj (2019) found a lack of knowledge from businesses about the practices of circular economy. Serbia takes the lead in terms of the knowledge and awareness regarding the benefits of circular economy. Chambers of commerce and business associations have been increasingly undertaken efforts to increase awareness among their membership (Pavlović et al., 2020).

Technological barriers are another factor that may prevent SMEs from transitioning from a linear to a circular business model (Agyemang et al., 2019; Benton et al., 2015; Yap, 2005; García-Quevedo et al., 2020). Current corporate practices are heavily reliant on linear technologies (Kok et al., 2013). New sustainable production and consumption technologies would need to be integrated into existing linear business models, and skilled people would need to be able to manage them, in order to transform linear business model to circular. Additionally, the lack of advanced resource efficiency technologies (Zhu and Geng, 2013), and the insufficient investment in technologies focusing on circular product designs are factors might inhibit MSMEs to implement practices of the circular economy.

Finally, the absence of support from the supply and demand network are factors that hamper MSMEs to implement circular economy practices. The successful implementation of a circular economy demands the involvement of all supply chain partners (Rizos et al., 2016; Kirchherr et al., 2018; Mangla et al., 2018; Mahpour, 2018; Farooque et al., 2019; Benton et al., 2015;

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Pomponi and Moncaster, 2017; Kahrman and Tandir, 2021). All stakeholders involved in the supply chain must work together for the circular economy to be implemented successfully (Hart et al, 2019; Van Buren et al., 2016). However, because of perceived dangers to their competitive advantage or due to a culture that does not prioritize circular economy initiatives, suppliers and service partners may be hesitant to participate in new circular economy processes (Luthra et al., 2018). On the other hand, a lack of consumer awareness about the advantages of green products discourages consumers from altering their consumption habits, and smaller businesses are frequently not subject to significant demand-side pressure to adhere to sustainability standards or create business models for the circular economy (Wooi and Zailani, 2010). A change in consumer lifestyle and behavior is necessary for the transition to a circular economy. However, some people can view circular economy strategies as more expensive, difficult to execute alternatives with no apparent advantages, or they might be hesitant to adjust their conceptions of ownership and consumption (Edbring et al., 2016).

3. Methodology

This research reports data from the Business Opinion Survey conducted in the WB countries utilizing CAPI (Computer-Assisted Personal Interviewing) data collection method. The survey was funded by the Regional Cooperation Council (RCC). The interviews were developed face-to-face by a pool of trained interviewers from during mid-February to mid-March 2022 in Albania, Bosnia and Herzegovina, Kosovo* , North Macedonia, Montenegro and Serbia. The questionnaire was initially developed in English before being translated into the national languages. All questions were translated to digital form and put on interviewers' laptops or tablets. In each economy, a responsible person or national team leader assessed the pre-programmed questionnaires. Experienced interviewers performed the study across all six economies. Written instructions comprising a broad overview of the questionnaire, a strategy for choosing a firm, and a process for choosing respondents were provided to each interviewer. A total of 1881 SMEs responded to the survey instrument for the entire Western Balkans region. Companies in majority state ownership were excluded from the sample. A random selection methodology was followed to pick up the company. The sample size was designed based on the official data provided by national statistical offices of six economies were used as data source. Interviewers approached directly companies' managing boards/teams to fill out the survey.

4. Results

The section of this article presents the main results of the business survey. It first describes the sample characteristic and then follow with a description of the results, disaggregated by size and sector of the business.

4.1 Sample characteristics

The database contained firms of all sizes (micro, small, medium and large). Considering the purpose of this paper, the large companies were excluded from the dataset which counted for 19 large companies. Considering the regional distribution of these large companies and the low number of this size (4 in Albania, 2 in BiH, 2 in Kosovo*, 1 in North Macedonia, 2 in

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Montenegro and 8 in Serbia), the exclusion of 19 companies does not “eradicate” the quality of the database.

Hence, the final sample size is 1,181 firms operating in the WB. The regional distribution is displayed in Table 1.

Table 1: Regional sample distribution

Economy	Sample size
Albania	196
Bosnia and Herzegovina	198
Kosovo*	198
North Macedonia	199
Montenegro	198
Serbia	192
Total	1181

To define if the company exports to the EU or other countries, we recoded the following questions *G55_3 Percentage of company’s sales: Exported to the EU* and “*G55_4 Percentage of company’s sales: Exported to third world countries*” into a single one. Answers of these questions were coded with a binary variable, namely with 1 if the company has exported during the last 12 months at least 5% of their sales into the EU and/or in other countries and zero if otherwise. The same process is conducted for defining the export of goods and services into the WB.

Results show that 18.3% of businesses export in WB6 and 13.5% export in the EU and/or in other third countries. Considering that firms which export, do have access into other markets and get new knowledge on operations and product development innovation, it is expected that firms which export are more inclined to consider circularity principles implementation into their business model. For example, Alonso-Almeida et al., (2020) empirically found that firms which produce circular products are more inclined to increase their exports.

Table 2: Export orientation in the WB6, EU and other third countries

Country	Export in EU and other countries (except for WB6)		Export in WB6	
	Yes	No	Yes	No
Albania	16,3%	83,7%	18,9%	81,1%
Bosnia and Herzegovina	27,8%	72,2%	26,3%	73,7%
Kosovo *	8,1%	91,9%	8,6%	91,4%
North Macedonia	6,0%	94,0%	10,1%	89,9%
Montenegro	10,1%	89,9%	23,7%	76,3%
Serbia	13,0%	87,0%	22,4%	77,6%

The sample consisted of 57.7% microbusinesses with less than 10 employees, 29.5 percent small businesses with 10–49 employees, and 12.9 percent medium businesses with 50–249 employees. The sample is predominated by micro businesses and this is not a novel aspect in the literature of circular economy. In a study conducted by Mura et al., (2020) which

empirically investigates the barriers of adopting circular economy practices in Italy, micro businesses represented almost 80 percent of the sample. In another empirical research which investigates the barriers and enablers of the circular economy in Romania, 89.32% of the sample size was represented by micro businesses (Oncioiu et al., 2018).

Table 3: Firm size

Firm size	No. of employees	Count	%
Micro	Between 4 and 9 employees	681	57,7%
Small	Between 10 and 49 employees	348	29,5%
Medium	Between 50 and 249 employees	152	12,9%
Total		1181	100%

In terms of the economic sectors, 215 firms operate in the manufacturing, 141 in construction and the remaining (822) in services.

Table 4: Business sector

Sector	Frequency	Valid Percent
Manufacturing	215	18,3%
Construction	141	12,0%
Services	822	69,8%
Total	1178	100,0

According to the survey results, the majority of firms (65.5%) are established after year 2000, meaning they are relatively new firms of less than 20 years old. 20.2% are established between 1991-2000 while a very few of them (5.4%) are established before 1990.

Table 5: Firm age

Year of establishment	Frequency	Percent
From 2001 to 2021	774	65,5%
From 1991 to 2000	239	20,2%
From 1981 to 1990	46	3,9%
From 1971 to 1980	6	,5%
From 1961 to 1970	7	,6%
From 1951 to 1960	5	,4%
I don't know/Refuse to answer	104	8,8%
Total	1181	100,0

4.2 Implementation of CE Practices

Businesses were asked if they had taken any measures to apply the circular economy's practices. The exact question was, "*B12 Has your business taken any steps to reduce the environmental impact it makes, such as reducing energy consumption, waste reduction or switching to recycled/sustainable materials?*" 58 percent of firms acknowledged that they have

taken actions to apply the circular economy principles (12 percent have undertaken a lot of steps while 46 percent have undertaken little steps). Thus, on a general scale, six out of ten enterprises have taken some steps to implement circular economy principles.

Table 6: Actions to implement CE practices

Responses	Frequency	Percent
Yes - a lot	142	12,0%
Yes - a little	543	46,0%
No	464	39,3%
DK/refuse	32	2,7%
Total	1181	100 %

The results show that a larger proportion of manufacturing firms have undertaken steps to implementing CE practices (17.7%), followed by the construction sector (13.5%) and services (10.3%). The results confirm that micro-business are less prepared in implementing CE practices compared with small and medium businesses.

Table 7: Characteristics of firms that have undertaken steps to implement CE practices

Alternatives	Total		Sector						Firm size					
			Manufacturing		Construction		Services		Micro		Small		Medium	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes - a lot	142	12,0%	38	17,7%	19	13,5%	85	10,3%	72	10,6%	46	13,2%	24	15,8%
Yes - a little	543	46,0%	99	46,0%	62	44,0%	382	46,5%	319	46,8%	157	45,1%	67	44,1%
No	464	39,3%	72	33,5%	56	39,7%	334	40,6%	269	39,5%	137	39,4%	58	38,2%
DK/refuse	32	2,7%	6	2,8%	4	2,8%	21	2,6%	21	3,1%	8	2,3%	3	2,0%

A country disaggregation is carried out as follows to observe country variances in terms of enterprises' actions to implement circular economy practices. According to the data, Montenegro leads with 18.2 percent of enterprises using circular economy actions, while Kosovo* holds the worst spot with 6.6 percent. Despite these differences, it's crucial to remember that a sizable fraction of businesses in the WB6 have started using CE practices. However, the range of practices remains at very low levels.

Table 8: Actions to implement CE practices in the WB countries

	Albania		Bosnia and Herzegovina		Kosovo *		North Macedonia		Montenegro		Serbia	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes - a lot	22	11,2%	24	12,1%	13	6,6%	29	14,6%	36	18,2%	18	9,4%
Yes - a little	81	41,3%	70	35,4%	96	48,5%	83	41,7%	115	58,1%	98	51,0%
No	88	44,9%	99	50,0%	76	38,4%	84	42,2%	43	21,7%	74	38,5%
DK/refuse	5	2,6%	5	2,5%	13	6,6%	3	1,5%	4	2,0%	2	1,0%

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Firms were asked if their current business model allows for a transition from the traditional linear model to the circular business model. Overall, 14% of businesses confirm that their current business model allows for a shift to a circular business model. Only 22.2% of current businesses model cannot transit toward circular business model. There is more than 30% of businesses (32.2%) which are not sure if such a shift could be made. This implies for a low knowledge of technical process of transformation of production processes, supply chain network cooperation and all other aspects of CE.

In terms of country variations, 27.6% of Albanian firms admit that their current business model allows to shift from linear to a circular business model and this represents the highest capacity in the WB6. The second largest capacity is admitted by Montenegro with 15.7%, followed by Bosnia and Herzegovina (14.6%), Kosovo* (13.6%), North Macedonia (7.5%) and Serbia (5.7%). However, these results should be treated carefully as a higher percentage of firms are not sure if such a transition could be made (look at Table 9).

Table 9: Does your current business model allow for a shift towards a circular (economy) model?

	Total		Albania		Bosnia and Herzegovina		Kosovo*		North Macedonia		Montenegro		Serbia	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes	167	14.1%	54	27,6%	29	14,6%	27	13,6%	15	7,5%	31	15,7%	11	5,7%
No	262	22.2%	46	23,5%	35	17,7%	38	19,2%	61	30,7%	39	19,7%	43	22,4%
Not sure	380	32.2%	59	30,1%	82	41,4%	64	32,3%	53	26,6%	59	29,8%	63	32,8%
Not considering this	214	18.1%	4	2,0%	19	9,6%	62	31,3%	51	25,6%	26	13,1%	52	27,1%
It is difficult but could be achieved with proper incentives	156	13.2%	33	16,8%	33	16,7%	5	2,5%	19	9,5%	43	21,7%	23	12,0%
Don't Know	2	.2%	0	0,0%	0	0,0%	2	1,0%	0	0,0%	0	0,0%	0	0,0%

The transition from a linear to a circular business model is simpler as a company gets bigger. According to the following data, 21.7% of medium-sized businesses acknowledge that their current business model allows for a shift from linear to a circular business model. In terms of the sector, a higher proportion of manufacturing firms (18.1%) confirm that their business model allows to be shifted into circular business model. This is less possible for firms operating in services and constructions sector.

Table 10: Does your current business model allow for a shift towards a circular (economy) model?

	Size						Sector					
	Between 4 and 9 employees		Between 10 and 49 employees		Between 50 and 249 employees		Manufacturing		Construction		Services	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	83	12,2%	51	14,7%	33	21,7%	39	18,1%	11	7,8%	117	14,2%
No	167	24,5%	73	21,0%	22	14,5%	35	16,3%	32	22,7%	195	23,7%
Not sure	233	34,2%	99	28,4%	48	31,6%	63	29,3%	51	36,2%	266	32,4%
Not considering this	116	17,0%	71	20,4%	27	17,8%	44	20,5%	30	21,3%	138	16,8%
It is difficult but could be achieved with proper incentives	81	11,9%	54	15,5%	21	13,8%	34	15,8%	17	12,1%	105	12,8%
Don't Know	1	,1%	0	0,0%	1	,7%	0	0,0%	0	0,0%	1	,1%

4.3 Barriers of implementing circular economy practices

Firms were asked to select the factors that prevent them to shift toward a circular business model in the WB6. Only 167 companies, or those whose present business models allow for a shift to a circular business model, were required to respond to this question. "Added costs" were mentioned by 46.7 percent of businesses as the main barrier preventing them from transitioning to a circular business model. This result is consistent with those of Rizos et al., (2016), Agyemang et al., (2019) and García-Quevedo et al., (2020) which put the financial factor at top barriers. Businesses operating in Serbia and North Macedonia are considerably more likely to view "added costs" as a barrier to moving from a linear to a circular business model. This financial barrier seems to affect slightly more medium businesses compared with small and micro ones and this is not consistent with findings of other research which uncovered that smaller businesses are slightly more affected by this factor (Mura et al., 2020). In addition, firms which export are less likely to consider the financial barrier as a preventing factor. Firms operating in manufacturing and constructions sector are more likely to consider the financial aspect as a preventing factor to shift to a circular business model. These findings are in line with the findings of the previously reported research (Mura et al., 2020; Oncioiu et al., 2018)

The second most important factor which prevents businesses to shift to a circular business model is the "lack of skills and experience" (15%). Businesses operating in Kosovo* are more likely to be affected by this factor compared to other countries. In addition, "lack of skills and experience" mostly affects micro businesses and those which operates in the construction sector. These results are consistent with other empirical research of Geng and Doberstein (2008) and Preston (2012).

The third most important factor is the "lack of the regulatory framework" which is mentioned at the same percentage as the "lack of skills and experience". This is consistent with other studies such as those of Ranta (2018), Farooque et al., (2019), Geng and Doberstein (2008), Mathews and Tan (2011), Benton et al., (2015) and Singh et al., (2020). "The lack of the regulatory framework" is most likely to impact businesses which operate in Albania. This factor is mostly an issue for micro businesses, firms in the service sector and for those which export.

The fourth factor mentioned by businesses is the “lack of government subsidies”. This is most likely to prevent businesses in Albania, small businesses, those which export and those which operate in the services sector. This factor is highlighted as a preventing factor in other studies as well (Al Zaabi et al., 2013; Walker et al., 2008; Diabat and Govindan, 2011).

The fifth factor is the “lack of consumer demand” for products/services which enjoy the principles of the circular economy mentioned by only 9% of businesses. This is the less important factor among the listed ones.

Table 11: Barriers that prevents firms to shift to a circular business model

Barriers	Total		Albania		Bosnia and Herzegovina		Kosovo *		North Macedonia		Montenegro		Serbia	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Added costs	78	46,7%	20	37,0%	14	48,3%	11	40,7%	10	66,7%	15	48,4%	8	72,7%
Lack of skills and experience	25	15,0%	7	13,0%	5	17,2%	7	25,9%	2	13,3%	4	12,9%	0	0,0%
Lack of regulatory framework	25	15,0%	12	22,2%	4	13,8%	3	11,1%	2	13,3%	3	9,7%	1	9,1%
Lack of government subsidies	24	14,4%	11	20,4%	5	17,2%	3	11,1%	0	0,0%	4	12,9%	1	9,1%
Lack of consumer demand	15	9,0%	4	7,4%	1	3,4%	3	11,1%	1	6,7%	5	16,1%	1	9,1%
Total	167	100%	0	0,0%	0	0,0%	0	0,0%	0	0,0%	0	0,0%	0	0,0%

Table 12: Barriers that prevents firms to shift to a circular business model

Factors	Firm size						Do you export in EU?			
	Micro		Small		Medium		No		Yes	
	N	%	N	%	N	%	N	%	No	%
Added costs	36	43,4%	24	47,1%	18	54,5%	65	50,0%	13	35,1%
Lack of skills and experience	14	16,9%	8	15,7%	3	9,1%	18	13,8%	7	18,9%
Lack of regulatory framework	14	16,9%	6	11,8%	5	15,2%	18	13,8%	7	18,9%
Lack of government subsidies	10	12,0%	11	21,6%	3	9,1%	18	13,8%	6	16,2%
Lack of consumer demand	9	10,8%	2	3,9%	4	12,1%	11	8,5%	4	10,8%
Total	83	100%	51	100%	33	100%	130	100%	37	100%

Table 13: Barriers that prevents firms to shift to a circular business model

Factor	Manufacturing		Construction		Services	
	N	%	N	%	N	%
Added costs	25	64,1%	7	63,6%	46	39,3%
Lack of skills and experience	4	10,3%	2	18,2%	19	16,2%
Lack of regulatory framework	5	12,8%	1	9,1%	19	16,2%
Lack of government subsidies	3	7,7%	1	9,1%	20	17,1%
Lack of consumer demand	2	5,1%	0	0,0%	13	11,1%
Total	39	100%	11	100%	117	100%

5. Conclusions

In developed economies, the adoption of circular economy practices is growing exponentially, however this pace is not the same in developing economies. Evidences point out that the implementation of circular economy practices in developing countries is in a nascent stage with various obstacles of firms operating in these countries (Singh et al., 2018). Literature offers a variety list of barriers that are considered as hampering factors for businesses to transit from a linear to a circular business model (Kirchherr et al., 2018; Fernández-Viñé et al., 2010; Rizos et al., 2016; Agyemang et al., 2019; García-Quevedo et al., 2020; Ranta, 2018; Farooque et al., 2019; Geng and Doberstein, 2008; Mathews and Tan, 2011; Benton et al., 2015; Singh et al., 2020; Mangla et al., 2018; Mahpour, 2018; Farooque et al., 2019; Pomponi and Moncaster, 2017; Kahriman and Tandir, 2021). However, studies taking the WB6 countries with a focus only to the SMEs in analysis, are absent. This research managed to provide a comprehensive view of main barriers that WB SMEs face while endeavoring to implement circular economy practices. SMEs consider the financial factor, lack of skills and experience and the lack of a supportive regulatory framework as top three barriers that impede them to transit from a linear to a circular business model.

Our findings have a variety of policy implications for how the primary barriers to SMEs in Western Balkan nations conducting CE activities may be overcome. Policymakers must first have a better understanding of the numerous issues that SMEs in the WB6 face related with the transition towards a circular business model. This includes identifying the factors that impede or delay circular economy implementation efforts. The shift to the CE entails a complicated set of administrative and legal processes resulting from environmental regulations, which usually necessitates exorbitant amounts of time and money from SMEs to deal with them.

This analysis sheds light on the connection between participation in CE activities and the difficulties encountered by SMEs. Besides its academic and practical value, a few limitations should be mentioned that future research could address. First, this article has looked at a number of obstacles that are thought to be important in terms of how they relate to CE activities, but they have also been somewhat determined by data availability. The RCC dataset has been used for making such analysis and the list of barriers have been limited, without the option of providing further obstacles. Future research should extend the analysis by including other obstacles which are widely described in the literature. Second, this article aimed at identifying factors that hamper the business transition from a linear to a circular business model by taking the whole WB6 and making some national disaggregation. However, a thorough analysis for each of the WB countries lack. WB economies do have several common issues when it comes to circular economy. However, the dynamics of circular economy development, national legislations and other contextual aspects, makes it necessary to have in-depth country analysis.

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Entrepreneurial Education and Innovativeness: Evidence from Serbian Start-up Firms

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Abstract

The main goal of the research is to determine the impact of different types of education on the innovativeness of start-up firms that actively operate in the Republic of Serbia. For the collection of primary data, a specially designed questionnaire is used, which is filled out by founders of start-up firms. A total sample includes 121 start-up firms. Multiple regression analysis, reliability analysis and descriptive statistical analysis are conducted. Based on the obtained results, it has been proven that non-formal and informal education has a positive statistically significant impact on the innovativeness of start-up firms, while formal education does not have a statistically significant impact on a given dependent variable. The conducted research and the obtained results have important implications for the scientific and professional public. Firstly, in line to given results managers' attention should be drawn to invest their time in educational activities that are not covered by the formal education program. Additionally, the importance of sharing knowledge among employees in the firms is especially pointed out. Finally, it is important to highlight the guidelines for improving innovativeness in start-up firms, in order to ensure their competitive position in post pandemic circumstances.

Key words: entrepreneurship, innovativeness, start-up firms, education, Serbia

1. Introduction

The main task of an entrepreneur is to discover and develop new products and services. According to Jones and Barnir (2019) the process of creating start-up firms can be divided into two perspectives: discovery and creation perspective. The purpose of the mentioned processes is reflected in effectively exploiting the identified opportunity, which is based on the implementation of changes. Therefore, entrepreneurs are expected to explore the sources of innovation, and to identify the chance for the realization of successful innovation (Drucker, 1996). It is proven that the innovations present the basis for developing knowledge-based economy and they are crucial for the growth and survival of an enterprise (Ozgen et al., 2013). Moreover, the changes of existing activities through innovation enable entrepreneurs to achieve competitive advantage and improve business performance.

Although entrepreneurs tend to assure successful exploitation of created new ideas and to provide superior market position, they are faced with many difficulties, i.e. limited access to funding sources, lack of market information, monopoly behavior of large enterprises, corruption (Slavković & Simić, 2019). To overcome obstacles, entrepreneurs are expected to find and employ human resources that possess the specific skills and abilities (Alvarez & Barney, 2007). In line with previous, plenty of evidence points to the importance of human

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capital, as personal entrepreneurial assets (Davidsson & Honig, 2003; Shepherd & DeTienne, 2005, Simić & Slavković, 2019).

Previous empirical results have also proved that an entrepreneur is a key actor, thus, it is necessary to look at his characteristics and competences as determinants of the start-up success (Peña, 2002; Slavković & Simić, 2019) and innovativeness (Barker & Mueller, 2002; Marvel & Lumpkin, 2007; Lin et al., 2011, Simić & Slavković, 2019). It is evident that the level of knowledge and skills, experience and motivation that the entrepreneur brings to new venture have impact on business performance. The entrepreneurs with a college education, previous managerial experience, and who are committed to establishing a new venture, have more chances to create a successful start-up firm (Peña, 2002). This is supported by evidence that when making decisions, greater cognitive resources contribute to more efficient problem identification and formulation of an optimal solution (Hayton, 2005).

In addition, there is evidence about the relation between entrepreneurs' education and innovativeness as one of the pillars of successful start-up firms. Barker and Muller (2002) argue that career experience in various fields is important for decision making process related to the implementation of advanced technology. Previous experience in R&D process and innovation activities are typically associated, while educated employees tend to have greater cognitive competences that will help in exploring and exploiting new ideas. Marvel and Lumpkin (2007) found that entrepreneurs' educational background and prior technology knowledge, positively affects innovation radicalness. Simić and Slavković (2019) proved that founders' education and entrepreneurial self-efficacy have a significant impact on innovativeness of new ventures.

However, in the literature there is no consensus on how to measure human capital of entrepreneurs. Education and/or work experience can be used to measure and determine the structure of human capital (Unger et al., 2011), while different education types (Debarliev et al., 2022; Paduraru, 2013), self-efficacy (Simić & Slavković, 2019), and entrepreneur's motivation (Unger et al., 2011) consider as important elements. Apart from that, the beginning of the 21st century has announced the emergence of a knowledge-based economy, that has highlighted the importance of lifelong learning. It has been proven that entrepreneurial education should not be limited to the traditional forms of formal learning (Alfirević et al., 2018). There is the demand to improve knowledge, skills and abilities, that will assure providing better chances in a changing economic and social environment, while institutions as providers of lifelong education are assumed to change (Sezen-Gultekin & Gur-Erdogan, 2016). In addition, the unexpected arrival of the COVID 19 pandemic and the following crisis have affected the way in which the entrepreneurial process is carried out (Akula & Singh, 2021), as well as market opportunities that inevitably affect start-up firms (Kalogiannidis & Chatzitheodoridis, 2021). Hence, it is important to explore to which extent entrepreneurs are ready to react to emerging problems and challenges and how their education can influence the implementation of possible solutions.

Bearing in mind previous issues related to entrepreneurial education, the subject of research in this paper is the importance of different types of education for the innovativeness of start-up firms. The types of education that are covered are formal, non-formal, and informal (Coombs & Ahmed, 1974). In this way, it is necessary to determine whether there has been a change in the role of traditional forms of formal education and to identify the importance of non-formal and informal education in the execution of the new venture process, that will imply the guidelines for the improvement of innovation of start-up firms. For the purposes of this research, innovativeness is observed as the tendency of employees to apply new ideas and choose new alternatives in performing work activities.

The paper has several parts. In the next section, a theoretical framework of research is developed. Section three provides the research methodology and the data analysis. The presentation and discussion of research findings are provided in sections four and five. Section six concludes.

2. Literature review

2.1. Education as human capital investment

Human capital can be presented as a determinant that indicates a clear distinction between entrepreneurs and non-entrepreneurs (Matricano, 2016). Firstly, entrepreneurs are residual seekers of the substance of the firms, as a result of which there is a strong incentive to use their human capital in order to generate the benefits for the new venture. Secondly, entrepreneurs take rent from investment, which is why they continuously strive to achieve a satisfactory return with an acceptable period of return on investment, with minimal use of external sources (Cliff, 1998).

Although, there isn't consensus about the universal measurement of human capital, its improvement usually is achieved through formal training and/or through the acquisition of work-related experience. There are evidences that have proven that the investments in human capital contribute to the improvement of employees' performance (Arthur, 1994; Gelderblom & de Koning, 1996; Boselie, Paauwe & Jansen, 2001), as well as the performance of new ventures (Cooper, Gimeno-Gascon & Woo, 1994; Blanchflower & Oswald, 1998; Van Praag & Cramer, 2001). In accordance to the postulates of the human capital theory, the quality and level of an individual's knowledge is directly related to his cognitive ability, which has a positive effect on firm productivity (Schultz, 1961).

Since the education is related to knowledge, skills, ability to solve problems, discipline, motivation and self-confidence, the logical conclusion is that education enables entrepreneur to deal with problems and to become more successful in new venture process (Cooper et al., 1994). The investments in education are usually measured by the length of schooling, i.e. number of years attending formal education programs or duration of training. However, the qualitative aspect of education, which implies the amount and content of acquired knowledge and skills, is difficult to measure (Unger et al., 2011). Therefore, we usually perceive individual education as an investment, that can be assessed by the return for the invested time and resources (Schultz, 1961). The way in which the results of educational programs are evaluated have to be highlighted, that include both cognitive and non-cognitive dimensions of human capital (Burgess, 2016). For example, enriched investment programs at an early stage of life do not significantly change the intelligence quotient, but on the other hand, they significantly affect individual non-cognitive knowledge and social status (Loncik & Grunewald, 2003). From the entrepreneur's point of view, the effect of the investments in education often are perceived through the success of new venture on market and achieved business performance (Haber & Reichel, 2007; Bager, 2011).

2.2. Types of entrepreneurial education

In literature the most common typology highlights three types of education: formal, non-formal and informal (Coombs & Ahmed, 1974, Colardyn & Bjornavold, 2004). Formal education represents the educational process that takes place within a hierarchically structured, formal educational system (from primary schools to colleges). In addition, formal education also includes activities that consist acquisition of general or specialized knowledge, relying on

schools and faculties as an important instrument for acquiring different types of knowledge (Coombs & Ahmed, 1974; Etling, 1993).

Human capital can be accumulated by gaining experience during career or training at workplace, which confirms the importance of encouraging different programs of non-formal education and informal learning. Non-formal education is defined as organized, educational activities, which are not connected to an educational institution, and can be attended by people of all ages (Krupar et al., 2017). Non-formal education represents the type of organizational effort with the purpose to promote learning capabilities and to improve the quality of individual life through extracurricular activities (Okukawa, 2006).

The difference between formal and non-formal education is based on the fact that non-formal education mainly oriented on present, responds to the local needs of society, while it is focused on the needs of those who attend these education programs, less structured and does not assume a hierarchical relationship between students and teachers (Coombs & Ahmed, 1974). Apart from that, the implementation of different non-formal education programs points to various challenges, which are not typical for the context of formal education. For instance, participation in non-formal education programs is voluntary, participants in these programs have a wide range of abilities and they have different ages (Okukawa, 2006), and the relationship between lecturer and student is less formal (Etling, 1993).

The Covid 19 pandemic caused numerous challenges for the existing education system (Toquero, 2020). New circumstances contribute to the popularization of remote learning and gaining experience outside the traditional educational programs (Zhao & Watterston, 2021; Pokhrel & Chhetri, 2021). Introducing the concept “knowledge workers” (Soriano & Huarng, 2013) and highlighting the importance of lifelong learning process (Lans, et al., 2004), informal education is considered an important aspect in the process of starting a new venture. Informal education is defined as “any organized and sustained educational activities that take place both within and outside educational institutions, and cater to persons of all ages” (Baseska-Gjorgjieska et al., 2012). In addition, informal education considers huge range of activities and gaining experience by it learning from family, friends, peer groups, the media. As a result of informal education, individual gain competences that are connections between theoretical information and professional practice (Orhan, 2020). That is fundamental for the future founders of start-up firms, which will provide a good starting point for starting new venture process and facilitate finding solutions for the issues at a very beginning of new venture process. The most common challenges, a high degree of risk and uncertainty when making important decisions are just some of the reasons why the importance of lifelong learning should be emphasized in the context of entrepreneurial activities

2.3. Entrepreneurial education and innovativeness

According to Liñán (2004) entrepreneurial education is considered as an effective strategy that brings more innovation. There is increasing interest in developing educational programs, that will encourage an entrepreneurial mind-set, the growth of new businesses and the more efficient use of the creative potential and acquiring new knowledge and skills. In order to satisfy the need of entrepreneurs, but also the society, entrepreneurial education includes all forms of education and training, both formal and informal (Karimi et al., 2010).

Formal education enables acquisition of knowledge, abilities and skills necessary for discovering and exploiting business opportunities. For instance, analytical skills, understanding of market conditions, general and specific knowledge can contribute to building self-confidence and easier overcoming different issues at the early stages of new venture

development, as well as more efficiently performing entrepreneurial activity in general (Robson et al., 2009). The results of conducted research in this field indicate that most firms that achieve growth in sales and profits have founders with academic degree, who are interested in attending business education programs (Peña, 2002). Entrepreneurs' educational level influences their strategy planning skills (McMullan & Long, 1987), their ability to overcome information overload and to analyze complex knowledge (Carpenter & Fredrickson, 2001), but also increases a firm's openness to change (Classen et al., 2012). In accordance with the given theoretical and empirical evidence, it is possible to formulate the following hypothesis:

H1: Entrepreneurs' formal education positively affects innovativeness of start-up firms.

However, there are evidences that formal educational programs don't contribute to the acquisition of knowledge and skills that are relevant for the starting and managing new ventures (Robson et al., 2009; Slavković & Simić, 2019), and they don't have significant impact on the level of innovativeness (Ahn et al., 2017). In addition, it is proven that vocational and professional skills are more important for entrepreneur than university education (Sena et al., 2012). Therefore, it is relevant to explore whatever formal education programs provide knowledge and skills that will contribute to the entrepreneurs' readiness to start a new venture. There are numerous non-formal institutions which provide trainings in management and starting new business (Winn, 2005). Through non-formal educational programs, we can prepare a good basis for the development of new ideas, that cannot be created through formal education. In accordance with the previous results, the hypothesis can be defined:

H2: Entrepreneurs' non-formal education positively affects innovativeness of start-up firms.

Previous empirical results have proven that working experience, not only the level of formal education, has important impact on success of start-up firms. For example, Stuart and Abetti (1990) highlighted previous experience as an important determinant of the success of new technical ventures. Analyzing success factors, it can be concluded that nature and heterogeneity of the experience are relevant for entrepreneurial performance. In other words, knowledge and skills in different functional areas, past ownership experience and leadership experience are relevant indicators of the success of start-up firms (Cooper et al., 1994; Rotefoss & Kolvereid, 2005). Professional experience provide skills and know-how that can be used to deal with uncertainty in innovation and to cope with challenges involved in strategic changes (Hamori and Koyuncu, 2013). Moreover, according to Ahn et al. (2017) experience in specific industrial field can play an important role in enhancing strategic agility. In line with presented empirical evidences, informal education and lifelong learning process are emphasized, since these types of education have key role in acquiring relevant experience for entrepreneurs. Therefore, it is possible to formulate the following hypothesis:

H3: Entrepreneurs' informal education positively affects innovativeness of start-up firms.

3. Methodology

Determination of the impact of different types of entrepreneurial education on start-up innovativeness is based on the original research. In order to collect primary data, special designed questionnaire was used. In accordance with the objectives and defined hypotheses, owners or current managers of start-up firms in Republic of Serbia took part in this survey. Start-up firms, which are included in the sample, are not older than 5 years and actively operate in the territory of the Republic of Serbia. Moreover, all firms that are included have less than 50 employees. Taking into account the defined limits the total sample counts 121 respondents.

Analyzing the sample structure, the largest number of start-up firms operate in service sector (51%), and in the trade sector (29%), and the rest of them are manufacturing firms (20%). The size of the business is determined by the number of employees in the start-up firms. Almost 90% of start-up firms in this sample have from 2 to 9 employees, and the rest of them have more than 10 employees.

The questionnaire is composed of questions defined in the form of statements, which measure the degree of agreement of the respondents. In line with this, a Likert scale of 5 points was used, starting from 1 “I completely disagree” to 5 “I completely agree”. Types of entrepreneurial education is measured by using 7 items, e.g., “Knowledge acquired through formal education is useful for daily work in your company.”, “You have attended some kind of training that is relevant to performing your company's basic and other activities.” This part of the questionnaire was defined in line with previous researches conducted by Davidsson, P. and Honig, B. (2003), and Moon and Kym (2006).

The part of the questionnaire measuring the innovativeness of start-up firms contains 10 items, that are defined according to the research by Dess et al. (1997), who analyzed strategic aspects of the entrepreneurial success, and Wach et al. (2020), who analyzed business performance in 185 German firms. Examples of the given items are: “In the process of solving the problem, you are always ready to apply alternative solutions.”, “When performing work tasks, you often apply new, unusual and innovative solutions.”

Statistical data processing was performed with the computer support of the statistical package for social sciences IBM SPSS Statistics, Version 23 (Statistical Package for Social Sciences). In order to test the defined hypotheses, a multiple regression analysis was conducted, as well as a descriptive statistical analysis and reliability analysis. The level of statistical significance used in this research is $\alpha = 0.01$.

4. Results and discussion

In the first step, a descriptive statistical analysis and reliability analysis was carried out. According to the values presented in Table 1, the highest value of the arithmetic mean is identified in the case of formal education, which implies that the respondents included in this research believe that they have a high degree of formal education compared to the knowledge and experience they acquire through non-formal educational programs and forms of informal education. The highest value of the standard deviation is recorded in the case of non-formal education, which implies the highest heterogeneity of respondents' attitudes. The reliability of the given statements was measured using the Cronbach's alpha coefficient (DeVellis & Thorpe, 2021). The value of Cronbach's alpha ranged from 0.738 to 0.923, that indicates high level of internal consistency of statements.

Table 1. Results of descriptive statistical analysis and reliability analysis

Variables and items	Arithmetic mean	Standard deviation	Cronbach's alpha
Formal education	4.1942	0.95388	0.856
Non-formal education	3.2521	1.09568	0.738
Informal education	4.0140	0.83620	0.790
Innovativeness	3.8545	0.72641	0.923

In order to test the defined hypothesis, a regression model is created. The R2 value shows that it is a quality regression model, while the F statistic is statistically significant at the $p < 0.01$ level. The variance inflation factor is less than 5, indicating that multicollinearity is not a problem. According to the results presented in Table 2, it is determined that non-formal and informal education have a positive statistically significant impact on start-up innovativeness. However, it has been proven that the formal education of entrepreneurs has no statistically relevant influence on the given dependent variable, which is in accordance with previous researches. Hamori and Koyuncu, (2013), and Ahn et al. (2017) believe that long immersion in formal education may cause path dependence, which might be a double-edged sword for innovativeness. Also, the obtained results are in accordance with previous research in which it was proven that the acquired experience has a significant impact on innovativeness (Simić & Slavković, 2019). In other words, knowledge, abilities and skills that are developed and acquired outside the framework of formal education are more important for the development of innovative potential.

Table 2. Results of multiple regression analysis
(Dependent variable: innovativeness)

Independent variables	β	t	sig.
Formal education	-0.084	-1.293	0.198
Non-formal education	0.314	4.989	0.000***
Informal education	0.266	3.082	0.003***

*** The value is significant at level of $p < 0.01$.

$R^2 = 0,706$; $F = 55,293$ *** ($p < 0.01$).

5. Conclusion

Contemporary reality is characterized by work on the development of various educational strategies, which primarily aim to achieve the best possible production and economic effects. All forms of education (formal, non-formal and informal), as well as all educational strategies (permanent education, continuous professional education, lifelong learning, etc.) become not only an integral part of human capital, but also a necessary precondition for its growth and development. One of the important differences between entrepreneurs and non-entrepreneurs is based on the possibilities of human capital development. The level of formal education acquired experience, as well as various forms of networking are important determinants of the success of entrepreneurial behavior. Considering the entrepreneur as a central figure within the entrepreneurial process, indicates the importance of the characteristics, behavior, and knowledge that he uses in order to effectively exploit the identified opportunity.

Since investing in education represents the initial form of human capital development, the education of entrepreneurs represents an important element of the entrepreneurial process. Starting a new venture is characterized by a high degree of risk and uncertainty, limited resources, and other limitations, while successful implementation of new ideas is encouraged. An entrepreneur with his knowledge and abilities tends to overcome different issues and thus ensure the success of his firm. A wide range of competences, different ways of responding of entrepreneurs may be some of the reasons for the differences in the level of innovation.

The research results indicate that the level and field of formal education do not have a significant impact on innovativeness, despite the fact that respondents largely agree that the knowledge and skills acquired by attending the given educational programs correspond to the requirements they face during the entrepreneurial process. However, it was not identified in the case of other types of entrepreneurial education. It has been proven that acquired knowledge and experience through non-formal educational programs and permanent work on personal development have a positive and significant impact on the level of innovation. The high degree of willingness of respondents to acquire relevant knowledge and information for the establishment and management of start-up firm through permanent contact with their colleagues and other stakeholders, classifies the concept of informal education as a fundamental aspect of today's educational system.

The obtained results have important implications for members of the academic and professional public. In a theoretical sense, the obtained results can be useful for creating a framework for improving innovation, which will highlight the experience and characteristics of entrepreneurs as a central component. This framework can be considered as a part of the model that includes the elements that should be followed in order to succeed in start-up firms. Important managerial implications of the conducted research are reflected in terms of recommendations that can improve the degree of innovativeness. In other words, it is desirable to organize non-formal education programs in the form of trainings, which will aim at acquiring practical knowledge and developing creativity. In addition, various forms of networking should be encouraged, through professional events, seminars, conferences, where interested participants can share their experience and knowledge with others. The implications for the education system are in favor of the newly emerging circumstances caused by the COVID-19 pandemic. A greater focus on forms of remote learning should be used and applied also within formal educational programs, which will achieve greater efficiency on the way to acquiring entrepreneurial education.

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The Relationship between Narcissism and Entrepreneurship

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Abstract

Narcissism and entrepreneurship are two concepts that have been studied, analysed, and treated separately but recently received significant attention to see if there is a connection between them. In different countries, these studies have been conducted on different typologies of people, starting with students and ending with the directors of large companies, seeing how the narcissism-entrepreneurship relationship stands at various stages of life. The study aims to analyse whether there is a link between narcissism and entrepreneurship in Albanian students. The study was conducted using a questionnaire created to collect exciting data using the appropriate software. The questionnaire was completed in Albanian, and all respondents are Albanian citizens living in Albania. The study found a positive, although weak, but statistically significant relationship between narcissism and the entrepreneurial intentions and Individual entrepreneurial orientation of Albanian students.

Keywords: Narcissism, entrepreneurship, entrepreneurial intentions and Individual entrepreneurial orientation.

1. Introduction

Although narcissism and entrepreneurship have been researched, examined, and dealt with individually, they have recently attracted a lot of interest to determine whether there is a relationship between them. These studies have been carried out in many nations on various types of people, starting with students and finishing with substantial company leaders, to determine how the link between narcissism and entrepreneurship sits at different phases of life. Recently, more people and corporate leaders are developing narcissistic tendencies. When people encounter their initial employment possibilities as children or young adults, narcissistic and entrepreneurial traits are frequently discovered. However, can these two ideas ever come together at some point? If so, do Albanian students also fall under the purview of this relationship?

This study aims to determine whether there is a link between narcissism and entrepreneurship among students in our nation because studies on the subject are still in their early phases of growth in many countries. The research questions posed in this study are as follows:

- 1) Does exist a positive relationship between narcissism and entrepreneurial intention among Albanian students?

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- 2) Does exist a positive relationship between narcissism and individual entrepreneurial orientation among Albanian students?

The hypotheses that rise following this research questions are as follows:

- 1) The relationship between narcissism and entrepreneurial intention among Albanian students is positive.
- 2) The relationship between narcissism and individual entrepreneurial orientation among Albanian students is positive.

The study was conducted utilising a questionnaire that was made using the proper tools for gathering the fascinating data. The survey subjects were Albanians who reside in Albania, and the questionnaire was offered in Albanian. The question tries to elicit a deep perception of the phenomena while allowing the survey sample the most significant amount of freedom of speech.

2. Literature Review

Through entrepreneurship education, entrepreneurship may be taught directly. At the university level, entrepreneurship education is most effective at inspiring and nurturing students to start their businesses. The last is because graduating students are more likely to become entrepreneurs and are almost ready to make professional decisions. According to Lián (2004), entrepreneurial education is any educational or training activity regardless of whether it takes place in a formal academic setting. That aims to advance entrepreneurial intentions or specific factors that may influence those intentions (such as knowledge, desire and feasibility of entrepreneurial activity).

2.1. Entrepreneurial orientation and intentions and narcissism

According to Wiklund & Shepherd (2003), studies on entrepreneurial orientation have proven that it can influence the firm's performance, income, growth and innovation of its products. While following Rauch and Frese (2007), "the strategy generation process that provides the organisation with the framework to execute entrepreneurial activities and choices" is the definition of entrepreneurial orientation at the organisational level. In studies conducted mainly concerning the firm's performance, it has been found that entrepreneurial orientation affects an average of 24% of the change in performance. Bolton and Lane (2012) created the individual entrepreneurial orientation measure, which may be used to assess the entrepreneurial orientation of students and other people. When deciding whether to support company concepts, future leaders, business incubators, and possible investors may all benefit from understanding entrepreneurial orientation on a personal level (Bolton & Lane, 2012). Entrepreneurial activities are based on goals (Krueger et al., 2000). These goals are the ones on which entrepreneurs start their actions before they become such. In short, individuals do not suddenly become entrepreneurs without specific incentives and, most importantly, goals. It is precisely these goals that lay the foundation for a successful business and long life.

Ajzen (1991) defined objectives as the degree to which individuals are prepared to attempt and the amount of effort they want to put out to act in an entrepreneurial manner. Typically, a person will serve in a given way more often the greater their purpose. Entrepreneurial purpose and behaviour are tightly connected, according to Ajzen (1991). The Krueger et al. (2000) study also indicated that entrepreneurial behaviour is purposeful and planned, which lends credence to this idea. Since entrepreneurial behaviour is intentional, several studies concurred that entrepreneurial intention might predict it (Krueger & Carsrud, 1993). Chen and Linan (2009)

created and standardised a valid and reliable instrument that measures entrepreneurial intention.

The first to discuss the distinctions between primary, but not clinical, narcissism—which refers to the extent to which people are motivated by self-love—and secondary narcissism as a type of personality disease was the well-known psychotherapist Freud (1957). In his writing, he discussed the distinction between excessive "Self-love" and a psychiatric condition. Even though they may not have malicious intentions, narcissists are blind to other people's happiness as long as their requirements for self-validation and outside approval are satisfied (Braun 2017). Narcissists pursue entrepreneurial positions and are more likely to be chosen by others. Still, they tend to act in their interests at the expense of the needs and interests of others. This phenomenon is described as two sides of narcissism, the bright and the dark (Campbell et al. 2011). Their good side comes out when narcissists are on their best days and affects initial impressions like charming or visionary attributes of entrepreneurs.

Consequently, the negative side appears on bad days, revealing manipulative and self-indulgent behaviour. Both sides coexist with well-developed social skills that mask them for a while. (Howard et al. 2009)

The NPI-40 is one of the most widely used measures of narcissism in social science and academic studies of entrepreneurship (Ackerman et al., 2011), while the NPI-16 is a short version of the NPI-40 and has been shown to have discriminant validity and good predictors according to Ames et al., (2006).

2.2. The link between narcissism and entrepreneurship

McKinney (2013) points out that many studies bring to light a possible connection between narcissism and the entrepreneurship paradox of narcissism and its potential adverse effects on society. Both new and old organisations have drawn the attention of leading scholars. According to previous theoretical research, narcissism and leadership appear to be correlated (Kets De Vries & Miller, 1985; Rosenthal & Pittinsky, 2006). Since entrepreneurs are widely portrayed as symbols of well-being, power, and success, it is expected that narcissists who seek attention, admiration, and ability should be drawn to entrepreneurship. To date, few academic studies have attempted or studied this relationship. These studies are primarily based on data generated by students and business leaders. And concentrate on the desire to start a business and a company's strategic orientation as opposed to a venture.

Due to the growing role that entrepreneurs play in job creation, innovation, and economic development, as well as the increasing prevalence of narcissism in business and society (Carree & Thurik, 2010; Malchow-Miller et al., 2011), it is necessary to conduct a thorough and systematic study on the topic.

Leung et al. (2020) investigate the potential connection between narcissism and six entrepreneurship-related characteristics, including the complete entrepreneurial process. Purpose, choice, success, well-being, individual orientation, and organisational direction are also referred to as levels of entrepreneurial commitment or degrees of entrepreneurship (Grilo & Thurik, 2008). (Van der Zwan et al., 2010). The purpose of this study is to demonstrate that narcissism and entrepreneurship are related (Leung et al., 2020). The findings of this study, which focused on female students, indicate a connection between narcissism and entrepreneurial desire. Specifically, if the inclination toward narcissism grew by 1, the likelihood of having the goal to become an entrepreneur increased by 4.08 times.

3. Methodology

A positivist research methodology was applied in this study. This strategy emphasises scientific techniques that produce accurate information without prejudice or human interpretation. We decided on this methodological approach based on quantitative research. Any method for gathering data (like a questionnaire) or for analysing data (like graphs or statistics) that yields numerical data is referred to be this approach. Primary and secondary sources were used to gather the data for this study. A questionnaire has been used to collect the preliminary data, and other data have been gathered through research carried out by several writers. The publications cited in the literature study served as the foundation for creating the questionnaire. The survey was made with the proper survey software (SurveyMonkey), allowing respondents to complete it online. The electronic questionnaire can be helpful since it is quick, inexpensive, requires no assistance, and is simple to disseminate to many individuals. The survey's questions are written in Albanian. The respondents of the questionnaire are Albanians who reside in Albania.

The questionnaire is composed of 4 sections. In the first section, the questionnaire aims to obtain general information on the respondents' demographic data, such as gender, age, current study cycle and entrepreneurial experiences. In this section are used closed-ended questions. Its second section is entirely devoted to measuring students' narcissism levels. In this section, students were asked to select one of two statements in 16 pairs of statements adapted from the questionnaire of the study by Ames et al. (2006). In the third and last section, to measure entrepreneurial intention and individual entrepreneurial orientation in students, they were asked to evaluate the statements adapted from the instrument created by Liñán, (2004) and Bolton & Lane, (2012). For assessing entrepreneurial intention, items were asked on a seven-point Likert scale (from 1 – totally disagree to 7 – totally agree), while for the assessment of individual entrepreneurial orientation, items were asked on a five-point Likert scale (from 1 – totally disagree to 5 – totally agree).

The sample consists of 208 Albanian bachelor's and master's students from different study programmes such as business administration, economic informatics, finance banking, etc. All surveyed students study in private or state universities in Albania. The combination of the convention technique with the snowball technique (used in the non-probabilistic samples) was used for the sample selection. The sample selection criteria are: (1) the individuals surveyed are students, and (2) the individuals surveyed study in Albania.

Data collected through questionnaires were processed and analysed using SPSS Statistic software. Descriptive analysis, correlation analysis, and regression analysis were all employed in the inquiry to arrive at the conclusions.

Before starting the primary data analysis, the dependability of the research tool was checked using the Cronbach Alfa coefficient. The Cronbach Alpha, sometimes called the Alpha Coefficient, assesses the precision of multiple-choice surveys that accept replies on a Likert scale. The Cronbach alpha value must be greater than 0.6 for the instrument to be reliable (Hair et al., 2006). The association between narcissism and entrepreneurial intention and orientation was examined using the Pearson correlation coefficient and regression analysis. The correlation coefficient is interpreted differently by various writers. According to Davis' (1971) criteria, value intervals of 0.70 and higher signify a strong correlation, 0.50 and 0.69 a significant relationship, 0.30 and 0.49 a moderate association, 0.10 and 0.29 a weak connection, and 0.10 and 0.29 an insignificant relationship. Theoretical models for the basic regression equation show the relationship between the dependent variable and the independent variables that

describe the behaviour of the dependent variable. This regression equation has the following general form:

$$Y = b_0 + a_1 X_1$$

4. Study Results

4.1. Demographic data of respondents

Table 4.1 shows the demographic data of individuals who completed the questionnaire, gender, age, current study cycle and entrepreneurial experiences.

Table 4.1: Composition of the sample and its demographic characteristics

		Frequency	Percentage
Gender	Female	148	71.2
	Male	60	28.8
Age	18	6	2.9
	19	40	19.2
	20	55	26.4
	21	19	9.1
	22	15	7.2
	23	21	10.1
	24	10	4.8
	25	8	3.8
	26	9	4.3
	27	10	4.8
	28	3	1.4
	29	2	1.0
	30	2	1.0
	31	1	.5
	32	2	1.0
37	3	1.4	
46	1	.5	
56	1	.5	
Study cycle	The first cycle of study: Bachelor	132	63.5
	The second cycle of study: Master	76	36.5
Entrepreneurial experience	Yes	58	27.9
	No	150	72.1

According to the demographic results, the sample of 208 students participating in it consists of 71.2% female and 28.8% male. The study's participants were questioned on their ages, which ranged from 18 to 56. In this respect, students aged 20 represent the majority of the sample, comprising 26.4%, followed by students aged 19, representing 19.2% of the total sample. Students aged 21 represent 9.1% of the sample, followed by the last group of students aged 23, representing 10.1% of the sample. Concerning the study cycle, as evidenced by the younger age, 63.5% are students who follow the first cycle of study, Bachelor. In comparison, 36.5%

of the sample represents students who follow the second study cycle, Master. Out of 208 surveyed students, only 27.9% of the sample had experience in entrepreneurship, while the rest of the sample, 72.1%, was represented by students with no entrepreneurial experience.

4.2. The relationship between narcissism and entrepreneurship

The first step consists in performing the reliability analysis. In quantitative research, the Cronbach alpha coefficient has proven to be satisfactory concerning the three elements: entrepreneurial intention, entrepreneurial orientation and narcissism. The Cronbach Alpha coefficient for individual entrepreneurial orientation was found to be 0.803. Given that, according to the methodology for an instrument used to be considered valid, the value of the Cronbach alpha coefficient must be above 0.6, we can say that the ten statements adapted to measure individual entrepreneurial orientation among students are considered valid. Further, regarding the reliability and validity of the statements that measure entrepreneurial intention, the Cronbach Alpha coefficient was found to be 0.897. Such a coefficient indicates that the instrument for measuring entrepreneurial intention is reliable. As for narcissism, the instrument measuring the level of narcissism among students has proven reliable with a Cronbach Alpha coefficient of 0.746. The second steps consist of performing the Pearson correlation, which aims to show the possible relationship between the pairs: Narcissism – Entrepreneurial Intention, Narcissism – Individual Entrepreneurial Orientation. What is observed in table 4.2 is that the correlation between narcissism and entrepreneurial intention is 0.152*, and the correlation between individual entrepreneurial orientation and narcissism is 0.182**, a value included in the range of 0.10 to 0.29, which means that the correlation is weak. Even though these two correlations are considered vulnerable, their results are statistically significant.

Table 4.2: The result of correlation analysis

		IEO	EI	NARC
IEO	Pearson Correlation	1	.339**	.182**
	Sig. (2-tailed)		.000	.008
	N	208	208	208
EI	Pearson Correlation	.339**	1	.152*
	Sig. (2-tailed)	.000		.029
	N	208	208	208
NARC	Pearson Correlation	.182**	.152*	1
	Sig. (2-tailed)	.008	.029	
	N	208	208	208

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The final stage in the study is to run the regression model to determine the influence of narcissism on entrepreneurial aspects such as individual entrepreneurial orientation (IEO) and entrepreneurial intention (EI).

In the regression analysis summary table, the R Square value of the first model is .033 and for the second model is .023. This determinability coefficient shows that narcissism explains 3.3 % of the data variance for the first model and 2,3 % for the second model.

Table 4.3: Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.182 ^a	.033	.029	.490	.033	7.087	1	206	.008
2	.152 ^a	.023	.018	1.072	.023	4.844	1	206	.029

a. Predictors: (Constant), NARC

b. Dependent Variable: IEO, EI

The confidence intervals should be 90 (%), 95(%), and 99(%). As we can see from the table above, the Sig. F change value is .008 for the first model and .029 for the second model, showing that it is within the confidence interval.

Table 4.4: Summary of the models' coefficients

Model	Unstand. Coefficients		Stand. Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
	1	(Constant)	5.534			.150		36.996	.000		
	NARC	.772	.351	.152	2.201	.029	.152	.152	.152	1.000	1.000
2	(Constant)	3.855	.068		56.387	.000					
	NARC	.427	.160	.182	2.662	.008	.182	.182	.182	1.000	1.000

a. Dependent Variable: EI, IEO

The form and values of the regression equation for both models result as follows:

$$\text{Model 1 - } Y = 5.534 + 0.152 X_1$$

$$\text{Model 2 - } Y = 3.855 + 0.182 X_1$$

For the first model, the coefficient of X_1 (Narcissism) is .152. This result suggests that for every unit of change in the variable X_1 , the entrepreneurial intention is influenced positively by 0.152 units while the other parameters of the model remain unchanged. While for the second model, the coefficient of X_1 (Narcissism) is .182. This result suggests that for every unit of change in the variable X_1 , the individual entrepreneurial orientation is positively influenced by 0.182 units while the other model parameters remain unchanged.

5. Conclusion

We found empirical information about narcissism's effects on entrepreneurial traits, including individual entrepreneurial orientation (IEO) and entrepreneurial intention (EI). The results of the data analysis in this study show a substantial association between narcissism and individual entrepreneurial orientation as well as between narcissism and entrepreneurial intention, even if it is just a week one. The regression analysis results show that as narcissism changes, Albanian students' entrepreneurial traits advance. At the end of this investigation, it can be said that narcissism and the entrepreneurship-related topics covered have a beneficial association. The sequence in which this study discusses entrepreneurship education at universities is crucial. Future research might examine the link between narcissism and other characteristics of entrepreneurship in greater detail, as well as the impact of demographic and cultural variables.

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Analysis of Factors Influencing Social Entrepreneurial Intentions: Case of University Students in the Republic of Serbia

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Abstract

The concept of social entrepreneurial intentions (SEI) is derived from the concept of entrepreneurial intentions but with added social dimension to the profit orientation of the entrepreneur. Mair and Noboa (2006) modified the concept according to the Theory of Planned Behaviour and proposed the model of SEI which indicate that SEI is under the direct influence of four variables such as empathy, moral obligations, social entrepreneurial self-efficacy and perceived social support. Additional factors are observed as exogenous that through direct factors influence SEI. Among them, previous experience in solving social problems stood out. Therefore, this research will test the mediating effect of previous experience on SEI. Mediating variables will be four variables that are direct predictors of SEI. The research was conducted on the student population and the sample consists of 350 respondents. The student population was targeted because of their potential to be entrepreneurs and the fact that educational curriculums should be upgraded with practical exercises to develop students' SEI. The analysis was conducted applying for the program SPSS AMOS and Hayes's PROCESS macro was used for testing the mediating effect. Specifically, parallel mediation was tested with four mediating variables. The results revealed that previous experience has a significant positive influence on SEI, while only perceived social support has a significant mediating effect on SEI. The results of the study raise awareness of the importance of students' previous experience in solving social problems and of the support that they receive from the important others in their surroundings.

Keywords: social entrepreneurial intentions, previous experience, social problems, students

Introduction

Social entrepreneurship is a form of entrepreneurship that has as its main goal the creation of social value and the use of innovative solutions to solve social issues (Martin & Osberg, 2007). This specific characteristic of social entrepreneurship is the main difference between this form of business and business entrepreneurship.

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However, the question is often asked why some people become entrepreneurs and others do not, especially when it comes to such a specific type of entrepreneur. What is characteristic and common to people who are motivated to engage in entrepreneurship, especially social entrepreneurship? The question can be answered by examining the characteristics of entrepreneurs (Milanović et al., 2021) and the entrepreneurial intentions of individuals. Therefore, the intention to start a business is an important factor in researching and understanding social entrepreneurship, and entrepreneurship in general (Lee & Wong, 2004; Tran & Von Korflesch, 2016). In this sense, the entrepreneurial intention is seen as a mental process that directs both the behaviour of individuals and the implementation of business plans (Gupta & Bhawe, 2007). To find answers, several groups of researchers have studied the intention of individuals to become entrepreneurs (Ajzen, 1991; Davidsson, 1995; Krueger, et al., 2000; Shepherd & Krueger, 2002).

In the context of social entrepreneurship, there are not enough studies on the intentions of individuals to become social entrepreneurs. As a social enterprise differs from a traditional enterprise in its characteristics, the motives of individuals for establishing a social or traditional enterprise also differ. Understanding the factors that influence the creation of the intention of individuals to establish a social enterprise can be useful to develop models of support for the development of social entrepreneurship. Therefore, the purpose of this paper is to fill the gap by identifying factors that influence social entrepreneurial intentions. Specifically, to identify how prior experience influences social entrepreneurial intentions through the mediation of empathy, moral obligation, self-efficacy and perceived social support of the individual. For this purpose, the model of Mair and Noboa (2006) modified by Hockerts (2015) will be used as a starting point. As in Hockerts' (2015) study, the research population consists of students that are involved in the educational process and their efforts could be shaped and directed to different objectives according to their intentions.

The paper structure is as follows: firstly, an overview of the literature on social entrepreneurship and the development of the concept of social entrepreneurial intentions will be given. Then the methodology of research and data analysis, the measures used and the applied procedures will be presented. The following are the results of the analysis and the discussion derived from the results of the study.

1. Literature review

1.1. Social entrepreneurship

Since the very beginning of the concept of social enterprises, initiatives of this type have been aimed at building an environment in which the community is nurtured in such a way as to develop a sense of shared responsibility and local resources are protected and developed. The social mission is at the core of the idea of social entrepreneurship and is placed before profit, which is traditionally the main goal of enterprises. This does not mean that social enterprises do not make efforts to make a profit (Martin & Osberg, 2007). Social enterprises accept profit as one of the goals, but most often see it as equally important or even less important concerning the social mission.

After its emergence, the concept of 'social entrepreneurship' was quickly adopted in the private, public, and non-profit sectors (Anderson et al. 2006). As a concept that uses market-based approaches to solve social issues, social entrepreneurship is gaining acceptance around the world (Talić & Ivanović-Đukić, 2020). Social entrepreneurship is especially important in

developing countries, where there are numerous social problems (Chell, 2007), which can be more easily overcome with the help of social innovations.

Just as a difference can be made between the understanding of the term commercial enterprise and a social enterprise, the differences between an entrepreneur and a social entrepreneur can also be observed. Namely, in social entrepreneurship, the contribution to social benefit takes precedence, and in a way, profit takes second place. That is why it is expected that there are certain differences in the behaviour and understanding of a social entrepreneur. Since making a profit is a secondary goal, social entrepreneurs are driven by other motives, passionate and determined to take risks and efforts to create positive changes in society (Ivanović Đukić et al., 2020). Social entrepreneurs can identify a problem in the community and they are trying to solve it by investing the profit they have generated from the business. They are characterized by a high level of motivation to work on improving the system, creating innovative solutions and solving social problems through various social projects.

As for Serbia, the social economy sector is at a lower level of development compared to other European countries, although there are a large number of problems for whose solutions social enterprises offer enormous potential. The development of social entrepreneurship and the acceptance of this relatively new concept was slow, the conditions for the creation and development of social enterprises are unfavourable, and social entrepreneurs face numerous challenges every day (Ivanović Đukić et al., 2020). Although progress can be seen, as the law on social entrepreneurship was passed in February of this year (Official Gazette of the Republic of Serbia, No. 14/2022), the implementation of which is awaited, and certain activities have been undertaken to regulate this area (formed state bodies, working groups, etc.).

1.2. The concept of social entrepreneurial intentions (SEI)

According to Thompson (2009, p. 676), entrepreneurial intention can be seen as “a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future”. Moreover, the Theory of Planned Behaviour, introduced by Ajzen (1991), is a useful tool used in research and analysis of factors affecting intention and for predicting intention.

Further, Mair and Noboa (2006) modified this concept and proposed the model of SEI which indicate that SEI is under the direct influence of four variables such as empathy, moral obligations, social entrepreneurial self-efficacy and perceived social support (Hockerts, 2015). Additional factors are observed as exogenous that through direct factors influence SEI. Such factors are gender, personality traits, previous entrepreneurial experience, examples of entrepreneurs in the family and similar (Milanović et al., 2021). Hockerts (2015) included the individual's previous experience in solving social problems in the model of Mair and Noboa (2006). He used the four independent variables (empathy, moral obligation, self-efficacy and perceived social support) of Mair and Noboa's (2006) model as mediators between prior experience and entrepreneurial intentions of social entrepreneurs.

Empathy, as an individual's ability to understand other people's feelings (Preston et al., 2007), is one of the most important characteristics of social entrepreneurs, which has been recognized in numerous studies (Mair & Noboa, 2006; Dees, 2012; Hockerts, 2015; Korte, et al., 2018). As stated earlier, a social entrepreneur notices problems in society and empathizes with individuals or groups that are facing a problem. He sees an opportunity for entrepreneurship in such an environment, which will at the same time have a positive impact on certain social groups.

Dealing with social entrepreneurship is generally associated with strong ethical principles and high morals of the individual (Bornstein, 2004; Bull & Ridley-Duff, 2018). A person engaged in social entrepreneurship is expected to behave under moral principles and socially accepted norms (Hockerts, 2015), so often in the literature on social entrepreneurship, personal moral values are presented as essential attributes of social entrepreneurs (Hemingway, 2005; Nga & Shamuganathan, 2010).

Self-efficacy, as a prerequisite for the existence of social-entrepreneurial intentions, refers to the belief in one's abilities. This characteristic is especially important for social entrepreneurs at times when they face numerous challenges and obstacles, which is why Hockerts (2015) proposed self-efficacy as a predictor of social entrepreneurship.

According to Mair and Noboa (2006) social support, i.e., the support an individual receives from his environment also plays a very important role for social entrepreneurs. This support can be in different forms (financial support, technological skills) and can be significant in all phases of social enterprise operations.

As this paper relies on the extended research model proposed by Hockerts (2015), which includes previous experience with social problems as a predictor of social entrepreneurship intention, it will be discussed below. Familiarity with social problems Ernst (2018) relates to social entrepreneurial intentions and may have an impact on entrepreneurial choices (Kautonen et al., 2010; Hockerts, 2015). Individuals who are familiar with social problems or have engaged in social work, volunteering, or have themselves encountered problems that marginalize certain people have a greater motivation to engage in social entrepreneurship (Yiu et al., 2014; Ernst, 2018). Previous experience, whether it is one's own experience with social problems or involvement in solving other people's problems, is an important source of social entrepreneurial intentions. Such experience, previous knowledge and acquired attitudes can be of importance to entrepreneurs in the process of managing a social enterprise (Politis 2008). Here, previous experience will be measured as individual practical experience in working to solve various social problems. Past experiences treated in this way indicate knowledge of socio-economic problems in society and can lead to the creation of the intention to solve these problems through the action of social enterprises (Hockerts, 2015).

Based on the above, the following research hypotheses are proposed:

H1a: Prior experience has a positive influence on empathy (path a_1).

H1b: Prior experience has a positive influence on moral obligation (path a_2).

H1c: Prior experience has a positive influence on social entrepreneurial self-efficacy (path a_3).

H1d: Prior experience has a positive influence on perceived social support (path a_4).

H2a: Empathy has a positive influence on SEI (path b_1).

H2b: Moral obligation has a positive influence on SEI (path b_2).

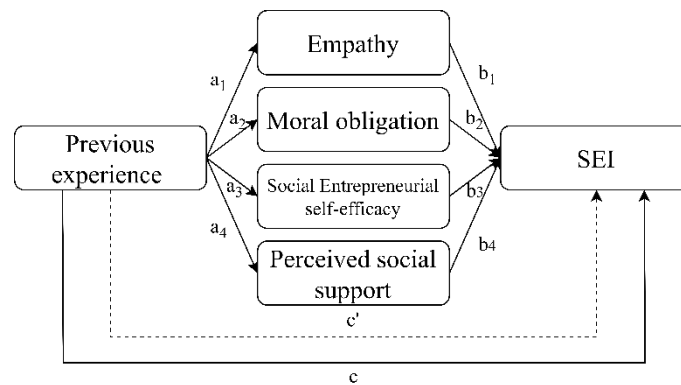
H2c: Social entrepreneurial self-efficacy has a positive influence on SEI (path b_3).

H2d: Perceived social support has a positive influence on SEI (path b_4).

H3: The influence of prior experience on SEI is parallelly mediated by empathy, moral obligations, social self-efficacy and perceived social support (path ab).

Accordingly, the succeeding research model is presented in Figure 1.

Figure 1. Research model



Source: Authors' presentation

2. Methodology of the research

2.1. Sample

By examining university students in the Republic of Serbia, the study aim was tried to be achieved. What is more, the sample consisted of students of economics that are already involved in learning programmes closely connected to the process of business establishment and management. Adding a social dimension to the enterprise's overall goal is not something that students of economics are not familiar with and generally speaking they might have previous experience in such activities. As in the majority of social science quantitative research, this study it was used a convenience sampling method, meaning that students of one university from the Republic of Serbia were surveyed.

To avoid the problem of common method variance, the questionnaire was translated from English to Serbian and backwards. Moreover, the questionnaire was sent to students using Google forms online tools and web-based formal social networks that gather students of economics. For research, the employed questionnaire was derived from the literature and original research of Hockerts (2015) who developed a questionnaire intended to measure SEI.

The majority of students were women (265 or 75.7%) while 85 (24.3%) were men. This is somewhere in the line with the student's gender structure in the surveyed faculty meaning that this sample could be considered a representative one and the study results as reliable and indicative of the practice. Having in mind that students in the Republic of Serbia are mostly between 18 and 24 years old, the mean value of respondents' age is 22.59 years. One more important socio-demographic characteristic of a sample is the percentage of students enrolled in entrepreneurship education at the faculty. There are 220 students (62.9%) that attended courses designed to enhance students' entrepreneurial skills and 130 students (37.1%) did not attend such courses at the faculty jet.

2.2. Measures

The questionnaire used in this study was previously developed by Hockerts (2015) and it paved the way in the literature on the SEI topic. Therefore, its implementation in this research is grounded and has been widely accepted in scientific circles.

2.2.1. Dependent variable

Social entrepreneurial intention (SEI) was observed as the dependent variable in the research model. They were measured using a three-item scale and assessed on the 5-point Likert scale from 1 - 'strongly disagree' to 5 - 'strongly agree' according to Hockerts (2015). An example of the statement which it is about: 'I expect that at some point in the future I will be involved in launching an organization that aims to solve social problems.'

2.2.2. Mediating variables

As mediating variables in this research model, empathy, moral obligation, social self-efficacy and previous social support were applied. All of them were measured on the same 5-point Likert scale as a dependent variable using three items for every variable (Hockerts, 2015). An example of an item measuring empathy is: 'I feel compassion for socially marginalized people.' A moral obligation measuring item is: 'Social justice requires that we help those who are less fortunate than ourselves.' Social entrepreneurial self-efficacy is assessed using the following item as an example: 'I am convinced that I personally can make a contribution to address societal challenges if I put my mind to it.' Lastly, perceives social support was measured using the next item: 'People would support me if I wanted to start an organization to help socially marginalized people.'

2.2.3. Independent variable

The independent variable of the proposed research model is previous experience or the experience that is obtained in similar business activities that involve efforts invested in resolving social problems. 'I have some experience working with social problems' is one of three items designed to measure this variable. The same 5-point Likert scale was used for that purpose.

Table 1: Reliability of the variables

Variable		Factor loadings	Cronbach α
Previous experience	PE1	.760	.777
	PE2	.834	
	PE3	.803	
Empathy	EM1	.811	.778
	EM2	.853	
	EM3	.693	
Moral obligation	MO1	.832	.866
	MO2	.775	
	MO3	.879	
Social Entrepreneurial Self-Efficacy	SSE1	.832	.686
	SSE2	.679	
	SSE3	.573	
Perceived social support	PSS1	.876	.860
	PSS2	.845	
	PSS3	.793	
Social entrepreneurial intention	SEI1	.677	.746
	SEI2	.775	
	SEI3	.853	

Source: Authors' calculation

Reliability analysis and reliability indicator Cronbach α in Table 1 represent acceptable reliability of explored variables. The threshold adopted for the Cronbach α is at least 0.6, while desirable values are higher than 0.7 (Hair et al., 2019). Factor loadings obtained through confirmatory factor analysis confirm the factor structure of the variables in question.

2.3. Data analysis

SPSS AMOS (version 23) and PROCESS macro (version 3.5.3) were used in this research for testing the hypothesis. The first SPSS extension was applied to test the reliability and validity of the adopted measurement scales. Cronbach α and the average variance extracted (AVE) were used and the cut-off point for the first was 0.6 while for the latter was 0.5 according to Hair et al. (2019). Validity of variables was also proved in the manner that the square root of AVE is greater than correlation coefficients below and next to it. Bivariate correlation indicates the existence of a relationship between values whose influence will be measured.

The second SPSS extension was used to assess the total, direct and indirect effect that variables previous experience, empathy, moral obligation, social entrepreneurial self-efficacy, perceived social support and social entrepreneurial intention have on each other. Before conducting this analysis, fulfilment of assumptions of regression analysis was tested. This further means that assumptions of normality, linearity, multicollinearity and homoskedasticity were assessed. Through the outlier identification process, ten observations were deleted, thus making a final sample of 340 observations. Mediation analysis was conducted by applying model 4 in the PROCESS macro with bootstrapping procedure on the 5,000 observations and a 95% confidence interval. Parallel mediation was tested by entering four variables in one iteration as presented in Figure 1.

3. Results of analysis

The next table represents the convergent and discriminant validity of the measurement scale. At the same time, bivariate correlation coefficients indicate a relationship between independent, mediating and dependent variables.

Table 2: Bivariate correlation

Variable	Mean	SD	AVE	1	2	3	4	5	6
1. PE	2.354	1.073	.736	.858					
2. EM	4.067	.830	.739	.074	.860				
3. MO	4.029	.902	.829	-.229**	.475**	.910			
4. SESE	3.881	.835	.661	.097	.303**	.330**	.813		
5. PSS	3.176	1.007	.823	.195**	.140**	.021	.356**	.907	
6. SEI	2.903	1.007	.707	.255**	.103	.009	.142**	.479**	.841

Note: PE – previous experience, EM – empathy, MO – moral obligation, SESE – social entrepreneurial self-efficacy, PSS – perceived social support, SEI – social entrepreneurial intention, AVE – average variance extracted; On the diagonal square root of AVE as a measurement of discriminant validity of variables; ** correlation significant on the level of $p < .01$.

Source: Authors' calculation

Table 2 indicates that between measured variables exists a positive or negative moderate correlation at the 0.01 level of significance. In an example, a positive correlation is captured between SEI, on the one side, and previous experience of respondents ($r = .255$, $p < .01$), social

entrepreneurial self-efficacy ($r = .142, p < .01$) and perceived social support ($r = .479, p < .01$), on the other side.

Table 3 presents the results of the mediation analysis. All results that have a 95% confidence interval that does not contain zero are perceived as significant and indicative for further interpretation.

Table 3: Results of mediation analysis

Relations	R ²	F	B	SE	t	p	95% CI
path $a_1 = PE \rightarrow EM$	.002	.748	.034	.040	.865	.388	[-.04; .11]
path $a_2 = PE \rightarrow MO$	.072	26.09***	-.234	.046	-5.108	.000	[-.32; -.14]
path $a_3 = PE \rightarrow SESE$	.006	2.138	.064	.044	1.462	.145	[-.02; .15]
path $a_4 = PE \rightarrow PSS$	.086	31.633***	.284	.050	5.624	.000	[.18; .38]
path $b_1 = EM \rightarrow SEI$	.301	28.736***	.370	.087	4.260	.000	[.20; .54]
path $b_2 = MO \rightarrow SEI$			-.134	.071	-1.888	.060	[-.27; .01]
path $b_3 = SESE \rightarrow SEI$			-.192	.066	-2.898	.004	[-.32; -.06]
path $b_4 = PSS \rightarrow SEI$			.439	.052	8.459	.000	[.34; .54]
path $c' = PE \rightarrow SEI$ (direct effect)			.141	.050	2.835	.005	[.04; .24]
path $c = PE \rightarrow SEI$ (total effect)	.094	35.009***	.298	.050	5.917	.000	[.20; .40]
path ab (indirect effect)			.156	.032			[.09; .22]
EM ab_1			.013	.016			[-.02; .04]
MO ab_2			.031	.020			[-.01; .07]
SESE ab_3			-.012	.011			[-.04; .01]
PSS ab_4			.125	.026			[.08; .18]

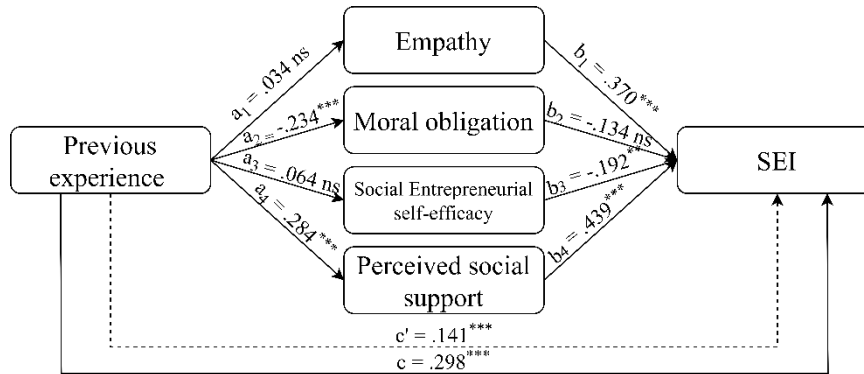
Source: Authors' calculation

Mediation analysis has shown that previous experience does not have statistically significant influence on empathy ($\beta = .034, p > .05, 95\% \text{ CI } [-.04; .11]$) and on social entrepreneurial self-efficacy ($\beta = .064, p > .05, 95\% \text{ CI } [-.02; .15]$). On the other hand, an influence of prior experience is negative and significant on moral obligations ($\beta = -.234, p < .001, 95\% \text{ CI } [-.32; -.14]$) and positive on perceived social support ($\beta = .284, p < .001, 95\% \text{ CI } [.18; .32]$). Taken together in consideration, the regression analysis detected significant positive effect of empathy ($\beta = .370, p < .001, 95\% \text{ CI } [.20; .54]$), perceived social support ($\beta = .439, p < .001, 95\% \text{ CI } [.34; .54]$), previous experience ($\beta = .141, p < .01, 95\% \text{ CI } [.04; .24]$), while an influence of social entrepreneurial self-efficacy is negative ($\beta = -.192, p < .05, 95\% \text{ CI } [-.32; -.06]$) on SEI. Total effect of independent variable on dependent variable is statistically significant and positive ($\beta = .298, p < .001, 95\% \text{ CI } [.20; .40]$). Lastly, the total indirect effect of four mediating variables is significant and positive ($\beta = .156, 95\% \text{ CI } [.09; .22]$), but observed individually previous experience has only a positive influence on SEI through perceived social support ($\beta = .125, 95\% \text{ CI } [.08; .18]$).

4. Discussion

Graphical interpretation of the research model with obtained results is illustrated in Figure 2.

Figure 2. Research results' interpretation



Source: Authors' presentation

Based on the conducted statistical analysis and interpreted results hypotheses H1a and H1c are not confirmed, while H1b and H1d are confirmed. This further means that previous experience has an influence on moral obligation and perceived social support. That influence on a moral obligation is negative meaning that with an increase in experience moral obligations to help resolve social problems decrease. Although this result is opposite to the basic analysis of Hockerts (2015) where positive influence was determined, the current study indicates that in the Serbian context such experience might be a negative factor of moral obligation to help people in social need. On the other hand, students indicate that while obtaining experience in tackling social problems, their perception of gaining social support from third parties along the way. This was also concluded in similar research (Hockerts, 2015; Milanović et al., 2022). All mediating variables except moral obligation have a significant influence on the dependent variable thus making hypotheses H2a, H2c and H2d confirmed. The influence of moral obligation is not significant as in the research of Hockerts (2015). The positive influence of variables 'empathy' and 'perceived social support' on SEI is supported in the literature, but a negative influence of social entrepreneurial self-efficacy is negative and stands out from the literature on this topic. It can be justified with the other research results indicating that entrepreneurs most often do not need competencies to be engaged in the entrepreneurial process. Ultimately, mediating effect of four mediating variables taken together in one model is significant but individually only perceived social support mediates the relationship between prior experience and SEI. For this reason, the last research hypothesis H3 is only partially confirmed. The study results are in the line with Hockerts' (2015) conclusion of the direct positive influence of previous experience on SEI.

Conclusion

The essence of social entrepreneurship and the difference between this and other forms of entrepreneurship is the creation of social value or solving social issues through innovative solutions (Martin & Osberg, 2007; Peredo & McLean, 2006). Social enterprises offer an innovative approach to overcoming the gap that exists in different spheres through a reconceptualization of the enterprise's mission and a different logic of value creation than that traditionally advocated (Brown & Wyatt, 2015). Therefore, is of great importance to direct younger generations toward entrepreneurship education and prepare them for the

entrepreneurial activities that could generate social benefits for socially endangered persons. In this way, the identification of students with SEI is vastly important. Likewise, the identification of SEI's predictors such as prior experience, empathy, moral obligation, social entrepreneurial self-efficacy and perceived social support is beneficial for educators and career managers. Therefore, in this study, the student population was targeted to measure the influence of these factors on students' SEI.

The results revealed that previous experience has a significant positive influence on SEI and perceived social support, while negative influence on moral obligation. Empathy and perceived social support have positive and social entrepreneurial self-efficacy negative influence on SEI. Only perceived social support has a significant mediating effect between previous experience and SEI. The results of the study raise awareness of the importance of different factors such as prior experience, empathy, social entrepreneurial self-efficacy and perceived social support that affect students' SEI. The most important all is that influence of students' former experience in resolving social problems is transferred to SEI through the support that they receive from the important others in their surroundings. Besides the theoretical implications of the paper that could be derived from the testing of Hockerts' (2015) research model, practical implications for career advisors and educators also stand out from the paper. They could use these results as indicative of the career management practices of students and for designing curriculums that contain tasks for practical knowledge adoption in social entrepreneurship and that promote support for students that intend to start their social enterprise.

The uniqueness of the study was achieved by conducting research during the COVID-19 pandemic when social problems were more obvious than ever. On the other hand, the paper is not without shortcomings. Future research in this field should extend the research sample to other faculties and universities and add new predictors to the studied model to increase the variance explained by the model. However, the paper contributes to the literature both theoretically and practically and its results could be considered indicative.

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Students' Decision-making to be Engaged toward Sustainable Entrepreneurship. Evidence from Albania.

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Abstract

This paper aims to emphasise one of the most critical components committed to advancing the Green Deal Agenda in Albania: the awareness regarding sustainable entrepreneurial behaviour. As the prosperity of the EU Green Deal Agenda is impacted significantly also by the contribution of the Western Balkans, analysing students' mindset to reasonably be engaged toward sustainability represents a priority research feature. Relying on the theory of planned behaviour and integrating within the framework of a decision-making model of considering future consequences, this research attempts to explain students' attitudes and intentions to become prospective sustainable entrepreneurs. An electronic survey sustained by previous research was employed to gather self-reporting data using the Likert scale. The study sample is two hundred students from both public and private universities in Albania. Ordinal regression analysis is run through SPSS software based on a quantitative methodology to identify behaviour patterns. The contribution of this paper is to address the issues to be considered by policymakers in adapting higher education policies that promote sustainable entrepreneurial behaviour and that lead toward a holistic system thinking, where consideration of future consequences is prioritised.

Keywords: Triple bottom line, Decision-making, Entrepreneurial behaviour, Sustainable entrepreneurship.

1. Introduction

It was the year 1987 when the United Nations Brundtland Commission brought to the centre of attention the concept of sustainability by defining the new agenda of our societies as the ability of society's members to meet their current needs without jeopardising the capability of the succeeding generations to encounter their requirements (Keeble, 1988). This new plan presented by the UN many years ago is translated into a set of SDGs (sustainable development goals), a prerequisite to be completed to provide our societies with a more favourable environment and better social welfare. Part of this new pathway is also the Balkan Countries, whose contribution is essential; for this reason, they are also working to co-collaborate in achieving the Green Deal Agenda through the project EU4 Green Recovery (Gagarina et al., 2012).

Under the background of these challenges, this study investigates students' intentions toward sustainable entrepreneurship by relying on TPB and the decision-making logic of the

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Consideration for Future Consequences (CFC) concept. The consideration for future consideration construct has been defined by research as an essential predictor of pro-green behaviour (Bruderer Enzler, 2015). Other scholars have examined how the context affects the link between concerns for future results and decision-making (Demarque et al., 2013).

Additionally, studies reveal that a clearer emphasis on the future and an attentive, present orientation are good indicators of sustainable conduct. (Wittmann & Sircova, 2018). The propensity to place less importance on things farther away in time is referred to as "temporal myopia" (Kim & Zauberan, 2009; Wittmann & Paulus, 2008). This article explores the connection between students' sustainable conduct as potential entrepreneurs and their future positioning, as determined by the CFC scale. The CFC scale used in this study is characterised as two-dimensional, which means it measures concern for the immediate repercussions of behaviour and future implications.

However, research on entrepreneurial goals in sustainable entrepreneurship is still in its early stages, and the study of sustainable business intentions is a growing area of study in that literature. For this reason, we decided to address this issue in the Albanian context. We have employed a quantitative methodology in analysing the relationship between variables. Descriptive statistics offer an overview of attitudes toward sustainability, subjective norms that support sustainable behaviour, perceived behaviour control to undertake sustainable entrepreneurship, and concerns about future or immediate concerns about the consequences of behaviour. A trustworthiness examination is conducted to guarantee the internal steadiness of the variable constructs. Then correlation analysis is applied to distinguish the direction of the link within variables and the strength or weakness of the relationships between the variables. The output of the correlation analysis, including the significance of the results, leads to the next step of our research. An ordinal regression analysis based on the proportional odds model is run to scrutinise the behaviour patterns within variables.

The outcomes approve the contribution of the TPB in the sustainable entrepreneurship field and explicitly the entrepreneurial intentions of students as prospect entrepreneurs to initiate a sustainable business. Also, the findings show that reflecting on future results influences preferences toward behaviour. The findings offer suggestions for designing appropriate and efficient efforts to encourage students' intents toward sustainability by providing study programs that support the inclusion of a sustainability orientation in their curricula.

2. Literature Review

Several authors have considered sustainable entrepreneurship as an instrument that creates impact not only at an economic level but also in society and the environment. In this frame, McMullen (2011) and Urbano et al. (2020) have acknowledged the impact and capacity of sustainable entrepreneurship as a route that could settle obstacles and issues behind the economic skeleton and produce eco-friendly awareness and social prosperity. Another component is added to this conception by Masciarelli & Leonelli (2020), as they view sustainable entrepreneurship as a course that, through the identification and recognition of entrepreneurial opportunities, also delivers psychological effects besides economic, social, and environmental value.

Researchers have defined sustainable entrepreneurship as a subject that addresses four market imperfections: information asymmetries, inefficient companies, incorrect pricing mechanisms, and externalities (Cohen & Winn, 2007). This perspective is oriented toward economics. Furthermore, the authors argue that business firms' capacities are not related only to contributing toward causing environmental degradation but can lead the world to the next

industrial revolution. In this case, the idea is precisely about sustainable entrepreneurship (Cohen & Winn, 2007). Other researchers also theorise sustainable entrepreneurship as a phenomenon aiming to capture opportunities where market failures exist and solve those market failures (Dean & McMullen, 2007).

According to authors (Tilley & Young, 2006), a person is referred to as a sustainable entrepreneur when they combine economic, social, and environmental entrepreneurship into a business with sustainability as both a goal and a technique of wealth generation. Also, Kuckertz and Wagner (2010) specify that entrepreneurs focused on sustainable development aim to balance the triple bottom line in their daily operations. Furthermore, Hummels and Argyrou (2021) point out that society needs sustainable entrepreneurs to redefine sustainable development in a way that acknowledges the planetary boundaries as severe constraints on economic advancement, environmental quality, and human development.

The link between pro-environmental behaviour, a long-term view, and consideration for future consequences has been empirically demonstrated by authors (Milfont et al., 2014).

According to Strathman et al. (1994), consideration for the future consequences specifies the degree to which potential upcoming results of individuals' current behaviour are considered and the potential to which they are affected. The author also designed a specific scale comprising elements that reveal regard for substantial future consequences and other statements indicating vital concern for immediate effects. Yasir et al. (2021) studied the students' intentions on sustainable entrepreneurship by combining the constructs of the TPB with consideration for future consequences construct, environmental values, and social values. They disclosed that the students' sustainable entrepreneurial intentions were indirectly influenced by respect for future outcomes. Furthermore, scholars (Yasir et al., 2021) found that concerns about immediate consequences negatively impacted students' intentions to be sustainable entrepreneurs. The same conclusion was observed by Arnocky et al. (2014), who discovered that the reduced immediate concerns positively modulate the relation between long-term perspective and sustainable behaviour.

Joireman and King (2016), based on the conceptualisation of CFC as designed by Strathman et al. (1994), considering both the immediate and the future outcomes, explain that individuals with a forward-thinking attitude might mitigate the advantages of momentary pleasures by carefully considering future consequences. Nevertheless, they are far less progressive if they are more concerned with the immediate effects of their attitudes and behaviours because they are more susceptible to those effects (Joireman & King, 2016). In this logic, Arnocky et al. (2014) assert that starting a sustainable business undoubtedly involves both short-term and long-term benefits, as is the case with sustainable behaviour. When considering sustainable entrepreneurs as the critical actor that undertakes this form of entrepreneurship, scholars (Majid & Koe, 2012) describe them as individuals with a mindset of future orientation, directing their energies toward achieving the triple bottom line through this approach objectives. Yasir et al. (2021) also emphasise that people who are sensitive to future consequences may display more favourable attitudes and mindsets toward sustainable business and behaviour because they are more prepared to give up current rewards for the needs of future generations.

One of the most widely employed models by scholars (Bayrón, 2013; Boudreaux et al., 2019; Lanero et al., 2015; Tran & Von Korflesch, 2016) to scrutinise and theorise entrepreneurial intentions is the socio-cognitive model. Several studies have been conducted to identify students' entrepreneurial purposes in undertaking an entrepreneurial activity. Mainly, scholars have addressed the antecedents that could lead toward those intentions. In this frame, several investigations incorporated Ajzen's theory (Ajzen, 1991) to explain entrepreneurial intentions. They include: integrating TPB with the social cognitive method to explore the roots of the

entrepreneurial purposes of 438 university students in Malaysia (Al-Jubari et al., 2019); implementing the TPB to explore the career plans of 1225 undergraduate business administration students (Van Gelderen et al., 2008); exploring the entrepreneurial mindset of 719 polish students (Wach & Wojciechowski, 2016), etc.

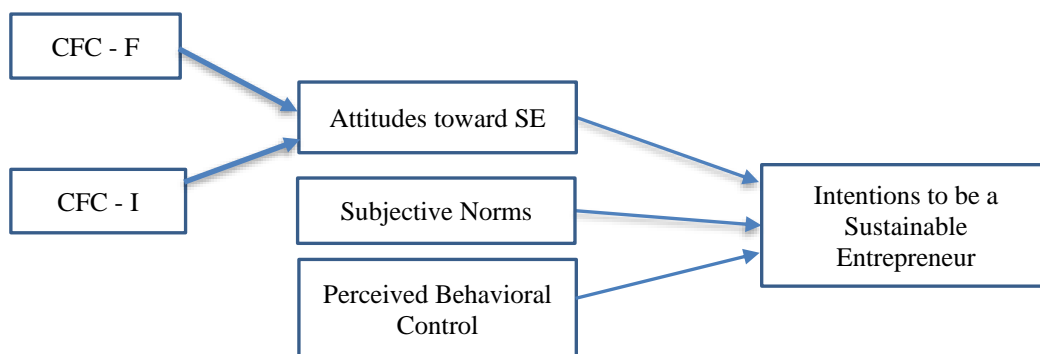
Also, TPB has been executed in the setting of sustainable entrepreneurship as a theoretical framework to scrutinise the intentions of sustainable entrepreneurs' behaviour. Scholars like Joensuu-Salo et al. (2022) implemented the constructs of TPB with the sustainable entrepreneurship concept to explain the entrepreneurial intents of 486 higher education students and 642 secondary-level students. Agu (2021) also investigated students' intentions to be sustainable entrepreneurs by employing TPB and looking into education's facilitating function in sustainable business.

According to Krueger et al. (2000), entrepreneurial aspirations are essential to comprehending entrepreneurship since they capture the desire to launch or operate a business. Regarding sustainable entrepreneurship, Kuckertz and Wagner (2010) examined the impact of sustainability orientation on engineering and business students' entrepreneurial ambitions. They discovered that people more concerned with sustainability exhibit greater entrepreneurial intent. Thelken and de Jong (2020) disclosed that high CFC-I positively impacts positive attitudes toward sustainable business. Vuorio et al. (2018) discovered that attitudes toward sustainability and the perceived attractiveness of starting a business drive sustainability-oriented entrepreneurial goals.

3. Methodology

In this study, a positivist approach and a quantitative methodology are employed. We adopted the conceptual model from Thelken & de Jong (2020) to explore the relationship between consideration for future consequences and the other constructs of the TPB to discuss if concerns for future or immediate effects impact sustainable entrepreneurial intentions. Quantitative data are collected by using an electronic questionnaire as an instrument of data collection. Thelken & de Jong (2020) used a 12-item scale to measure CFC-F and CFC-I based on the work of Strathman et al. (1994) and Joireman & King (2016). Also, Thelken & de Jong (2020) redesigned in terms of entrepreneurial sustainability the items constructed by Moriano et al. (2012) to measure subjective norms and the work of Liñán & Chen (2009) to measure perceived behavioural control and intentions.

Figure 1: Theoretic Model



Adapted from Thelken & de Jong (2020)

According to the conceptual model presented in figure 1 above, the study hypotheses are formulated as follows:

H1: Individuals who carefully consider how their actions will affect the future will have positive attitudes toward the sustainable enterprise.

H2: Individuals concerned with the immediate effects of their actions will have negative attitudes toward sustainable entrepreneurship.

H3: Positive attitudes toward sustainable entrepreneurship might influence the intention to run a sustainable business.

H4: Intentions to launch a sustainable business are positively impacted by strong subjective norms favouring sustainable entrepreneurship.

H5: A high perceived behavioural control of becoming a sustainable entrepreneur benefits one's intentions to launch a sustainable firm.

The following section presents a statistical analysis to test the study hypothesis.

4. Results and discussion

4.1. Sample demographics and descriptive analysis

An electronic survey carried out in 2022 served as the data source for this investigation. The survey was distributed to first-year and second-year students of bachelor's and master's programs. In total, 200 questionnaires were considered valid for elaboration and were analysed. The majority of respondents result to bachelor's students. Also, the majority of them are females. Table no.1 summarises the main characteristics of the sample.

Table 1: Demographic profile of the study sample (N=200)

Age	Gender	Education Level
18-20 years 26%	Female 61%	Bachelor 75.5%
20-22 years 47.4%	Male 39%	Professional Master 12%
22-24 years 15%	Total 100%	Master of Science 12.5%
>24 years 11.5%		Total 100%
Total 100%		

Source: Authors

Table no.2 figures the descriptive statistics for the study variables. The data (comparing the mean values between CFC_F items and CFC_I items) shows that the study sample is more concerned about future consequences than about the immediate results of their actions. Also, students show strong affirmative attitudes toward sustainable entrepreneurship, supportive subjective norms, robust perceived behavioural control to be sustainable entrepreneurs, and positive intentions to be sustainable entrepreneurs.

Table 2: Descriptive statistics

Constructs	Items	Mean (SD)
Consideration for Future Consequences – Future	CFC_F_1	6.00 (1.421)
	CFC_F_2	5.35 (1.625)
	CFC_F_3	4.72 (1.839)
	CFC_F_4	5.77 (1.314)
	CFC_F_5	5.79 (1.399)
Consideration for Future Consequences-Immediate	CFC_I_1	3.14 (1.392)
	CFC_I_2	2.85 (1.489)
	CFC_I_3	4.97 (1.692)
	CFC_I_4	2.56 (1.410)
	CFC_I_5	2.69 (1.437)
	CFC_I_6	3.16 (1.705)
	CFC_I_7	3.19 (1.525)
Attitudes (ATT)	ATT_1	5.89 (1.250)
	ATT_2	6.09 (1.262)
	ATT_3	6.25 (1.216)
	ATT_4	6.00 (1.301)
	ATT_5	6.90 (1.295)
Subjective Norms (SN)	SN_1	5.91 (1.672)
	SN_2	5.12 (1.750)
	SN_3	4.61 (1.851)
Perceived Behavioural Control (PCB)	PCB_1	4.32 (1.664)
	PCB_2	4.88 (1.585)
	PCB_3	4.78 (1.550)
	PCB_4	5.06 (1.409)
	PCB_5	4.61 (1.553)
Intentions (INT)	INT_1	5.00 (1.576)
	INT_2	5.46 (1.503)
	INT_3	5.47 (1.601)

Source: Authors

4.2. Reliability analysis and correlations

This section discusses the results related to the internal consistency of the variable constructs for this study and the correlation analysis results. Table no.3 summarises the reliability analysis counting on Cronbach's Alpha statistic. All the variables display an acceptable level of internal consistency based on Cronbach's Alpha values, indicating the suitability of continuing the further analysis steps.

Table 3: Internal consistency of variables - Reliability analysis

Variables	Cronbach's Alpha	No. of Items
CFC-F	.796	5
CFC-I	.706	7
Subjective Norms	.713	3
Attitudes	.873	5
Perceived behavioural control	.837	5
Intention	.830	3

Source: Authors

We have computed the new scale variables to proceed with the correlation analysis. Before exploring the link between the predictors and outcome variables in a regression model to identify behaviour patterns, the accurate statistical control is the correlation analysis that explains the significant and robust correlations to be further inspected. In the case of the ordinal data, Spearman's rho is the proper correlation to be applied. Tables no.5 and no.6 exhibit Spearman's rho statistics for each one of the new scale variables computed.

Table 4: Correlation-Spearman's rho: TPB constructs, CFC-I, CFC-F

Spearman's rho (Sig.)	Strong intentions to be a sustainable entrepreneur
Favourable attitudes toward being a sustainable entrepreneur.	.692 (.006) **
Strong perceived behavioural control to be a sustainable entrepreneur.	.516 (.000) **
Supportive subjective norms to be a sustainable entrepreneur.	.070 (.328)
Strong considerations about future consequences.	.698 (.005) **
Strong considerations about immediate consequences.	.069 (.330)

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Authors

Table 5: Correlation-Spearman's rho: Attitudes, CFC-I, CFC-F

Spearman's rho (Sig.)	Favourable attitudes toward being a sustainable entrepreneur.
Strong considerations about future consequences.	.033 (.640)
Strong considerations about immediate consequences.	-.045 (.528)

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Authors

4.3. The statistical study model proposed

When the dependent variable is classified as an ordinal variable, the appropriate regression analysis to identify the pattern of behaviour within the variables is ordinal regression. Concretely, we have employed the Proportional Odds (PO) model of the ordinal regression for the variables included in this study. According to this model, the link within the predicted and predictive variables is parametrised as the following:

$$\gamma_i^{(j)} = \ln \text{odds } (Y_i \leq j) = \ln \left(\frac{\gamma_i^{(j)}}{1-\gamma_i^{(j)}} \right) = \ln \left(\frac{P(Y_i \leq j)}{P(Y_i > j)} \right) = \theta^{(j)} - (\beta_1 X_{1i} + \dots + \beta_k X_{ki})$$

Where:

$Y_i, X_{1i}, \dots, X_{ki}$ are the observed data for sample included in the study and i represents the no. of observation and takes values from 1 to n . $i = 1, \dots, n$

Y -is the dependent variable and can take values in C ordered categories, $j = 1, \dots, C$, and probabilities $\pi^j = \Pi(Y=j)$

X_1, \dots, X_k are the k -independent variables

β_1, \dots, β_k are the regression coefficients for each predictor from 1 to k and $\theta^{(j)}$ the intercept coefficient.

Each observation of the predicted variable Y_i is independent. This regression explains how a set of predictor variables defines the chance of the predicted variable to be to a specific ordinal category by modelling the cumulative probability of a case. According to Liu et al. (2011), the purpose of the Proportional Odds ordinal regression model is to explain how one or more explanatory variables could define the dependent variable by forecasting the probability of a case being at or below or beyond a particular category of an outcome variable.

To estimate the student's willingness to be sustainable entrepreneurs and the way this willingness is designed by consideration for future or immediate consequences, attitudes, subjective norms, and perceived behavioural control according to the theoretical framework, the following model is proposed:

$$\gamma_i^{(j)} = \theta^{(j)} - (\beta_1 CFC_F_i + \beta_2 CFC_I_i + \beta_3 ATT_i + \beta_4 SN_i + \beta_5 PBC_i) \text{ where } j=1, \dots, 7$$

Where: Y represents students' intentions to be sustainable entrepreneurs.

But, based on the results generated from the correlation analysis (Spearman's rho, table no.4, and table no. 5 in the previous section), the above-mentioned ordinal regression equation would take the following form:

$$\gamma_i^{(j)} = \theta^{(j)} - (\beta_1 CFC_F_i + \beta_2 ATT_i + \beta_3 PBC_i) \text{ where } j=1, \dots, 7$$

The primary supposition of this regression model is the assumption of proportional odds. In the next section, this hypothesis will be tested to evaluate the appropriateness of applying this regression model for this study's proposed model.

4.3.1. Indicators adequacy for the proposed model

The primary outputs from the ordinal regression analysis are the models' quality indicators. These indicators aim to offer an evaluation of the correctness and suitability of the proposed model. So, before interpreting the effects of the predictors in this section, we will explain the parameters that indicate the study model quality. The first parameters of the model adequacy that SPSS defines in the output "Model Fitting" show that -2 log-likelihood (-2LL) for the Final model takes lower values compared with the Intercept Only model (see table no.6). Furthermore, this difference within the baseline and the final model is showed at the Chi-square to test value (Chi-Square = 78.166), by considering the significance of this test (p-value = .000)

we can conclude that the Final model offers a better prediction of the explained variable compared with the baseline model (see table no.6).

The second output processed by the software is the Goodness of Fit indicators. The components of this output are Pearson’s chi-square value and Deviance chi-square values (see table no.6). These two statistics aim to explain if the data observed produces consistency with the fitted model. To check the goodness of fit for the study model, we need to test the null hypothesis that the model is a good fit compared with the alternative assumption that the model does not fit and fails to reject the null hypothesis. Considering the results (see table no.6), respectively, Pearson chi-square ($\chi^2 (2870) = 2738.442$, p-value=.960), and Deviance chi-square ($\chi^2 (2870) = 933.351$, p-value=1.000) and comparing the p-values with the significance level $\alpha = 0.05$ we conclude that the null hypothesis is not rejected, meaning that the model is a good fit.

To further analyse and confirm to what extent the model is a good fit or to what extent the full model explains the data fit better than the intercept-only model, we inspect another indicator, the pseudo-R square statistic. We specifically refer to the Nagelkerke statistic (see table no.6) to clarify that the model containing the complete set of explanatory variables displays a 32.5 % enhancement compared to the null model. Another crucial indicator to confirm the model appropriateness is the Test of Parallel Lines, which supports us in checking the primary assumption of the PO ordinal regression or the proportional odds (PO) assumption. Given the output generated (see table no.6), we will control the null hypothesis (The ordinal model has one set of coefficients for all thresholds) with the alternative hypothesis (The ordinal model has a separate set of coefficients for each threshold). Refereeing the results of the test of parallel lines (see table no.6), we identify a non-significant result (p-value = .102), so we fail to reject the null hypothesis, and the proportional odds assumption is checked.

Table 6: Adequacy indicators for the tested ordinal logistic regression Model

Models’ quality	Model 1: CFC-F or CFC-I and Attitudes toward Sustainable Entrepreneurship	
1. Model Fitting		Final
a) -2 Log Likelihood	Intercept Only -2LL = 1017.298	-2LL = 939.132
b) Chi-Square		Chi-Square = 78.166 df=3, Sig (p-value) = .000
2. Goodness-of-Fit	Pearson	Deviance
– Chi-Square	2738.442	933.351
– df	2870	2870
– Sig.	.960	1.000
3. Pseudo R-Square		
– Nagelkerke	.325	
4. Test of Parallel Lines	Null Hypothesis	General
a) -2 Log Likelihood		858.452
b) Chi-Square	939.132	Chi-Square = 80.680 df=48
– df		
– Sig.		Sig (p-value) = .102

Source: Authors

4.3.2. Parameter estimation analysis

In this section, we will explain the results of the parameter estimation analysis. The output for the parameter estimation is presented as follows (table no.7):

Table 7: The probability of being a sustainable entrepreneur and the parameter estimation

The model				
Explanatory Variables	Estimate	SE (Std. error)	Wald	Sig. (p-value)
CFC- F	.276	.123	5.015	.002
Attitudes	.351	.124	8.064	.005
Perceived Behavioural Control	.889	.121	54.391	.000

Source: Authors

Considering the Wald test result for each one of the predictors of the model, we can distinguish that all the Wald statistics for the parameters that aim to predict the intention toward being a sustainable behaviour are significant as the p-values are lower or equal to the level of confidence set with $\alpha = 0.05$. Explicitly, for the explanatory variable CFC-F the estimate coefficient is $b = .276$ (Std. error = .123, p-value = .002), for the other explanatory variable Attitudes the estimate coefficient is $b = .351$ (Std. error = .124, p-value = .005), and for the other independent variable Perceived Behavioural Control the estimate coefficient is $b = .889$ (Std. error = .121, p-value = .000).

Analysing according to the model of the regression the parameters for each one of the explanatory variables, we can conclude that: consideration for future consequences is a positive and significant predictor, meaning that students that are more concerned about future consequences of their actions display strong intentions to be sustainable entrepreneurs; also, attitude is a positive and significant predictor, meaning in this case that students that demonstrate favourable attitudes toward sustainable entrepreneurship have strong intentions to be sustainable entrepreneurs. And lastly, the third explanatory variable- perceived behavioural control, is a positive and significant predictor, meaning that students that display robust perceived behavioural control to be sustainable entrepreneurs have intentions to be sustainable entrepreneurs.

To better explain the contribution of each of the predictors, we also have executed through the SPSS software a generalised linear model for this ordinal regression to obtain the odd ratios. The odd ratios for each one of the predictors are presented in the following table (table no.8):

Table 8: Ordinal Logit Regression- Odd Ratios

Predictor	Odd ratios (p-values)
CFC_F	1.318 (.002)
Attitudes	1.421 (.005)
Perceived Behavioural Control	2.433 (.000)

Source: Authors

Based on the odd ratios, we could further explain this study model as follows:

About “Consideration for future consequences” (OR = 1.318, in this case, $OR > 1$), meaning that for each unit increase on “consideration for future consequences”, the odds of a student with deeper concerns about future consequences falling into a higher level of intentions to be

a sustainable entrepreneur changes by a factor of 1.318. Regarding “Attitudes” (OR = 1.421, in this case, OR > 1), meaning that for each unit increase in “attitudes toward sustainable entrepreneurship”, the odds of a student with favourable attitudes toward sustainable entrepreneurship falling into a higher level of intentions to be a sustainable entrepreneur changes by a factor of 1.421. Relating to “Perceived Behavioural Control” (OR = 2.433, in this case, OR > 1), meaning that for each one unit increase in “perceived behavioural control to be a sustainable entrepreneur”, the odds of a student with robust perceived behavioural control to undertake sustainable entrepreneurship falling into a higher level of intentions to be a sustainable entrepreneur changes by a factor of 2.433.

5. Conclusions and Prospects

We investigated the consideration for future consequences model with two factors and the theory of planned behaviour to determine how they could influence students’ intentions to start a sustainable business. Precisely, we ascertain which constructs of the TPB and which factor of CFC lead to higher senses toward sustainable entrepreneurship. Not all the raised hypotheses were verified (the first and the second hypotheses are rejected), as we expected attitudes toward sustainable entrepreneurship to be affected by considering future consequences. But, Spearman's rho correlation within those variables indicated a weak and insignificant relationship. This would be better explained if other components such as demographics and other psychological factors were included model and inspected their contribution as mediators within attitudes and considerations toward future consequences.

The fourth hypothesis was also rejected as this study's relationship between subjective norms and intentions toward behaviour was statistically unimportant. We included the consideration for future consequences in the ordinal regression model based on the moderated and significant relationship we found within this variable and intentions toward sustainable behaviour. The proposed model explains the purposes of starting a sustainable business as a function of considerations for future consequences, perceived behavioural control, and attitudes toward sustainable entrepreneurial behaviour. According to earlier research (Krueger et al., 2000; Thelken & de Jong, 2020), the desire to launch a sustainable business is independent of how well social network members are but is dependent on attitudes and perceived behavioural control. In other words, sustainable entrepreneurs may deviate from accepted business practices and alter accepted beliefs about the (perceived) function of businesses in society. This might help to explain why people don't need to decide to become sustainable entrepreneurs with the (perceived) support of their close friends or family (Thelken & de Jong, 2020).

There are various ways in which this study adds to the body of literature. First, we evaluate sustainable entrepreneurship using sustainable entrepreneurial intentions, adding to the debate on sustainable entrepreneurs. To the best of our knowledge, this study is the first to consider the goals toward sustainable business and its precursors within the context of TPB and CFC in the Western Balkans. Additionally, this study has inferences for the entire community and the environment because it intends to assist the SDGs by demonstrating how a sustainability-oriented mindset can foster sustainable entrepreneurial intents. This study aims to add more value to the sustainable world in light of these circumstances. Our study has several drawbacks as well. We only consider one factor that might affect attitudes toward conduct. Still, as Wittmann & Sircova (2018) point out, the time dimension (CFC) can only partially explain behavioural variation in this example. Therefore, more elements, including demographics, values, and even psychological capital, need to be considered in future studies (Tang, 2020). Finally, this study only looked at the Albanian setting. Still, future research might look at other nations dealing with the same issues and obligations related to the Green Deal Agenda.

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The Effect of Entrepreneurial Orientation to Economic Benefits, with Business Strategy and Biosecurity as Mediators: A Research about Husbandry in Greece

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Abstract

This paper deals with a model that studies the effect of entrepreneurial orientation, strategy and biosecurity on the financial benefit of stock-farms, using biosecurity and strategy as intermediate variables. To carry out this study, panhellenic research was conducted with the aid of an e-questionnaire, designed on google forms. In summary, 280 answers were collected from husbandry holdings. The forementioned measures were designing latent variable constructs and indirect effects were included in the model. This led to applying the SMART-PLS software to process the data. The results showed that all the direct and indirect effects of the model were statistically significant, qualifying biosecurity and strategy as partial mediators, confirming all research hypotheses. The paper highlights the financial value of biosecurity, as well as the need to improve the entrepreneurial orientation of stock-farms in Greece, based on which a concrete and targeted strategy will be structured. In addition, policymakers should promote biosecurity and financially support entrepreneurs to adopt all the necessary biosecurity measures. This research provides research space for applying the same model on the husbandry sector of other countries.

Keywords: Entrepreneurial Orientation, Biosecurity, Strategy, Husbandry, Greece

1. Introduction

Greece has a long tradition in animal husbandry (Filioglou *et al.*, 2021). However, the sector is currently struggling. Studying the years for which there is information about all the observables so that there can be a correspondency, between 2013 and 2016 husbandry holdings in Greece were decreased by 12%, animal husbandry workforce was decreased by 10% and animal output value was decreased by 3%. (Eurostat, 2016a, 2016b; Hellenic Statistical Authority, 2013, 2016b). Regarding livestock, it is currently distributed as follows (Eurostat, 2016c):

Table 1: Livestock distribution in Greece

Horses, asses, mules and hinnies	Bovine animals	Swine	Sheep	Goats	Poultry	Rabbits, breeding females
13.410	459.090	170.750	822.760	354.170	280.410	2.290

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As previously mentioned, the above information regard stock-farms. But what happens with the entrepreneur, who is the core of Small Medium Enterprises (SMEs) (part of which are stock-farms)? Actually entrepreneurial orientation in Greek businesses is low (Sotiropoulou *et al.*, 2021). Therefore, business strategy does not exist in the majority of greek Small Medium Enterprises (SMEs) (Vlados, 2021). Stock-farms are no exception. However, the last 10-15 years a new kind of innovation has started to be implemented that could help stock-farms considerably. That is, biosecurity, which regards a set of measures within the stock-farm itself, such as isolation, motion and hygiene control, in order to prevent disease transmission among livestock units, leading to significant economic benefits. The problem raised is whether, in the case of Greek livestock, the right entrepreneurial orientation combined with a targeted strategy and biosecurity measures can lead to economic benefits. Thus, the aim of this paper is the study of the SEM model, which studies the effect of entrepreneurial orientation on economic benefits, with entrepreneurial strategy and biosecurity as intermediate variables.

The significance of the paper lies in highlighting biosecurity as an innovative procedure whose implementation can greatly and financially help a livestock unit. Prevention is always preferable to treatment, so biosecurity can protect the health of livestock and depreciate capital expenditure on livestock treatment in case of disease or replacement in case of loss due to disease transmission. At the same time, we highlight the financial benefit livestock owners can have from the improvement of entrepreneurial orientation of their enterprise and hence, the creation of a targeted strategy for achievement of goals.

The structure of the paper is as follows: There is a literature review in which three concepts will be analyzed: entrepreneurial orientation, business strategy and biosecurity. For each of them we will give its definition, its significance for the enterprise and its dimensions. Then there is the methodology, where we will explain the design of variables, the method of data collection, the sampling technique and the data processing. Later on, the results will be presented, discussed and lead to a series of useful conclusions, as well as practical and research implications.

2. Literature

2.1. Entrepreneurial Orientation

Entrepreneurial orientation regards “entrepreneurial top management style (i.e., goals, beliefs, dominant logic, mindset, leadership, communication), organizational configuration (i.e., processes, routines, structure, culture), and new entry initiatives (i.e., new products, services, markets, organizations)” (Wales *et al.*, 2020). There is a series of approaches on this concept. The most widespread are those of Miller (1983)/Covin *et al* (1989) and Lumpkin and Dess (1996). The first approach regards that the entrepreneurial orientation of an enterprise consists of the qualities of innovativeness, risk-taking, proactiveness, which has to covary positively. The second approach regards that the entrepreneurial orientation of an enterprise consists of the qualities of innovativeness, risk taking, proactiveness, competitive aggressiveness and autonomy, which do not have to strongly and positively covary. Some years later, Covin and Wales (2012), offered a series of approaches on entrepreneurial orientation, leaving the use of the approach to each researcher’s discretion. This does not mean that there have not been other approaches on this concept. For example, that of Wang’s (2008), where entrepreneurial orientation consists of four dimensions: market proactiveness, competitive aggressiveness, firm risk taking and firm innovativeness. A newer approach redefines entrepreneurial orientation as a multi-dimensional structure consisting of two non-interchangeable dimensions:

entrepreneurial behavior (innovativeness and proactiveness) and the attitude of the administration towards risk (risk-taking) (Anderson *et al.*, 2015).

Analyzing the dimensions of the previously mentioned approaches, innovativeness is regarded as the effort of an enterprise to be involved in creating and supporting new ideas, innovation, experimenting and creative procedures. Proactiveness is defined as the ability to predict future problems, needs and changes. Risk-taking regards the enterprise's ability to make decisions and channelling its resources towards a concrete orientation, knowing that it involves, within reason, a certain degree of uncertainty of the result. Competitive aggressiveness refers to the enterprise's propensity to challenge its competitors directly and intensely. Autonomy has to do with the organizational conditions required, so as to facilitate the independency of the organizational actors in order for them to fulfil a new idea or vision (Lumpkin & Dess, 2001, 1996; D. Miller & Friesen, 1978; Venkatraman, 1989).

Entrepreneurial orientation is considered to be a fundamental factor for entrepreneurial success (Singh *et al.*, 2021). It assists decision making and enhances economic performance (Donbesuur *et al.*, 2020; Laskovaia *et al.*, 2019). In addition, it makes the cooperation between enterprises more efficient (Dung *et al.*, 2020). Thus, the first research hypothesis of the paper is created:

H1: Entrepreneurial orientation affects positively and statistically significantly business economic benefits.

2.2. Business Strategy

Business strategy could be described as all the operations of an enterprise with a view to achieve all its goals over time (Vlados & Chatzinikolaou, 2019). Of course, a plethora of definitions of business strategy has been developed. The following are some of them. «Strategy is a common policy between an enterprise's activities and its products or purchases, which determine the fundamental nature of business strategy, in the past, present and future» (Chladkova & Formankova, 2016). «Strategy is determining an enterprise's fundamental, long-term goals and aims, adopting a series of actions and defining the necessary means for the achievement of these goals» (Bucheli *et al.*, 2010). «Strategy is forming a mission, setting goals or aims achieved by adopting policies and plans that are outlined so as to determine the extent of business activity and identity» (Christensen *et al.*, 1982). It regards decisions made on all levels of an enterprise's hierarchy (Vlados, 2021). The implementation of an enterprise's strategy can be carried out in a series of steps, such as strategic analysis, design and selection of the strategy, materialization, strategy implementation and control (Scholes *et al.*, 1998). Alternatively, it can be carried out by following the steps mentioned by Vlados (2019): Determining the enterprise's objectives, analyzing its external and internal environment, setting Strengths, Weaknesses, Opportunities, Threats (SWOT), proposing and evaluating alternative strategies, building an integrated strategy and creating tactics and policies of implementation and control of the chosen strategy. The most popular strategies according to current literature are focusing on high quality, focusing on one or a small number of key goods or services, focusing on reaching out to new customer groups, focusing on customer specific solutions and focusing on competitive pricing (Grudkina *et al.*, 2021; Pachekrepopol *et al.*, 2021; Ryabova *et al.*, 2020).

Establishing a targeted business strategy contributes to the enterprise's higher economic output. (Ukko *et al.*, 2019). This is a distinct and timeless feature of entrepreneurship (Boyer *et al.*, 2002; Cron & Sobol, 1983). The second research hypothesis of this paper is, thus, created:

H2: Business strategy affects positively and statistically significantly business economic benefits.

2.3. Biosecurity

By the term «biosecurity» we mean all the measures aiming at preventing infectious diseases in livestock (NSW Government, 2015). These measures are grouped in three categories: Isolation, traffic control, sanitation (Kouam & Moussala, 2018). In each category a series of measures is allocated, as they were studied by Kouam *et al.* (2018).

Table 2: Biosecurity measures

Isolation	Traffic control	Sanitation
- Farm not located on main road side	- Ban sign board against companion animals present	- Poultry barn wall is roughcast
- Farm close to a commercial poultry	- Visitors ban sign board present	- Poultry barn with concrete floor
- Farm close to pig farms	- Other domestic animal have access to the farm	- Footbath is functional
- Farm close to local poultry farms	- Wild birds have access to farm premises	- Gutter is present
- Farm close to a stream	- Rodents have access to farm premises	- Rodents have access to stored feedstuff
- Building orientation based on the direction of the dominant wind	- All-in all-out management system applied	- Sanitation lock complies with standards
- Fence around the farm yard perimeter	- Visitors allowed to touch poultry	- Dead animal storage facility is present
- Airing openings of poultry house protected by a wire mesh	- Farming equipment specific to each poultry house	- Draining channel present
- Presence of other fowl species on the farm	- Linear flow principle applied	- Holes are found on the poultry barn wall
- Area around the farm cleaned and cleared of trees and bush	- Visitors record book present	- Manure stored within the farm premises
	- Workers assigned to a specific poultry house	- Workers wear dedicated clothing (clean coverall and boots) on farm
		- Visitors are disinfected prior entering the farm
		- Rodent control program is present
		- The litter is wet around feeders and drinkers
		- Chicks from different origins are mixed
		- Mortality record book is present
		- Farming equipment is clean

Biosecurity is forming part of an enterprise's innovation framework. In fact, it is classified as an innovative process; that is, a form of innovation especially regarding Small Medium Enterprises (SMEs) (Saleem *et al.*, 2020). As it is widely known, innovation is a concept closely associated with an enterprise's economic benefits (Pradhan *et al.*, 2020). Thus, the third research hypothesis of this paper is created:

H3: Biosecurity affects positively and statistically significantly business economic benefits.

2.4. The mediating role of business strategy and biosecurity

The mediating role of business strategy has been widely studied in literature. To be more specific, we have studied the model of the effect of entrepreneurial orientation on business performance, with business strategy as an intermediate variable. In fact, this research has been done in countries where different conditions prevail in each of them, e.g. Italy, Pakistan. The results show that business strategy significantly moderates between entrepreneurial orientation and firm performance (Pradhan *et al.*, 2020; Shah & Ahmad, 2019). Of course, firm performance and economic benefits are closely related (Hillman *et al.*, 1999). Thus, the following hypothesis is created:

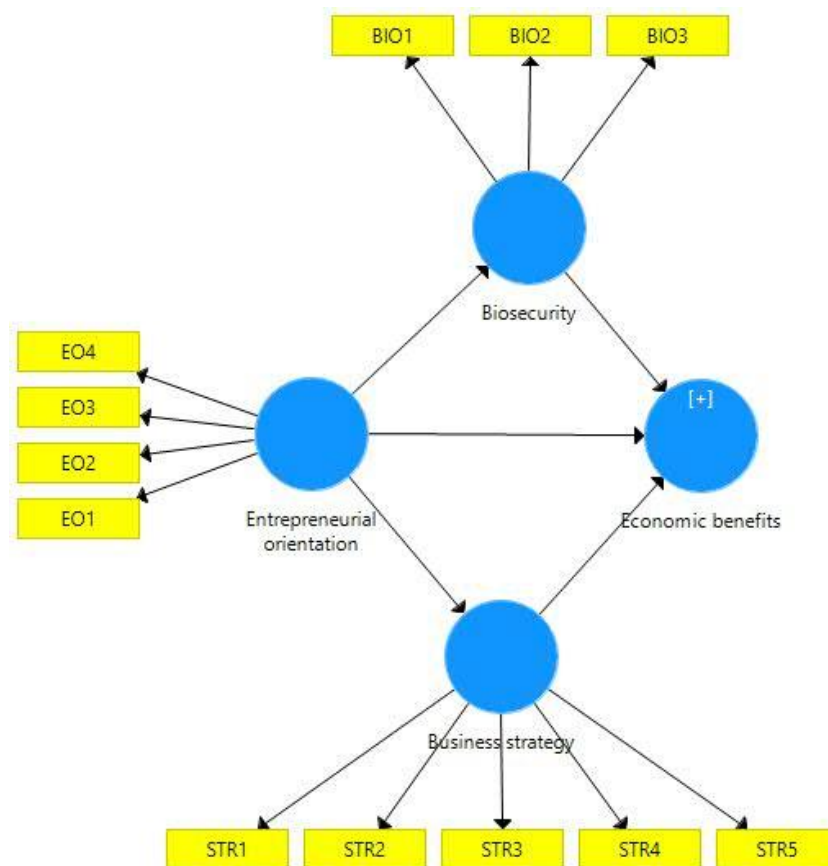
H4: Business strategy significantly moderates between entrepreneurial orientation and economic benefits.

Innovation has its own concept as an intermediate variable in literature. In models of entrepreneurial orientation → innovation → firm performance which have been studied in countries different from each other, e.g. Spain, Pakistan, it is shown that innovation significantly moderates between entrepreneurial orientation and firm performance. (Fan *et al.*, 2021; Freixanet *et al.*, 2021). In a similar way, the following hypothesis is stated:

H5: Biosecurity significantly moderates between entrepreneurial orientation and economic benefits.

Based on all the above research hypotheses, the following research model is created:

Graph 1: Research Model



A similar model has been studied in the case of Indonesia, including fashion firms. All the studied effects were confirmed (Nofiani *et al.*, 2021). What is left is for this paper to pass onto methodology and results, in order to show whether the research hypotheses are confirmed and also whether this paper concurs with literature.

3. Methodology

3.1. Research population

The first step of the methodology was to determine the research population, which were the pure livestock farms in mainland Greece and Crete. Due to low livestock farming activity in the regions of Attica, the Aegean and Ionian Islands, the regions of Attica, the Ionian Islands, as well as the islands in the Northern and Southern Aegean were excluded from the research.

3.2. Data collection

For the data collection, the technique of the questionnaire was determined. Owing to the fact that a face-to-face survey would be time-consuming, taking the possible issues due to the Coronavirus pandemic, we decided to conduct the survey online (Google forms). As for the communication with owners of pure livestock farms, there is currently no central and open database with livestock farmers' contact details. There could possibly be capability of communicating with the commercial chambers of each prefecture, but due to General Data Protection Regulation (GDPR) issues, the survey would be extremely time-consuming since a separate request for contact details should be made to each prefecture. For this reason, the random sampling technique could not be implemented. It was alternatively decided to apply quota sampling, where we selected goals of sample collection by region, based on the most recent inventory of the Hellenic Statistical Authority. As there was no form of direct communication with livestock farmers, we decided to approach them indirectly with the aid of people who work with them. So, we called agro consultants, veterinarians and accountants, asking them to forward our questionnaire link to the livestock farmers they know. The survey lasted three months, from March to May 2022 and we collected 279 responses in total. As can be seen from the table below, the representativeness of the sample has been achieved.

Table 3: Population representativeness

Region	Number of livestock holdings	Percentage % of population of livestock holdings	Sample	% of total sample
Eastern Macedonia and Thrace	1396	9	23	8
Central Macedonia	1792	12	38	14
Western Macedonia	611	4	15	5
Epirus	3843	26	66	24
Thessaly	2426	16	42	15
Central Greece	1511	10	32	11
Western Greece	1778	12	30	11
Peloponnese	520	4	14	5
Crete	831	6	19	7
Summary	14708	100	279	100

Source: Hellenic Statistical Authority (2016a)

3.3. Design of variables

The study included four latent variables, each of which consisted of a number of measurable variables. Each measurable variable corresponds to one questionnaire question. The variables were entrepreneurial orientation, biosecurity, business strategy and economic benefits. As for entrepreneurial orientation, it was mentioned in literature that the dominant approaches are those of Miller's (1983)/Covin's *et al* (1989) and Lumpin and Dess's (1996). However, for purposes of comparison of different approaches and results, Wang's (2008) approach will be tested, where entrepreneurial culture is analyzed into four measurable variables at a scale of 1-5: market proactiveness, competitive aggressiveness, firm risk taking and firm innovativeness. Business strategy was analyzed into four selected strategies at a scale of 1-4, as they were used by the Community Innovation Survey (CIS), a survey of Eurostat conducted every two years (European Commission, 2018). The following strategies were specifically selected: Focusing on high quality, focusing on one or a small number of key goods or services, focusing on reaching out to new customer groups and focusing on customer specific solutions. Moreover, the strategy of focusing on competitive pricing was added. As for the biosecurity variable, it was analyzed into three components: isolation, traffic control and sanitation. Its design took place in the following steps. Three question categories were created based on Table 2. The possible questions were «yes» or «no». Subsequently, «no» was encoded as «0» and «yes» as «1». The sum was calculated for each line of the data table regarding the columns of each biosecurity dimension. In this way, the variables regarding biosecurity dimensions were manually created, as is shown in the tables below. That is, the traffic control variables in a scale of 0-11, isolation 0-10 and sanitation 0-17. So, these variables constituted the reflective indicators for the latent biosecurity variable. In a similar way the variable of economic benefits was created. The respondent livestock farmers were requested to reply whether they have had a number of benefits in their business for the last three years or not. More specifically, they were asked about production improvement, lower production costs, income increase, a more environmentally-friendly business, reduced workload. Thus, the variable of economic benefits was designed in a scale of 0-5. Having completed the creation of variables, we go on to process the data. Due to the fact that latent variables are used and indirect effects are studied, the data were processed with the SMART-PLS software, which is based on the use of the Partial Least Squares (PLS) algorithm. Prior to using the software, we must first ensure that the sample size is adequate. So, we follow the criterion according to which the minimum sample equals the number of internal or external connections to the model multiplied by 10. (Joe F. Hair *et al.*, 2011; Kock & Hadaya, 2018). So, for this model a minimum of 170 statistical units is required. Having collected a sample of 279 livestock farmers, we ensure the reliable use of the software in this model.

3.4. Model Estimation

The first step in the software use is the run of the PLS algorithm, setting "Path" as a weighting scheme, a maximum of 5000 iterations and 10^{-7} as a stop criterion. In this way, the path coefficients are extracted. The variables of entrepreneurial orientation, business strategy and biosecurity explain 25,1% of total variance. The effect of biosecurity on economic benefits (0,381), which is the strongest one, is readily discernible.

4. Results

4.1. Measurement model assessment

Later on, the creation of latent variables must be checked. This is how the model is assessed for convergent validity and internal consistency reliability. To assess convergent validity, the

outer loading values and the Average Variance Extracted (AVE) values must be checked. Ideally, every outer loading value should exceed 0,7. However, values from 0,4 to 0,7 are also acceptable. Correspondingly, each AVE value should exceed 0,5. To check internal consistency reliability, the following indicators are examined: Composite reliability, ρ_A and Cronbach's Alpha. The first two should exceed 0,7, while the Cronbach's Alpha value should be between 0,7 and 0,9. All the above conditions were proved to apply, achieving convergent validity and internal consistency reliability. The last issue is discriminant validity, which is examined by the HeteroTrait MonoTrait (HTMT) criterion, where each table cell value should be lower than 0,85 (Sarstedt *et al.*, 2017).

Table 4: HTMT (Source: SmartPLS)

	Biosecurity	Business strategy	Economic benefits	Entrepreneurial orientation
Biosecurity				
Business strategy	0,320			
Economic benefits	0,488	0,310		
Entrepreneurial orientation	0,334	0,271	0,261	

In the table above, it is shown that the HTMT criterion is met. However, to ensure that the Bootstrapping procedure is also performed, Bias-Corrected and Accelerated (BCa) Bootstrap for 5000 iterations, at 5% significance level and two-tailed test are selected. In none of the extracted confidence intervals is value 1 included. So, it is regarded that all HTMT values significantly differ from 1, confirming discriminant validity.

4.2. Structural model assessment

The next control regards collinearity. Whenever the Variance Inflation Factor (VIF) is checked, every VIF value has to be lower than 3,0. This is exactly what applied in this case, so there was no collinearity issue. Then, the statistical significance of the effects is checked, where all the studied effects, except for the one of entrepreneurial orientation on economic benefits, are statistically significant. Moreover, f^2 is examined to review the effect size between the studied effects. "As a rule of thumb, values higher than 0,02, 0,15 and 0,35 depict small, medium and large f^2 effect sizes" (Cohen, 1988). The results show an insignificant effect size between entrepreneurial orientation and economic benefits. On the contrary, there is a medium size effect between biosecurity and economic benefits. The rest of the effects have a small but acceptable effect size. The last step is to control the predictive capability of the model. For this reason, the PLS predict feature of the software is used, defining number of folds and number of repetitions equal to 10 (default). To assess the predictive capability of the model, three measures are used. Q^2 , root mean squared error (RMSE) and mean absolute error (MAE). Where $Q^2_{predict} > 0$ indicates that the model has predictive relevance. As a rule of thumb Q^2 values higher than 0, 0,25 and 0,5 depict small, medium and large predictive relevance of the PLS-path model. As for RMSE and MAE, values are extracted once for the linear model and once for the PLS model. "If the minority (or the same number) of indicators in the PLS-SEM analysis yields higher prediction errors compared to the naive LM benchmark, this indicates a medium predictive accuracy" (Joseph F. Hair *et al.*, 2019).

Table 5: Traffic control indicator construction

Ban sign board against companion animals present	0	1	0
Visitors ban sign board present	1	1	1
Other domestic animals have access to the farm	1	1	1
Wild birds have access to farm premises	1	1	1
Rodents have access to farm premises	0	0	0
All-in all-out management system applied	0	0	1
Visitors allowed to touch poultry	1	0	1
Farming equipment specific to each poultry house	0	0	1
Linear flow principle applied	0	0	0
Visitors record book present	0	1	0
Workers assigned to a specific poultry house	0	1	0
Traffic control (BIO1)	4	6	6

Table 6: Isolation indicator construction

Farm not located on main road side	1	0	1
Farm close to a commercial poultry	1	0	0
Farm close to pig farms	0	0	0
Farm close to local poultry farms	1	0	1
Farm close to a stream	1	1	0
Building orientation based on the direction of the dominant wind	1	0	0
Fence around the farm yard perimeter	1	0	1
Airing openings of poultry house protected by a wire mesh	0	0	0
Presence of other fowl species on the farm	1	0	0
Area around the farm cleaned and cleared of trees and bush	0	0	0
Isolation (BIO2)	7	1	4

Table 7: Sanitation indicator construction

Poultry barn wall is roughcast	1	1	1
Poultry barn with concrete floor	0	1	0
Footbath is functional	0	1	0
Gutter is present	1	0	0
Rodents have access to stored feedstuff	1	1	1
Sanitation lock complies with standards	0	0	0
Dead animal storage facility is present	1	1	0
Draining channel present	0	1	1
Holes are found on the poultry barn wall	0	0	1
Manure stored within the farm premises	0	0	0
Workers wear dedicated clothing on farm	0	1	0
Visitors are disinfected prior entering the farm	0	1	0
Rodent control program is present	0	0	1
The litter is wet around feeders and drinkers	0	0	1
Chicks from different origins are mixed	0	0	1
Mortality record book is present	0	1	0
Farming equipment is clean	0	0	0
Sanitation (BIO3)	4	9	7

Table 8: Assessment of measurement model (Source: SmartPLS)

Latent variable	Indicators	Convergent Validity		Internal consistency reliability		
		Loadings	AVE	Composite reliability	ρ_A	Cronbach's Alpha
		>0,7	>0,5	>0,7	>0,7	0,7-0,9
Entrepreneurial Orientation	EO1	0,827	0,667	0,887	0,857	0,827
	EO2	0,657				
	EO3	0,781				
	EO4	0,969				
Business Strategy	STR1	0,695	0,630	0,894	0,897	0,851
	STR2	0,731				
	STR3	0,749				
	STR4	0,800				
	STR5	0,966				
Biosecurity	BIO1	0,887	0,750	0,900	0,864	0,835
	BIO2	0,882				
	BIO3	0,827				

Table 9: Path Coefficients of the structural model and significance testing results (Source: SmartPLS)

	Path Coefficient	95% Bca confidence interval	Significant (p<0,05)?	f ² effect size
BIO ³ → BEN ⁴	0,381	[0,266 , 0,486]	Yes	0,170
STR ⁵ → BEN	0,178	[0,063 , 0,289]	Yes	0,038
EO ⁶ → BIO	0,281	[0,168 , 0,380]	Yes	0,086
EO → STR	0,241	[0,084 , 0,368]	Yes	0,062
EO → BEN	0,096	[-0,036 , 0,219]	No	0,011
EO → STR → BEN	0,043	N/A	Yes	N/A
EO → BIO → BEN	0,107	N/A	Yes	N/A

Table 10: PLSpredict algorithms results (source: SmartPLS)

Indicator	PLS		LM		Q ² _predict
	RMSE	MAE	RMSE	MAE	
BIO1	1,066	0,898	1,070	0,894	0,074
BIO2	1,405	1,205	1,418	1,216	0,048
BIO3	1,211	0,994	1,224	1,008	0,027
STR4	0,889	0,735	0,897	0,731	0,047
STR3	0,982	0,810	0,968	0,800	0,004
STR2	1,011	0,872	1,023	0,884	0,014
STR1	0,960	0,768	0,965	0,772	0,029
STR5	0,739	0,610	0,740	0,605	0,034
BEN	2,921	2,447	2,940	2,460	0,051

³ Biosecurity⁴ Economic benefits⁵ Business strategy⁶ Entrepreneurial orientation

The results indicate a small to medium predictive capability.

5. Discussion & Conclusions

After having implemented the software on the data, all the research hypotheses were confirmed, except for the direct effect of entrepreneurial orientation on economic benefits. It seems that in the case of livestock farming in Greece, entrepreneurial orientation does not directly affect economic benefits, only indirectly by the intermediate variables of business strategy and biosecurity, making them full mediators. We do not consider that the case was not confirmed due to the use of entrepreneurial orientation based on Wang's (2008) approach, but because, as noted in this paper, entrepreneurial orientation in Greek SMEs is so low that its direct effect is statistically insignificant. This fact highlights the value of business strategy and biosecurity in the sector. In particular, biosecurity stood out in the results, having the biggest effect size on economic benefits. As for the predictive capability of the model, biosecurity was not high, but small to medium, depending on the measure with which we examine it. Nevertheless, the essential thing is the positive effect of independent variables on economic benefits, with the most notable being that of biosecurity.

In conclusion, this paper makes a series of highlights. Firstly, it highlights the need to develop entrepreneurial orientation especially in livestock farming, which has been a sector in dramatic decline in recent years. The development of entrepreneurial orientation could stop this decline. As an extension of entrepreneurial orientation, setting up a targeted business strategy is highlighted, which is not confined to livestock farming, but to all Greek SMEs. In addition, due importance is attached to biosecurity for economic benefits in livestock farming. We value the fact that most biosecurity practices are a matter of management and labour protocol, not investment. Therefore, a livestock unit can easily and with no marginal cost adopt – perhaps not all – but certainly the majority of biosecurity practices. So, adopting biosecurity rules in Greece is highlighted as a significant practical implication. Furthermore, this paper also has research extensions. It is especially important to broaden the current model in order to further support the much-afflicted Greek livestock-farming sector with the use of more variables. For instance, in future research we could add variables that represent the management of the livestock unit, as well as innovation variables, expressing processes with the term “precision livestock farming”.

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Classic Models for Assessing Creditworthiness in the Function of Predicting the Crisis in Companies in Developing Countries

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Abstract

In unstable business conditions, which are often the result of economic and financial crises, companies must adapt to the market in order to achieve their competitive advantages. Unstable market conditions that are particularly characteristic for underdeveloped and developing countries and require great flexibility of enterprises, which should be achieved through structural changes. That is why it is important that companies in these markets have established warning systems that can identify dangers in time. The focus of this paper's research was to answer the question of whether classical crisis forecasting models can successfully predict crises in underdeveloped and emerging markets. The authors conducted their research in Republic of Srpska on a sample of 34 companies, where they observed their business over a period of 4 years. Classical models have not proven to be completely accurate models for predicting crises in the enterprises of developing countries, but they have proven to be indicators of enterprise vulnerability.

Keywords: corporate crises, classic crisis forecasting models, developing countries

Introduction

Today, when the word crisis is mentioned, we most often think of the global economic crisis that is talked about on a daily basis, however, company crises have become a constant in our economic everyday life and occur in all economic cycles. In Bosnia and Herzegovina, as well as in many other developing countries, the problem of crisis prediction has not been sufficiently investigated.

Although economic cycles have been known to researchers since the 19th century, sudden and unexpected crises have become frequent in recent years. The fact that the time period between certain crises began to decrease over time influenced the topicality of the topic of crisis prevention in the company to become the focus of numerous authors. In addition to the fact that numerous crises have influenced the increasing relevance of this topic, they have also influenced certain models to be subsequently reconsidered. The impact of crises was impossible to predict with some models, the crises that happened were of a global level, but they had an impact on almost every company in Bosna and Herzegovina.

Environmental monitoring systems and early warning systems were created in the 60s of the last century primarily in the field of international politics as a tool for predicting political changes (crises). Early crisis detection systems register weak signals from the environment and warn management of possible complications in the company's operations. Early warning

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indicators are oriented towards various types of positive and negative trends that develop in the company's environment. Early warning indicators are considered diagnostic signs of future market conditions (Rothwell, 2010). They represent signals of possible upcoming crises, and most often do not predict the extent and time of the indicator's impact on the company (which essentially depends on the company's response strategies).

In the situation of a complex and dynamic environment, the company is forced to react to changes at the earliest possible stages. To avoid strategic surprises, companies should commit to observing early, unstructured data that addresses environmental discontinuities. Most often, this in itself is not enough, because in order to survive, companies must recognize weak signals of future changes. If such changes are recognized, they can become a source of new strategic advantages (Brown, 2004). In other words, when companies are faced with a large number of various signals from the environment, they must develop and use a system of methods for dynamic monitoring of the turbulent environment. The methods of observing the environment and their scope determine which information and which weak signals are taken into account, which are filtered, and which information fits into the company's vision (Ansoff, 1979).

Despite the criticism and challenges of the models for predicting the bankruptcy of a business company from their inception until today, these prediction models, based on ratio analysis, are still popular among analysts. This fact encourages many researchers in developing countries and in market-developed countries to develop (create) models adapted to the different needs of numerous users. After the introduction of Basel II banking standards in the United States of America, according to which credit scoring became mandatory, there was a further popularization of prediction models based on financial analysis, since each bank had to assess credit risk, that is, the probability of loan repayment.

Noticing the early signals of a business crisis of a company is very important, because it provides the company with enough time to take corrective actions. The problem that the authors face in the paper is the adequacy of classic models for creditworthiness assessment in the function of predicting crises in companies in developing countries. On the basis of the described research problem, the research subject itself is performed. The subject of research in this paper are classical models in the function of foreseeing crises in companies in developing countries. Based on the problem and the subject of the work, the authors have formed a research hypothesis that reads: Classic credit rating models cannot completely overlook the crisis in companies in developing countries.

Literature review

We can observe the development of the early crisis detection system through three generations. The first generation is characterized by quantitative data (early warning information) obtained on the basis of time comparison of indicators and analysis of financial reports and plans. A typical representative of this generation of systems is Altman's Z-score and other similar models. The dominance of quantitative information, the search for relevant information inside and outside the company and the beginning of using a qualitative form of information are the main characteristics of the second generation. As representatives we can mention Britt, A. (1973), Rothing, P. (1976), Rodl, H. (1976), Alback, H. (1979) (Osmanagić-Bedenik, 2007). The third generation developed in the 90s of the last century and continues to this day. The third generation is called strategic radar and refers to the systematic capture and assessment of strategically relevant early warning information. This generation focuses on the observation of silent signals, qualitative information about possible occurrences inside and outside the company.

During the development, implementation and use of rating systems and models, it is necessary to bear in mind that past experience in practice has shown that they need to be adapted both to the type and size of companies they rate, as well as to specific countries or regions where companies operate. In the professional literature dealing with the topic of predicting company insolvency, studies from the USA dominate, which used American companies as a sample. In order to be used in other parts of the world, these models should be tested and, where possible, adapted to the realities of each country. The basic Altman model or Z-score model is one of the most famous quantitative models for evaluating the financial position of companies (Vučenović, 2017).

All existing models for predicting the bankruptcy of a business in the scientific, professional, domestic and foreign literature can be classified into two large groups (Kiyak & Labauskaite, 2012):

- Classic (conventional, standard) statistical models - which include parametric methods (metric data analysis techniques for one variable) such as: linear multiple discriminant analysis models, for example, Altman's model, Springate's model and logistic regression models, for example, Zavgren's model and Chesser model of credit risk (Chesser model of credit scoring);
- Modern models or artificial intelligence models - which include non-parametric methods such as: artificial neural networks and decision trees as well as semi-parametric methods such as hazard models.

Three phases can be distinguished in the development of a failure prediction model (Yazdanfar & Nilsson, 2008):

- The first phase (1891-1960) is characterized by the importance of multiple discriminant analysis, which provides a linear dependence of the dependent variable (bankruptcy/non-bankruptcy) and independent variables (financial indicators) in predicting the probability of the bankruptcy of a company presented by Biver (1966, 1968) and Altman (1968).
- In the second phase (1960-2000), the importance of logit/probit regression models presented by Olson (1980) and Zmijevski (1984) is highlighted. From the 1960s until the end of the 1980s, when developing prediction models, researchers most often used parametric methods: linear multiple discriminant analysis and logistic regression analysis, and from the end of the 1980s, researchers began to use semi-parametric methods and non-parametric methods.
- In the third phase, the importance of the artificial neural network as a new methodology is highlighted. The third phase of the development of prediction models includes the period from 2000 to the present, which is marked by artificial intelligence models.

Below is a table of classical statistical models and methods for predicting the bankruptcy of a company.

Table 1: Classical statistical models and methods

Method	Prediction model
Univariate technique analysis)	Fitzpatrick (1932); Smith & Winakor (1935); Merwin (1942); Walter (1957); Beaver (1966)
Risk index model)	Tamari (1966); Moses & Liao (1987)
Multiple Discriminate Analysis - MDA models)	Altman (1968); Edmister (1972); Deakin (1972); Blum (1974); Moyer (1977); Altman, Haldeman & Narayanan (1977); Taffler & Tisshaw (1977); Springate (1978); Van Frederikslust (1978); Bilderbek (1979); Dambolena & Khoury (1980); Altman (1983); Taffler (1983); Fulmer (1984); Betts & Belhoul (1987); Declerc et al. (1991); Laitinen (1992); Lussier & Corman (1994); Altman et al. (1995); Ca-Score (1987); Shirata (1998); Grice & Ingram (2001)
Conditionalprobability models)	Ohlson (1980); Zavgren (1983); Zmijewski (1984); Gentry et al. (1985); Zavgren (1985); Swanson & Tybout (1988); Aziz et al. (1988); Gloubos & Grammatikos (1988); Keasey & Mcguinness (1990); Platt & Plat (1990); Sheppard (1994); Lussier (1995); Mossman et al. (1998); Grice (1998); Yang (2001); Becchetti & Sierra (2002); Charitou et al. (2004)

Source: Anjum, S. (2012). Usiness bankruptcy prediction models: a significant study of the Altman's Z-Score model. *Asian Journal of Management Research*

The scientific approach to predicting bankruptcy offers a large selection of statistical and mathematical methods (techniques) for predicting the bankruptcy risk of a company. Quantitative methods include a number of statistical and mathematical methods that try to find appropriate variables significant for predicting bankruptcy. In the group of classical methods that are used to predict the bankruptcy risk of a company, the following can be classified (Suraj-Soltysiak & Soltysiak, 2006):

- Financial analysis based on the analysis of financial indicators
- Statistical (econometric) techniques that can be divided into (Jandaghi et al., 2011):
 - Univariate data analysis techniques of one variable, monovariate technique - where the research focus is on measuring the central tendency and dispersion of the phenomenon;
 - Techniques of simultaneous analysis of several variables such as: linear multiple discriminant analysis, logit and probit analysis - where the focus of the research is on examining the connections (correlation or covariance) of the observed characteristics;
 - Mathematical models for linear programming,
 - Expert systems.

Edvard I. Altman (1968) completed his research on the interdependence between the initiation of bankruptcy proceedings in companies and the financial indicators of the company's operations in the years before the opening of bankruptcy. Altman conducted his research on a total of 66 companies, classified into two equal groups according to activity and size. In the research, the companies were divided into a group of successful companies (33 companies) and a group of unsuccessful companies (33 companies).

Based on multivariate discrimination analysis, Altman singled out 5 financial indicators, from the initial 22 financial indicators, and formed a model that is generally known in the world as Altman's Z-test. The importance of financial indicators in Altman's model is not equal, each of the 5 financial indicators has its own importance weight.

In order to improve his original model, Altman modified the model in 1983. and set up a new Z'-score model. The key difference is reflected in the fact that he replaced the market value of

capital with the book value of capital in the fourth financial indicator (X_4). The described change caused a change in the significance weighting of all financial indicators in the model.

Springate's model is developed based on Altman's model, and also uses Multiple Discriminant Analysis MDA. As with any model development, several commonly used financial indicators are initially included in the research. Testing reduces the number of indicators, so Springgate chose four financial indicators to analyze in order to determine the company's financial stability and potential insolvency (Pambekti & Fakhri, 2014).

One of the more famous models that was applied in European countries was made by Peter Kralicek. The model involves the calculation of the DF indicator, and it was created based on data from the financial reports of Austrian, German and Swiss companies. The DF indicator is used to detect a crisis in a company before it appears (Alihodžić, 2013).

Mark E. Zmijevski (1984) in his research on the formation of a model for predicting the bankruptcy of a business entity defines a sample of 1681 companies. The sample consists of 81 bankrupt companies and 1600 non-bankrupt companies. Also, all companies were listed on the New York Stock Exchange. In the observed period, there were 129 initiated procedures, of which 81 cases had the necessary data for the model.

For the construction of the model, data was collected for companies that entered bankruptcy in the period 1972-1978, and in the same period, data was also taken for a group of companies against which bankruptcy proceedings were not initiated. He used probit analysis in the construction of the bankruptcy prediction model. Similar to logistic regression, the values of the probit model range between zero and one and represent the probability of bankruptcy.

The Business Excellence Model (BEX) is a model for assessing business excellence and for predicting the success and failure of all companies, regardless of whether they are listed on the capital market (Belak & Aljinović Barać, 2008). The authors of the model created the model in 2008 based on research and business conditions in the Croatian economy. The BEX model shows and measures the business excellence of a company in two dimensions: the "lagging" dimension and the "leading" dimension. The BEX model consists of four indicators (profitability, value creation, liquidity and financial strength) with certain influence weights.

Methods and methodology

In their research, the authors analyzed 34 companies from Bosnia and Herzegovina in the period from 2017 to 2020. The observed companies were analyzed through 5 models for assessing the company's operations: Altman's Z-score model, Gordon Springeit's model, Kralicek's DF indicator, Zmijevski's model and the BEX model.

Function of the modified Altman model (Altman, 1983):

$$Z' = 0,717X_1 + 0,847X_2 + 3,107X_3 + 0,42X_4 + 0,998X_5$$

Z' – value of the Altman function,

X_1 – financial indicator that represents the ratio of working capital and total assets of the company,

X_2 – financial indicator that represents the ratio of retained earnings (current and previous period) and total assets,

X_3 – financial indicator representing the ratio of profit before interest and taxes (EBIT) to total assets,

X_4 – a financial indicator that is calculated as the ratio of the market value of capital and total liabilities,

X_5 – financial indicator that calculates the ratio of business income to total assets

Springate defined the model by the equation:

$$Z = 1,03 * X_1 + 3,07X_2 + 0,66X_3 + 0,4X_4,$$

The symbols in the previous equation have the following meanings (Pambekti & Fakhri, 2014):

Z – value of the Springate function

X_1 – financial indicator calculated as the quotient of working capital and total assets,

X_2 - financial indicator calculated as the ratio of profit before interest and taxes to total assets,

X_3 – financial indicator calculated as the quotient of the company's gross profit and short-term liabilities,

X_4 - financial indicator calculated as the ratio of sales revenue to total assets.

Kralicek's DF indicator is calculated by the formula (Alihodžić, 2013):

$$DF = 1.5X_1 + 0.08X_2 + 10X_3 + 5X_4 + 0.3X_5 + 0.1X_6,$$

where is:

DF – value of Kralicek's function,

X_1 – financial indicator calculated as the ratio of net cash flow to total liabilities,

X_2 – financial indicator calculated as the ratio of total assets to total liabilities,

X_3 – financial indicator calculated as the ratio of profit before taxation and interest to total assets,

X_4 – financial indicator calculated as the ratio of profit before taxation and interest and total income,

X_5 – financial indicator that is calculated as the ratio of inventory to total income,

X_6 – financial indicator calculated as the ratio of business income to total assets.

The formula of the model developed by Zmijewski is as follows (Zmijewski, 1984):

$$ZFC = -4.336 - 4.513X_1 + 5.679X_2 + 0.004X_3,$$

The variables included in the model represent the following financial indicators:

X_1 – financial indicator calculated as the quotient of net profit and total assets of the company,
 X_2 - financial indicator that is calculated as a quotient of total liabilities and total assets of the company,

X_3 - financial indicator which is calculated as a quotient of current assets and short-term liabilities.

The calculation of the BEX model can be represented by the formula (Belak & Aljinović Barać, 2008):

$$BEX = 0.388ex_1 + 0.579ex_2 + 0.153ex_3 + 0.316ex_4,$$

where is:

ex_1 – financial indicator of profitability (EBIT/total assets), does not have a great importance on the height of the BEX index. Its role is to stabilize the model.

- ex*₂ – financial indicator of value creation (net profit/(equity x price)), has great importance on the value of the index and if it is greater than 1, the company is doing well and creates value, and if the value of *ex*₂ is less than 1, the company is in problems. The structure of the owner's capital consists of the paid-in capital of shareholders, retained earnings from operations and company cuts. The cost of capital is approximated by the interest rate on term savings in banks (4%).
- ex*₃ – financial indicator of liquidity (working capital/total assets), does not have a big impact on the BEX index, is used as a stabilizing factor. Working capital represents the difference between the company's short-term assets and short-term liabilities.
- ex*₄ – financial indicator of financial strength (5 x (net profit + depreciation))/total liabilities, is the strongest indicator in the model. Its maximum value in the model is 10. The measure of coverage of liabilities with cash and cash equivalents is 20%.

During the analysis, the authors had at their disposal a database of over 16,000 companies - The selection of companies was made on the basis of the parameters from the Law on Accounting and Auditing of the Republic of Srpska (Official Gazette of the Republic of Srpska number: 94/15). The size of the company is defined based on the size of the assets, the amount of income and the number of employees. The authors included in the analysis only large companies, which are large during the entire observation period. The authors did not analyze all large companies, but only those whose operations could give indications of a crisis.

Research results

The authors chose 34 companies that belong to the category of large companies and that in 2016 had bad business indicators according to the observed models. Of the 34 observed companies, 16 are from the manufacturing industry, 14 from wholesale and retail trade, and one company each from construction, transport and storage, administrative and auxiliary service activities, and the production and supply of electricity, gas, steam and air conditioning.

For each observed company in the sample, the authors evaluated the performance of the company in 2017 based on the presented models. Based on the Z-score value, Altman classifies companies into three groups (Altman, 1983):

- 1st group of companies that are successful and not threatened with bankruptcy (companies that have a Z-score value greater than 2.99),
- 2nd group of companies located in the gray zone (companies that have financial difficulties and have a Z-score value of 1.81 to 2.99),
- 3rd group of companies that will end up in bankruptcy and have a Z-score value of less than 1.81.

According to the previously stated, in the sample there are 24 unsuccessful companies, 7 companies that are in the gray zone and 3 companies that have a Z score model value greater than 2.99 and they are presented as successful.

According to the Gordon Springate model, companies with a higher value of the Z function are considered to be more stable, while those with a lower score are closer to failure. For the value of the function below 0.862, the company is considered unsuccessful. Among the observed companies, 25 of them were evaluated as unsuccessful, and 9 of them as successful.

Kralicek's DF indicator can have positive and negative values: negative values indicate insolvency, and positive values indicate solvency of the business entity.

Table 2. The state of financial stability of the company depending on the value of the Kralicek indicator

The value of the Kralicek indicator	State of financial stability of the company
>3.0	Excellent
>2.2	Very good
>1.5	Good
>1.0	Medium
>0.3	Bad
<0.3	Beginning of insolvency
<0.0	Moderate insolvency
<-1.0	Pronounced insolvency

Source: Alihodžić A. (2013). Testing the application of Kralicek's DF indicator on the Belgrade Stock Exchange, magazine Bankarstvo 3, Belgrade

Of the observed 34 companies, 13 were rated as bad, 8 as the beginning of insolvency, 5 as moderate insolvency, 4 as good companies, 2 as excellent, 1 as very good and 1 company as moderately insolvent.

The authors measured and shows the overall business success using the BEX index, whose value can be:

- 1 - the company is doing well;
- between 0 and 1 - improvements are needed;
- < 1 - the company's existence is threatened.

The largest number of observed companies belongs to the group of companies evaluated between good and bad, 2 companies were evaluated as good and 2 could not be evaluated due to lack of data.

The Zmijewski model gave two ratings to companies based on the score that would be obtained based on the formula, accordingly companies can be liquidated or bankrupt. The total number of liquid companies according to this model was 16, while the total number of companies that were in the bankruptcy zone was 18.

Table 3. Results of company evaluation by models

Z Score model	Number of companies	Gordon's model	Number of companies
unsuccessful companies	24	unsuccessful	25
gray area	7	successful	9
successful companies	3	Bex model	Number of companies
Kralicek's DF model	Number of companies	good	2
Good	4	between good and bad	30
Excellent	2	Not rated	2
Bad	13	Zmijewski model	Number of companies
onset of insolvency	8	bankruptcy	18
Medium	5	liquid	16
moderate inslovenness	1		
very good	1		

Source: Author's calculations

Based on the observed data and predictions of the future business of the company, we can see that most models predict that the number of companies that will face insolvency and business problems in the future will be between 20-25 companies, that is, 2/3 of the observed companies.

According to the Z score model, there were a total of 24 unsuccessful companies in 2017, of which 6 companies had blocked accounts in 2020, and 18 of them did not. 13 of them had problems with liquidity, while 11 companies were liquid, 15 companies had positive operations, while 9 operated at a loss. Of the observed 24 companies that were assessed as unsuccessful, 13 companies had an increase in revenue in 2020, while 11 companies had a decrease in revenue, and 4 companies also had tax debt.

During the analysis of companies using Gordon's model, it was established that there are 25 unsuccessful companies and 9 successful companies in the observed sample in 2017. Of the 25 companies that were considered unsuccessful, 4 of them, or 16%, had a blocked account in 2022. While 2 out of 9 companies that were considered successful had blocked accounts, i.e. 22.22% of them. When looking at the liquidity of companies, 51% of them that were considered unsuccessful are liquid, while the number of those that are considered successful and were liquid in 2020 is 67%.

A higher percentage of companies that were considered "unsuccessful" operated positively, compared to those that were considered successful, 68% compared to 55%. While a larger number of companies that were considered "unsuccessful" did not pay tax obligations compared to successful companies, 19% versus 11%. Income growth was achieved by 55% of observed companies in both groups.

When analyzing companies using Kralicek's DF indicator, 13 companies were rated as bad, of those 13, 3 had a blocked account and tax debt in 2020. 7 companies were not liquid, 9 companies had positive operations, while 6 had an increase in income.

When the authors analyzed the companies using the Bex model, 30 of them were categorized "between good and bad", 5 of them had blocked accounts and tax debt, 50% of the posthumous ones were liquid. While 20 of them performed positively, income grew at 17 of the 30 companies that were in the "between good and bad" category.

When the authors analyzed companies according to the Zmijewski model, the analysis showed that 18 companies predicted bankruptcy and 16 companies were characterized as liquid. Of the 18 companies that were foreseen to go bankrupt, 5 had blocked accounts and 4 had tax debt. While the number of companies that were assessed as being liquid was 1. 11 companies were not liquid from the group of those that were expected to go bankrupt, while 50% of them had a negative business. A larger number of companies were not liquid, 18 of them, while 11 were liquid.

Table 4. Overview of results

Model/model rating	Were accounts blocked in 2020?		Was the company liquid in 2020?		Did the company make a profit?		Was there revenue growth in 2020?		Did the company have a tax debt in 2020?	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Z score model										
unsuccessful companies	5	19	11	13	15	9	13	11	4	20
gray area	1	6	5	2	5	2	5	2	1	6
successful companies		3	3		2	1	1	2		3
Gordon's model										
unsuccessful	4	21	13	12	17	8	14	11	4	21
successful	2	7	6	3	5	4	5	4	1	8
Bex Model										
okay		2	2		1	1	1	1		2
between good and bad	5	25	15	15	20	10	17	13	5	25
Zmijewski model										
bankruptcy	5	13	7	11	9	9	7	11	4	14
liquid	1	15	12	4	13	3	12	4	1	15
Kralicek's DF model										
good	1	3	3	1	2	2	3	1	1	3
Excellent		2	2		1	1	2			2
bad	3	10	6	7	9	4	6	7	3	10
onset of insolvency	2	6	4	4	4	4	4	4		8
medium		5	3	2	5		4	1		5
moderate inslovenness		1		1		1		1	1	
very good		1	1		1			1		1

Source: Author's calculations

Discussion

Over time, many authors tried to predict and quantify the problem of predicting the success of companies. The specificity of certain branches of investigation, different markets, as well as various exogenous variables had the effect of making this procedure more difficult for researchers. Throughout history, various models appeared that had the goal of evaluating the success or failure of a company's operations. Some of those models, such as Altman's, Springejt's, Kralicek's, Zmijewski's model or the BEX model, were used in this work in order to be able to analyze companies in the Republic of Srpska.

The problem of predicting the bankruptcy of a company is much more current in the world than in the region. Research conducted on large markets is not as relevant as research conducted by the authors on the market of the former Yugoslavia, due to the fact that this market has many more common characteristics with the market of the Republic of Srpska and Bosnia and Herzegovina (Vučenović & Mišić, 2022)

Salkić (2011) conducted her research in Bosnia and Herzegovina. Altman's Z-score model and the modified Altman's Z'-Score model from 1983 were used to assess the creditworthiness of companies in Bosnia and Herzegovina. She came to the conclusion that the base Z-Score model has relatively good results when it comes to companies that do not settle their obligations in

accordance with the deadlines, the conclusion was based on the fact that the model correctly classified such 80% of the observed companies. The modified Z'-Score model did not show as good results as the base model when it comes to companies that pay their obligations irregularly or are late with their obligations.

Salkić concluded that both of these models do not have the appropriate level of prediction accuracy. The base Z-score model from 1968 has a prediction error of 45% and the modified Z-score model from 1983 has a prediction error of 35%, she concluded that these models predict business performance with 55% and 65% accuracy.

Based on the theoretical analysis of previous research, Vučenović and Mišić (2022) concluded that the largest number of prediction models contained financial indicators, as a basis for predicting the business failure of a company (bankruptcy or bankruptcy). The development of prediction models was predominantly based on quantitative indicators of business failure of companies. In a theoretical sense, there is no consensus about the number and type of financial variables that reliably assess and predict the business failure of a company. Also, as a significant conclusion, the thesis that there is no best model for predicting the business failure of a company is imposed. Prediction models were developed using different statistical methods: multiple discriminant analysis, logit analysis, probit analysis, neural networks and decision trees.

In her research conducted in Serbia, Bešlić (2016) indicated that models based on historical data from financial reports should still be used. Bešlić concluded that these models have shortcomings, which are reflected in the fact that the models developed on the territory of the USA (Altman's model, Zmijewski's model), Great Britain (Tafler's model), Argentina (Sandin-Porporat's model) and Europe (Kralicek's DF model) are not precise for predicting the bankruptcy of selected companies in the Republic of Serbia. The environment in which these models were developed and the Serbian market are not comparable, for the reason that the Serbian market still does not contain functional market mechanisms with legal, economic and other infrastructure characteristic of market countries where the models were developed. In her work, Bešlić showed that these models have a relatively large error value that occurs when the model classifies a non-bankrupt company as a bankrupt company. Also, all the aforementioned models were developed before the great global economic crisis, so it is understandable that these models are not applicable for predicting bankruptcy of companies in the Republic of Serbia in the period from 2011 to 2015. These reflections of the author showed a reference point for creating the idea of using these models to predict the bankruptcy of a company in the Republic of Serbia.

Zenzerović and Peruško (2009) wrote about the application of Altman's Z model and came to similar conclusions as Bešlić. The predictive ability of Altman's Z model is significantly lower when applied to companies in countries in transition, such as the Republic of Croatia, as well as Serbia and Bosnia and Herzegovina, compared to the results that this model showed on a sample of companies in the USA.

Pavlović, Muminović, and Cvijanović (2011) tested the usefulness of Sandin & Porporato's model for predicting bankruptcy in Serbia. During testing, they found several errors, from which they concluded that Sandin & Porporato's model is not reliable for predicting the bankruptcy of Serbian companies. In their research, they pointed out that the model was developed in a stable period, and in the reference period that they analyzed, the world economy, including the Serbian one, was not in a stable period. In addition to the aforementioned specifics of the Serbian economy, such as chronic insolvency, they pointed out that the environment and legal regulations regulating bankruptcy in Argentina and Serbia are different. Nevertheless, they considered that the model can be useful as an indicator of companies'

vulnerability, based on the comparison of the As index of a certain company and the As index of other companies in this industry, especially considering the simplicity of the model. Companies with a lower As ratio than the normal ratio of companies in that branch should be subject to a more detailed analysis, where it is necessary to include an indicator based on cash flows.

In his work, Alihodžić (2011) concluded, based on the results of the analysis of the application of Kralicek's DF indicator for individual shares in the BELEXline stock market index, that the DF indicator for individual shares had positive values and a positive correlation with the achieved financial result in 2011. Based on the presented analysis, the author concluded that the best solution is to combine the given analysis with the analysis of the financial, property, and yield position, because under the conditions this combination is a more acceptable and safer method for predicting the performance and future of the company.

In their research, the authors showed that in the Republic of Srpska, classic models cannot completely predict the future movements of companies, but they can be good indicators for predicting future business. One of the reasons that classic models only take data from financial statements, and not all data such as the structure of workers, market position, degree of investment in research and development, social capital of company owners, which is especially important in developing countries.

The authors used 5 classical models in the research, and found that there is a stronger connection in the prediction between companies that received a bad rating and future problems in the business of the company such as blocked accounts, decline in profitability, liquidity and decline in total income or tax debts.

Conclusion

Dynamic market conditions lead to the elimination of insufficiently effective and efficient business entities. Therefore, in theoretical discussions, but also in practice, for several years, emphasis has been placed on anticipating the values of variables that can predict bankruptcy. The scientific approach to predicting bankruptcy has led to the development of a series of models derived using statistical and mathematical methods, starting from discriminant analysis, all the way to complex mathematical and simulation techniques. The presented models for predicting bankruptcy consist mainly of a combination of financial indicators, the calculation of which is based on data from financial statements, and as such they include quantitative aspects of business.

Although financial statements are a valuable reflection of the real reality of a business entity, they cannot fully capture the complexity of business operations. Therefore, as a complement to models for predicting bankruptcy, the use of qualitative variables is suggested, that primarily include attributes of corporate governance and the state of the environment in which the business entity operates. This is especially evident in developing countries where the quality of financial reporting has not reached a satisfactory level and where the institutional framework of business is subject to continuous changes, which is why business entities are faced with an additional level of uncertainty.

In today's market conditions, using only historical data to predict the future is not recommended. We believe that any quantitative analysis of a company's business performance should be supplemented with qualitative indicators of the company. Guided by the opinion that "information is the resource of the 21st century", predicting the future based only on financial reports is ungrateful. A large number of variables affect the company's operations, and it is not possible to approximate all variables in the model with stochastic models. The models, which

the authors used in their research, have their utility value in the way that they give a good indication of future business, but it is necessary to supplement them with other types of information that are not found in financial reports. Future research should go in the direction of adapting these models for developing countries. Models that would take into account the market, social capital as well as other information that is not found in financial statements.

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The Impact of International Logistics System on Business Environment in Times of Crisis

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Abstract

The period of the COVID-19 crisis pointed to the complexity and great importance of international logistics in realizing global business activities. This paper aims to examine the role of logistics system in the business environment before and after the economic consequences of the crisis, through the assessment of customs procedures, physical and ICT infrastructure, and the quality of logistics services. The empirical research was conducted on 298 companies from different industries which actively participated in foreign trade activities. Through descriptive and reliability analysis of selected statements, and ANOVA and T-test, it was concluded that the importance of logistics was specially recognized in certain areas during the period of crisis, such as ICT implementation and digitalization of international logistics activities. The greater importance is recognized for non-manufacturing companies, which emphasize positive changes in logistics system as a result of responding to the crisis. In addition, there is no difference in the assessment of logistics before and after the crisis in different-sized companies. It indicates a uniform attitude and equal perception regarding the importance of the logistics system, which must be adequately managed to achieve a positive impact on the business environment, especially in a period of crisis.

Keywords: logistics system, global supply chains (GSC), crisis, COVID-19, business environment

1. Introduction

The conditions of crisis impose the need for structural changes and imperative to find new ways to overcome the negative consequences (Mičić & Bugarčić, 2022). The logistics system is a necessary and essential factor in economic and social activities in usual circumstances, and with great potential in situations where the role of logistics operations can be crucial in reducing and overcoming the negative consequences of crisis and external shocks that disrupt business environment and economic activities in national economies. Analysis of logistics in times of crisis requires examining its role in recession and unforeseen circumstances, finding ways to minimize the negative consequences and smooth implementation of economic activities within global supply chains (GSC). The aim of this paper is to examine the role of the logistics system in business environment, with an emphasis on identifying its importance before and after the

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COVID-19. Before the last crisis, Britchenko, Olejarz and Życzyński (2018) pointed out that the greatest contribution of logistics in times of crisis, regardless of the cause, is its impact on the time component. The efficiency and timeliness of logistics operations ensure security, as an extremely important factor in economic and social progress. For this reason, improving logistics performance can reduce the negative consequences and is a possible method for preventing and neutralizing economic and other types of crises.

Hummels and Schaur (2012) note that trade in parts and components is the most sensitive segment of international trade and thus the primary task of international logistics in terms of timely delivery. Based on this study, Blyde and Molina (2015) identified the types of products that are most sensitive to transport time, where the greatest sensitivity is recorded in the transport of live animals, chemical and short-lived products, as well as industrial components such as machinery, scientific and professional equipment. Coal and other natural raw materials, as well as textile and tobacco transport, have the greatest resistance to transport time. Based on this evidence, it can be stated that unforeseen circumstances and slowing of economic activity due to the crisis cause the most damage to time-sensitive products, which is why managing logistics operations and maintaining continuity and efficiency of specific supply chains is especially important for international logistics in times of crisis. Regarding that evidence, Coe (2014) points out that logistics services and the entire logistics sector need more attention in economic policy. Widespread processes of relocating logistics activities outside companies and increased sophistication of logistics processes mean that this industry has evolved from providing services related to the handling of goods, to an integral and strategic role in many global industries in different circumstances.

Hofmann, Solakivi, Töyli and Zinn (2018) emphasize that the economic crisis is having a negative impact on international trade and related logistics operations. The consequences of the crisis may affect the main functional areas of logistics management, including procurement, warehousing, inventory management, transport and distribution. Optimization of logistics processes and functions, and reduction of operation costs have been identified as key instruments in combating the consequences of the 2008 global economic crisis. The quality of logistics providers contributes to revival of logistics sector and other related industries while eliminating the consequences of the crisis (Folinas & Aidonis, 2012). In addition, one of the concepts for increasing the success of logistics operations is based on a demand forecasting system in order to efficiently manage logistics and supply chain (Hart, Lukoszová & Kubíková, 2013). The application of such model includes the option of flexibility, which would imply certain deviations and adjustments of logistics activities in order to meet the demand in emergency circumstances. Logistics system flexibility implies a quick response to specific requirements, where time is a key obstacle and a factor that needs to be influenced, especially in crisis when the efficiency of logistics activities can prevent significant business losses.

This evidence may also be important in assessing the impact of the international logistics system on the business environment before and after the COVID-19 pandemic, that have hampered the flow of goods in international markets and disrupted supply chains, leading to strong post-crisis consequences. For that reason, it is necessary to examine which segments of logistics system show the greatest importance and in which industries, in order to react in a timely manner in this case, as well as in future crises. The quality of logistics system is observed through the assessment of customs procedures, physical and ICT infrastructure, and the quality of logistics service providers. The research also considers the circumstances related to disruption of GSC that have increased the gap between foreign trade partners and trade efficiency in times of crisis. The empirical research was conducted on the sample of 298 companies from different industries in the Republic of Serbia that have active participation in international trade activities. The paper presents respondents' attitudes regarding importance of

certain dimensions of logistics before and after the crisis and the results of descriptive statistical and reliability analysis of selected statements, as well as ANOVA and T-test.

The paper is structured as follows. After the introduction, an overview of previous studies on the impact of logistics system during the crisis is given, with an emphasis on COVID-19. The research question and hypotheses are defined at the end of literature review, followed by research methodology. After that, the results are presented with a discussion followed by concluding remarks.

2. Literature review on the relationship between logistics and crisis

The importance of logistics is recognized in various areas of economic and industrial development, where we can emphasize its important role in fostering competitiveness and economic development (D'Aleo & Sergi, 2017), while the particular importance of logistics is recognized in fostering international trade flows (Gani, 2017; Bugarčić, Skvarčiany & Stanišić, 2020). When it comes to the role of logistics system in times of crisis, this sector suffers due to its connection with different industries, where fluctuations in the level of demand affect the functioning of international logistics system. Folinis, Tsolakis and Aidonis (2018) note that the services of 3PL providers in Greece grew at an average annual rate of 19.7% in the period 1998-2008, while in the period 2009-2016 the logistics sector recorded a decline of 24%. The consequences of the crisis have affected different domains of logistics, primarily due to declining orders and growing uncertainty, which has negatively affected competitiveness and transport costs. The recession could lead to a reduced need for logistics services, however, some industries can mitigate the decline in demand if they have adequate logistics support, which contributes to increasing the availability of certain products, thus neutralizing the initial decline in economic activity. Potential economic growth in times of crisis could be achieved by improving sales performance, through export growth and improving the quality of services, as well as lower operating costs. These factors could directly depend on the quality of international logistics system and its ability to initiate the growth of domestic and international trade flows.

The growth of international trade and raising participation of countries in international markets have created the need for GSC implementation, primarily in goods distribution, which has increased the importance of international logistics services. At the same time, during the period of economic crisis, logistics activities are one of the first to bear risks and losses. International practice shows that the efficient transport and logistics systems at the national level stimulate the development of related industries and sectors, which is why improving logistics performance could be an important factor of defense against the negative effects of crises. Karanina, Selezneva and Chuchkalova (2020) point out that logistics can be an effective instrument in stimulating economic growth, enabling the national economy to emerge from a state of recession. The importance of international logistics in maintaining the continuity in GSC system was especially evident due to the COVID-19 pandemic, which caused the global crisis, closing borders and difficult conditions for the process of international trade. This crisis highlighted the strong need to establish and actively maintain logistics operations in supply chain management. The main goal set in such circumstances is to identify and improve the understanding of logistical characteristics that play a vital role during a pandemic. Certain studies (Taqi, Ahmed, Paul, Garshasbi, Ali, Kabir & Paul, 2020) state that production flexibility, diversification of supply sources and development of "reserve" suppliers are the most effective strategies for managing GSC in a pandemic.

The role of international logistics is primarily focused on meeting the demand and fast and safe delivery in foreign markets. The complexity of the situation due to COVID-19 is caused by the existing global distribution of production, where certain countries are specialized for most of the world's production, mainly China and Southeast Asia. Unusual circumstances have led to export issues and, consequently, countries are trying to find ways to start their own production. The mismatch of international flows has caused delays and rising delivery costs, which requires greater resilience of GSC and diversification of procurement systems (Gereffi, 2020). Accordingly, the results of empirical research show a positive and statistically significant impact of value-added in production and logistics performance, measured through LPI, on the participation of countries in GSC, where the intensity of participation at the global level is a chance to recover and emerge from the crisis (Qin, Godil, Khan, Sarwat, Alam & Janjua, 2021).

This evidence supports the assumption that the quality of logistics system may be the basis for countries to exit the global crisis and mitigate its negative effects. One of the global tendencies during the pandemic is the growth of e-commerce with increased demand for logistics services. Chornopyska and Bolibrukh (2020) have proven that the formation of logistics quality in modern conditions is influenced by the criteria of flexibility, timeliness, integrity, security and online interaction with customers. Consumers can independently choose additional delivery functions such as place, time and method of payment, which indicates the need to develop flexibility in the services of logistics operators. Such circumstances have led to new requirements for logistics services and more intensive application of digitalization, which is the basis for increasing competitive advantage and could affect the growth of logistics, but also change the perception of its role in the post-crisis period. Montoya-torres, Muñoz-villamizar and Mejia-Argueta (2021) point out that special attention should be paid to international cooperation, adoption of modern technology and knowledge, in order to find patterns for solving problems within GSC caused by the COVID-19 pandemic and implementing an adequate strategy to shape GSC.

Based on a comprehensive review of the relevant literature, Illahi and Mir (2021) identified key areas that need to be adopted in order to improve the efficiency of logistics operations and GSC management in times of crisis. This implies:

- Interdisciplinary approach between real needs and activities of transport and logistics;
- Holistic and integral approach to the selection of essential goods and the realization of their timely distribution;
- Framework for replenishment of existing stocks;
- Synchronized tactics in order to harmonize global logistics processes;
- Application of stochastic parameters for estimating storage capacity and time required for transport and distribution of goods;
- Respect for various practical limitations in the execution of activities;
- Development of indicators for monitoring the flow of deliveries and other operations;
- Modeling the approach in case of mass gatherings and growing demand;
- Informing about the state and course of logistics activities;
- Hierarchical coordination of all participants in the supply chain;
- Application of reverse logistics concept;
- Realistic estimates of all activities, primarily costs and time.

Hüseyinoğlu, Bäumlner & Kotzab (2022) conclude that a comparative analysis of the state of logistics systems and GSC before and after the COVID-19 crisis is needed, in order to draw adequate conclusions regarding the necessary strategies and to advance knowledge on the impact of the international logistics system on the business environment and various industries.

In addition to general consensus on the importance of logistics for the functioning of economic flows, especially at the international level, as well as its contribution in times of crisis, the identified gap in the existing literature is in the lack of studies examining the importance of international logistics system and its segments as a link between macro and micro aspects, especially in times of crisis. In this regard, the article seeks to answer two research questions:

RQ1: Is the importance of the logistics system for the business environment observed differently before and after the crisis?

RQ2: Which dimensions of logistics are especially recognized in times of crisis?

Also, two hypotheses have been created and being tested individually:

H1: The system of international logistics in times of crisis shows a different impact between manufacturing and non-manufacturing companies.

H2: The impact of logistics system in times of crisis depend on the size of the company.

3. Methodology

Conducted research, related to the COVID-19 crisis, is a part of a questionnaire that aims to examine the impact of logistics performance on the business environment and companies' performance. The electronic version of the questionnaire was distributed through the system of the Serbian Chamber of Commerce to all relevant companies in the Republic of Serbia that are actively involved in export and import operations. In the period March-April 2022, a total of 298 responses were collected from managers in the surveyed companies. The research is anonymous and used exclusively for scientific purposes.

The complete questionnaire, as well as the part related to the evaluation of logistics performance before and after the crisis, contains evaluations of the "hard" and "soft" components of the logistics system, formulated based on the Logistics performance index developed by the World Bank (Arvis, Ojala, Wiederer, Shepherd, Raj, Dairabayeva & Kiiski, 2018). In the part of the questionnaire designed to assess the impact of the COVID-19 crisis, it is possible to separate the average grades for each of the statements and see the difference compared to the previous period. Statements in the domain of physical "hard" components of logistics concern the assessment of trade, river, road and railway infrastructure. Logistics services within the "soft" dimension evaluate the efficiency of customs procedures, the quality of logistics service providers and the demand for transport services, as well as the dimensions of cyber and payment security of logistics operations and components that are closely related to the application of ICT and modern trading platforms. The statements are adapted to the subject and objectives of the research, as well as to the language area in which the research was conducted. The assessment is done on a 1-5 Likert scale, where higher values for individual statements point to the progress in that segment of logistics after the impact of the crisis.

From the total sample, 116 companies are from the manufacturing industry, while the remaining number of 182 refer to non-manufacturing companies. The size of the sample is dominated by small companies with a share of 43.29%, followed by medium-sized (33.9%), and large companies (22.81%). The sample is dominated by companies with private domestic capital (75.17%), while foreign (17.79%) and state-owned companies (7.04%) are represented to a lesser extent. The size of the sample enables valid interpretations and drawing conclusions at the level of the entire economy, based on the assessment of defined statements, while its heterogeneous structure provides an opportunity to examine differences depending on the sector of the economy and the size of the surveyed companies through T-test and ANOVA.

4. Results and discussion

For research purposes, 13 statements were formulated that refer to the states of individual components of the international logistics system before and after the COVID-19 crisis. The first two statements refer to the efficiency of customs procedures in the country and abroad, and their average rating indicates that there were no significant changes in this segment due to the consequences of the crisis. The situation is similar with regard to the elements of trade and physical infrastructure, where all those components indicate a slightly higher efficiency before the crisis, which is probably a consequence of the slower flow of goods during the pandemic caused by stoppages and border closures. Quality assessments of logistics service providers, related payments and demand for transport services have not changed significantly. This situation can be attributed to the short period of the observation. On the other hand, greater importance due to the consequences of the crisis regarding the effects of the international logistics system on the business environment was recognized for the categories of statements related to the application of modern technologies in logistics operations. Before the pandemic there was particularly less use of electronic trading platforms (B2B and B2C) as well as lower awareness of the importance of cyber security, whose growth can be attributed to the direct effects of the crisis that disrupted traditional business on a global level and pointed to greater application of ICT in this area. According to the standard deviation, the biggest gap in the rating is noticeable when comparing the level of demand for transport services, which is a consequence of disruption in demand for certain products during the pandemic, since the sample includes companies from different industries (Table 1). The validity of the obtained results is shown by the conducted reliability analysis, where the value of the Cronbach's alpha coefficient for the selected statements was determined at 0.935, which indicates a high internal consistency of the statements that were used.

Table 1: Descriptive statistics for the statements

Statements: Before COVID-19 pandemic...	Mean	Std. Deviation
1... the efficiency of the customs procedure was at a lower level compared to the current period.	2.9732	1.07275
2... the efficiency of customs procedures of the countries with which we cooperate was at a lower level compared to the current period.	2.9161	1.04270
3... the quality of trade infrastructure was at a lower level compared to the current period.	2.9664	0.99098
4... river traffic was less efficient compared to the current period.	2.9094	0.95444
5... road traffic was less efficient compared to the current period.	2.8893	1.10911
6... rail traffic was less efficient compared to the current period.	2.9161	1.01984
7... the quality of information and communication technology for the implementation of logistics activities was at a lower level compared to the current period.	3.1107	1.08455
8... the quality of services of logistics providers was at a lower level compared to the current period.	3.0369	1.08027
9... there were more problems in paying for logistics activities than in the current period.	2.9161	1.15892
10... there was less demand for transport services compared to the current period.	3.1040	1.22512
11.. there was less use of electronic trading platforms (B2B and B2C) compared to the current period.	3.4329	1.12988
12... there was a greater possibility of cybersecurity issues.	3.0906	1.11699
13... there was less awareness of the importance of cyber security.	3.4195	1.13198

Note: N=298; Min: 1; Max: 5

Source: Output from SPSS

Hereby, the answer to two research questions has been provided by giving evaluations of the effects of the international logistics system before and after the crisis, which stands out in particular segments of the business environment. The importance of modern technologies is highlighted through individual statements in this area that could be the rising trend in future logistics activities. The results complement findings from previous research that indicates a growing need for integrated and fast logistics flows because of the COVID-19 crisis (Hüseyinoğlu, Bäumlér & Kotzab, 2022), as well as the need to reduce costs, increase flexibility, and speed up the response to requests, in order to reduce risks at the level of logistics operations along the entire GSC (Remko, 2020). The integrity and coordination of logistics activities at the international level can be achieved through a greater degree of digitization of all segments in international logistics operations and more intensive application of modern technologies, which indicates the future growth and the importance of the Logistics 4.0 concept in international business, as an integral part of the Fourth Industrial Revolution (Winkelhaus & Grosse, 2020).

In order to determine the potential difference between manufacturing and non-manufacturing companies (H1), a T-test was conducted (Table 2). The results indicate that there is a statistically significant difference between manufacturing and non-manufacturing companies in terms of certain statements concerning the development of the international logistics system. A statistically significant difference was not identified only in the case of the statement related to the efficiency of the customs procedure, while other statements established a significant positive difference in favor of non-manufacturing companies. Accordingly, the first hypothesis was partially confirmed which indicates that non-manufacturing companies perceive a greater impact of the international logistics system in times of crisis.

Table 2: T-test results for two independent samples

Statements	Manufacturing companies	Non-manufacturing companies	t value	sig.
	M (SD)	M (SD)		
1	2.8534 (1.05710)	3.0495 (1.07856)	248.675	.123
2	2.7759 (1.01370)	3.0055 (1.05379)	252.013	.062
3	2.8017 (.96206)	3.0714 (.99743)	251.536	.021
4	2.7241 (.82973)	3.0275 (1.01061)	277.601	.005
5	2.7586 (1.00970)	2.9725 (1.16311)	269.365	.094
6	2.7500 (.90289)	3.0220 (1.07691)	274.635	.020
7	2.9569 (1.05824)	3.2088 (1.09258)	250.794	.049
8	2.8621 (1.01207)	3.1484 (1.10996)	261.328	.023
9	2.6983 (1.04856)	3.0549 (1.20645)	269.179	.007
10	2.9138 (1.22701)	3.2253 (1.21174)	242.797	.033
11	3.2069 (1.12302)	3.5769 (1.11351)	243.524	.006
12	2.8966 (1.02473)	3.2143 (1.15783)	266.275	.014
13	3.2500 (1.11023)	3.5275 (1.13547)	249.104	.038

Note: Values statistically significant at the level 0.01, 0.05 and 0.1; M- mean; SD – standard deviation

Source: Output from SPSS

In the next step, differences in average values between different-sized companies were examined. By comparing small, medium and large companies using the ANOVA test, it was determined that there is no statistically significant difference between the observed groups of companies (Table 3). Therefore, hypothesis H2 was not confirmed, which indicates the equal importance of the international trade logistics system for all market participants since it does not show differences in the impact on the business environment depending on the companies' size.

Table 3. ANOVA test results

Statements	F	Sig.
1	.121	.886
2	.161	.851
3	.054	.947
4	.006	.994
5	.310	.734
6	.208	.812
7	.239	.787
8	.197	.821
9	.177	.838
10	.012	.988
11	1.308	.272
12	1.170	.312
13	.033	.968

Note: Values statistically significant at the level 0.01, 0.05 and 0.1

Source: Output from SPSS

5. Conclusion

The conclusions primarily emphasize the role of ICT components within the international logistics system, complementing the OECD study regarding the need for optimization and rationalization of the necessary documents, as well as better international cooperation between participants in GSC, due to the consequences of COVID-19 (Soresku & Bolig, 2022), which can be achieved based on the growing trend of digital trading platforms. The research complements and concretizes earlier considerations of the role of international trade logistics in crisis conditions, while indicating the emerging trend within this system in the given circumstances with practical guidelines for reducing the negative sides of the crisis given through the answers to research questions. In this regard, we can conclude that the application of modern technologies, Logistics 4.0 and the development of B2B and B2C trading platforms are especially recognized during the consequences of the COVID-19 crisis, which directly affected GSC and the international logistics system. Regarding the tested hypotheses, the partial confirmation of H1 shows that the majority of statements are in favor of the greater importance of logistics system on the business environment for non-manufacturing companies, while the rejection of H2 imposes a conclusion on the equal importance of logistics for all companies operating on international markets.

The adoption of these principles in managing the GSC and the international logistics system leads to a strong potential for solving problems related to the movement of various products at the global level in crisis conditions. An active approach to solving problems enables a faster reaction and elimination of delays, especially significant in the process of international trade and execution of international logistics operations. The role of logistics, as an integral domain of economic and industrial policy and a key factor in international trade efficiency, provides a way to actively monitor and further improve industrial performance. In order to coordinate distribution and transport activities and to have the continuity of procurement and placement of goods on international markets, it is necessary to apply modern solutions and technologies. On the contrary, the weakness of the international logistics system can lead to an interruption in global supply, which entails negative consequences and a stoppage of all activities related

to industrial production and realization of sales on international markets. Future directions of research should be focused on ways to increase the efficiency of international trade logistics through the concept of Logistics 4.0, while the limitations of this article, reflected in the evaluation of logistics system within only one country, could be overcome by similar research in other markets.

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Exploring the Impact of the COVID-19 Pandemic on the Relationship between Entrepreneurial Resilience and Success: Evidence from Three Transition Countries

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Agim Pepkolaj³

Abstract

Scholars recognize the fact that firms operate in not a constant environment, but in a changing one, leading to a dynamic environment. All firms, regardless their size, face with wide risks and situations characterized by changes in environment, including the business disruption from the COVID-19 pandemic. This paper seeks to investigate the influence of entrepreneurial resilience on entrepreneurial success, and the moderating role of scarcity due to the pandemic on the aforementioned relationship. To reach the study's aim, a quantitative methodology is applied by making use of 651 questionnaires of small and medium-sized enterprises collected from three post-communist transition countries. Partial least square structural equation modeling is used as a method to test the research model. The paper findings indicate that entrepreneurial success is positively associated with entrepreneurial resilience. In addition, the relationship is stronger in cases when scarcity of products in the market is more present. This paper contributes to the entrepreneurship and organizational behavior literature.

Key words: Entrepreneurial success, entrepreneurial resilience, scarcity, COVID-19, transition countries, PLS-SEM

Introduction

Scholars recognize the fact that firms operate in not a constant environment, but in a changing one, leading to a dynamic environment. Thus, it can be said that the sustainability of the business activity is jeopardized by unpredictable factors (Belas et al., 2019; Campanella et al., 2016; Çera, Belas, et al., 2019). In this case, businesses adjust the organizational structure and policies and owners and managers of the business adjust their behaviors in order to deal with this dynamic environment where their activity take place so to survive or avoid failure and, why not, make use of new opportunities (Belitski et al., 2022; Çera, Breckova, et al., 2019; Lengnick-Hall & Beck, 2016). All types of firms (micro to large) manifest business discontinuities due to disruptions in the market where they operate. In addition, they face with wide risks and situations characterized by changes in environment originated from the market,

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technological challenges, political and socio-cultural conditions, including the business disruption from the COVID-19 pandemic (Çera et al., 2021; Çera, Belás, et al., 2019; Cheng et al., 2014; Kljucnikov et al., 2020; Santoro et al., 2017; Schepers et al., 2021). In this scenario, scholars see at firms that are resilient the possibility to deal with disruptions and/or uncertainties (Del Giudice et al., 2017; Galindo & Méndez, 2014). A resilient organization is characterized by the ability to act (coping mechanism) to the unpredictable events which may cause its failure (Bressan et al., 2022; Khurana et al., 2022; Smith et al., 2022). Operating in markets with unexpected events, a capacity for resilience may be seen as an important factor in avoiding business termination or failure.

An unprecedented and unexpected situation was the one created by the COVID-19 pandemic. Almost all countries across the globe took measures to control the spread of the virus leading to a situation where businesses (and not only) were exposed to new environment. During that time, entrepreneurial resilience became imperative for businesses to cope and find new way of continuing the business activity (Sharma & Rautela, 2021). Among others, digital transformation raised as an approach to response to the new reality (Khurana et al., 2022).

Although there is an interest in organizational resilience in the literature (from both angles: theoretical and practical), yet resilience at individual level has not received enough attention and related papers seem to be very few in the literature. The studies related to this issue in the context of the COVID-19 pandemic look like too limited. Thus, one can identify that there is a need to shed light on how entrepreneurs deal with challenges originated from both internal and external environment due to disruptions in the market and how they find ways to continue business activity. Additionally, even though scholars have provided insights on the positive influence of entrepreneurial resilience on entrepreneurial success, there is still room to study the factors that impact the above relationship.

To fill the above identified gap, this study seeks to offer a better view of the influence of entrepreneurial resilience on entrepreneurial success, and the moderating role of the COVID-19 (scarcity of products in the market) on the above relationship.

1. Literature review

At the organization level, the concept of “resilience” has been used by scholars to refer to a feature of those firms that can adjust to a shock quickly by putting in place such coping mechanism that enables business activity and avoid business failure (Akgün et al., 2014; Nyikos et al., 2021). There is a definition about entrepreneurial resilience provided by Coutu (2002, p. 52) which it is as the “capacity to be robust under conditions of enormous stress and change”. In this line, the capacity to absorb uncertainty and take actions towards new processes and activities to limit potential risks can be known as organizational resilience.

It is argued that organizational resilience and individual resilience do correlate one with the other, and in the situation of small firms, entrepreneur’s resilience (individual level) can foster firm’s performance and its success (Santoro et al., 2020). In the case of small businesses, it is demonstrated that a person’s behavior influences that of the others around, due to even the missing of complicated hierarchy (De Jong & Den Hartog, 2007).

In the literature of entrepreneurship, there are numerous studies claiming that resilience is an important determinant for providing outcomes to entrepreneurs, thereby, it can be seen as factor that influence success for entrepreneurs (Ayala & Manzano, 2014; Baron & Markman, 2003; Fisher et al., 2016). Moreover, there are papers pointing to the fact that business performance and entrepreneurial success are affected by resilience (Baron & Markman, 2003; Hayward et

al., 2010; Santoro et al., 2020), motivations, attitude towards risk (Grözinger et al., 2021; Stewart et al., 1999). Taking into account the above reasoning, a hypothesis can be formulated:

Hypothesis 1: Entrepreneurial success is positively affected by entrepreneurial resilience.

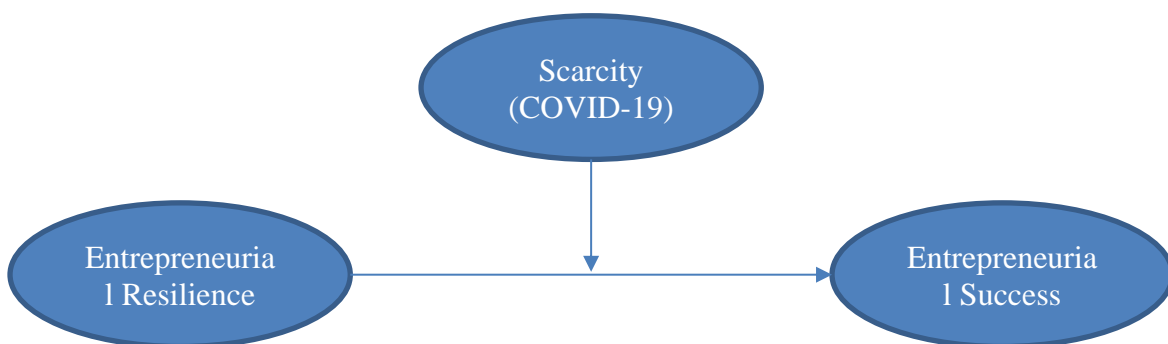
As a result of the COVID-19 pandemic and governmental measures, including lockdown, firms had to limit their activity leading to a significant decrease in revenues. In order to survive and avoid failure, changes are required to be put in place at organizational, industry and market level, due to the increase of uncertainty and threatened financial security (Beliaeva et al., 2020). Firms, in particular small and medium-sized enterprises (SMEs), were and are struggling with the new circumstances due to COVID-19. SMEs are identified as the most vulnerable to disruptions and their long-lasting effects (Cucculelli & Peruzzi, 2020), have challenges in accessing finance (Karlsson, 2021). Moreover, they usually do not have enough resources to make use of them and get rid of such situation. These difficulties of SMEs are also highlighted by the resourcebased view (Barney, 1991; Crook et al., 2008) and the liability of smallness (Fackler et al., 2013).

During the crisis periods, when scarcity is more present than ever, securing business performance is imperative in order to avoid failure (Grözinger et al., 2022). There is lack of research that shed lights on the determinants of business performance, especially in case of crisis. It is generally accepted by the scholars that the entrepreneurs' capabilities and firms' characteristics affect business performance. However, (Cowling et al., 2018), by analyzing firm performance after the global financial crisis (2008-2010), demonstrate that the above-mentioned characteristics manifested very low impact on the business performance. Thus, it is not fully clear the role of crisis and disturbance on relationship between entrepreneurs' capabilities (including resilience) and business success. In this paper, the following hypothesis is formulated:

Hypothesis 2: Scarcity (impact from a disruption/shock) moderates the relationship between entrepreneurial success and entrepreneurial resilience.

Figure 1 illustrates the conceptual framework of this paper.

Figure 1. Conceptual framework



2. Method and procedures

2.1. Questionnaire and data

The aim of this paper is to evaluate the effect of entrepreneur resilience on entrepreneurial perceived success, and the moderating role of the COVID-19 (scarcity of products in the market) on the aforementioned relationship. To achieve this aim, one can say that a quantitative method is needed to be applied in order to examine the abovementioned effects. In this context,

the quantitative method can infer the population’s attributes and or behaviour from a sample of the population (Creswell & Creswell, 2017). Therefore, survey is the used research strategy in this study, which foresees the development of a questionnaire. The questionnaire was firstly developed in English and then translated into the two languages (Albanian and Macedonian).

651 valid responses were collected randomly from September 2021 to February 2022 (246, 201 and 204 in Albania, Kosovo* and North Macedonia, respectively). Figure 2 illustrates the distribution of the respondents by firms’ principal market. The majority of the firms operates in local market, one in three firms operate in national market and the rest operate in international market.

Figure 2. Respondents’ distribution by principal market

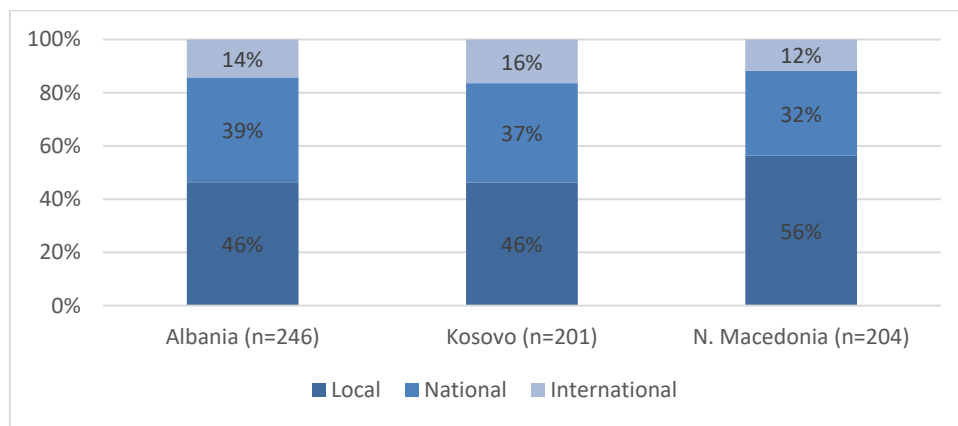
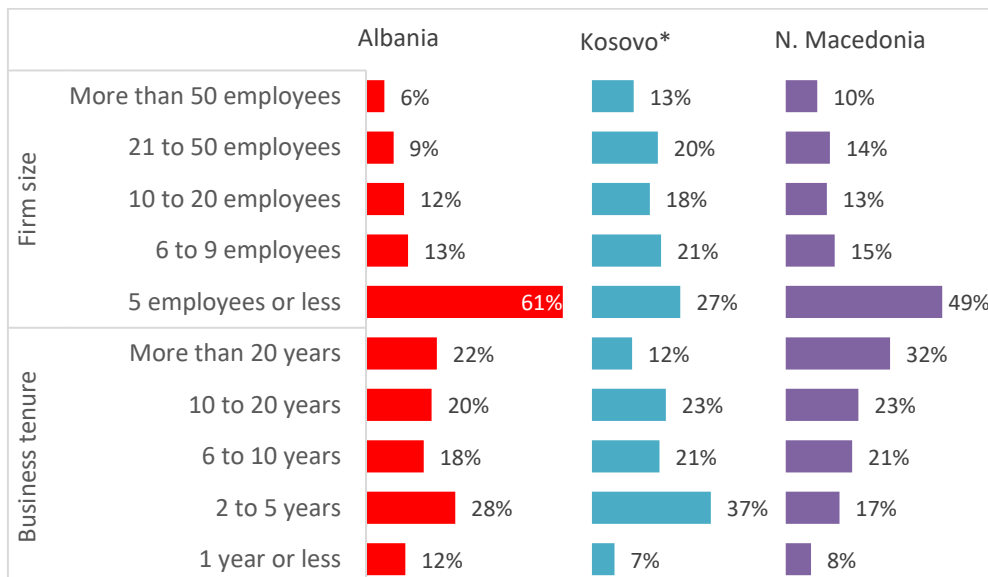


Figure 3 shows the distribution of the firms by their size and tenure. As can be seen, a similar pattern is presented in the three countries*.

Figure 3. Respondents’ distribution by firm characteristics



*This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

*This designation of Kosovo is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

2.2. Variables

All scales used in this paper are adapted from established measures to the COVID-19 pandemic. These variables are included in the questionnaire. Entrepreneurial success is measured using the four items from (Fisher et al., 2016), while entrepreneurial resilience is measured by a scale developed by (Sinclair & Wallston, 2004). The scale of scarcity is measured by using two items covering both limited-quantity and -time scarcity. The development of this kind of measure is motivated by a prior study of Wu et al. (2021). The three scales' items are measured by using a 5-point Likert scale. The measurement of the variables is reported in Table 1.

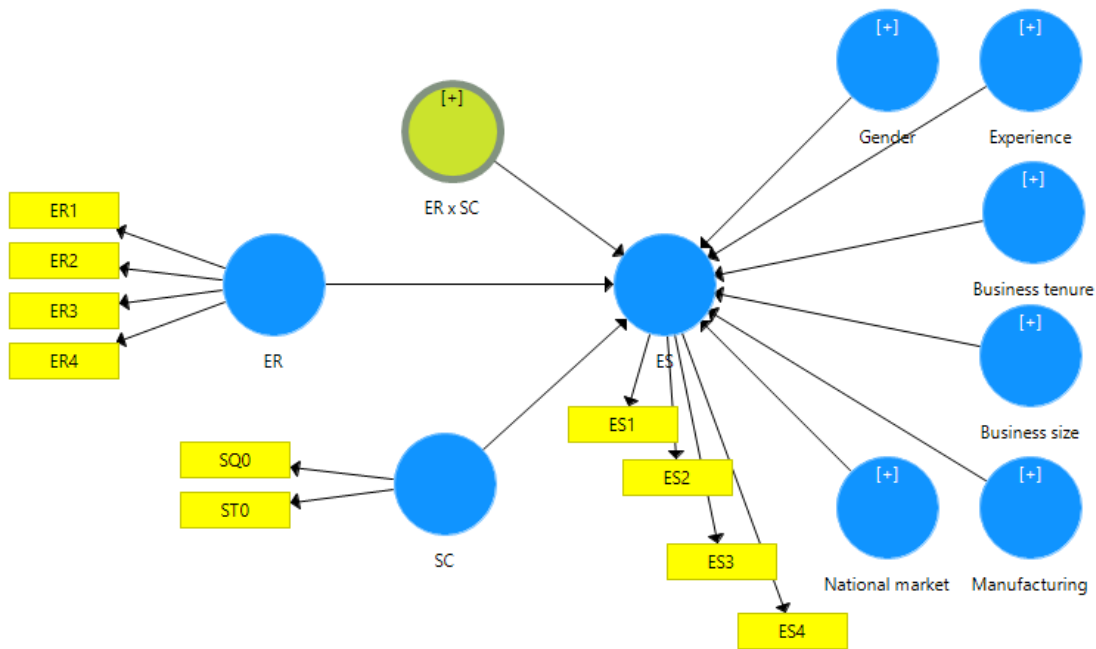
Table 1. Variables and items

Construct	Question	Items
Entrepreneurial Success	To what extent do you agree with the followings: I am successful if...	I am personally satisfied with my life and business
(Fisher et al., 2016)	1=totally disagree ... 5=totally agree	I do only that which I want to do in life and business I continually grow my business I exceed the business goals I set out to achieve in founding at least one business
Entrepreneurial Resilience	To what extent do you agree with the followings:	I actively look for ways to replace the losses I encounter in life
(Sinclair & Wallston, 2004)	1=totally disagree ... 5=totally agree	I believe that I can grow in positive ways by dealing with difficult situations I look for creative ways to alter difficult situations Regardless of what happens to me, I believe I can control my reaction to it
Scarcity	How available do you think are the:	... limited-time products? ... limited-quantity products?
(Wu et al., 2021)	1=extremely insufficient ... 5=extremely sufficient	

2.3. Method

In order to test the research model, partial least squares (PLS) structural equation modelling (SEM) method is used. The research model is performed in SmartPLS 3.0 (Ringle et al., 2015). The PLS method can test both measurement and structural models (Hair et al., 2017). In addition, PLS is a useful approach in testing moderating effects because it introduces a new indicator that is same to traditional regression parameter. Moreover, as recommended in the literature, the bootstrapping is applied with 5000 iterations of resampling. The tested research model is shown in Figure 4.

Figure 4. Research model



Note: ER, ES, and SC are Entrepreneurial resilience, Entrepreneurial success, and Scarcity, respectively.

3. Results

Before hypothesis testing, there is a need to check some assumptions, including item, scale, and convergent reliabilities (see Table 2), and discriminant validity (see Table 3). Item reliability informs on the capacity the construct has to explain the indicator's variance, which is recommended to be above 0.708 (Hair et al., 2019). It can be examined item loadings. All the indicators' loading satisfies the above rule, leading to the conclusion that item reliabilities in this study are acceptable.

Scale reliability can be checked by looking at the values of composite reliability and Cronbach's alpha for each composite. Among the two mentioned statistics, composite reliability is considered more appropriate for PLS-SEM (Hair et al., 2019). A higher value of them informs for better reliability, yet a value above 0.95 is seen as a problematic one. Thus, there is a range where they should vary (0.70 – 0.95). The values of composite reliability vary from 0.877 to 0.949. Seeing these results, one can say that the scale reliability varies from good to excellent, meaning that scale reliability is not a concern in this study.

Convergent validity reports the amount to which a scale converges to explain its items' variance. In general, a value above 0.50 is considered as acceptable. In this study, convergent validity ranges from 0.642 to 0.915, indicating that all scales explain more than the half of the variation among their items.

Table 2. Item, scale, and convergent reliability

Item	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Entrepreneurial resilience		0.856	0.860	0.903	0.699
ER1	0.836				
ER2	0.817				
ER3	0.848				
ER4	0.842				
Entrepreneurial success		0.813	0.822	0.877	0.642
ES1	0.824				
ES2	0.708				
ES3	0.851				
ES4	0.814				
Scarcity		0.907	0.908	0.949	0.915
SQ0	0.955				
ST0	0.958				

Note: ER, ES, and SC are Entrepreneurial resilience, Entrepreneurial success, and Scarcity, respectively.

In Table 3 is shown the correlation matrix and discriminant validity for the constructs included in the research model. The latter is measured using the HTMT coefficients. In this table the interaction variable (SR x SC) stands for is the moderating variable. The results of the discriminant analysis shows that all constructs in the model are distinct one from another.

Table 3. Correlation matrix and Discriminant validity

	Correlation coefficients				HTMT coefficients			
	ER	ER x SC	ES	SC	ER	ER x SC	ES	SC
ER	1.000							
ER x SC	-0.261	1.000			0.280			
ES	0.638	-0.246	1.000		0.757	0.268		
SC	0.375	0.121	0.368	1.000	0.426	0.128	0.432	

Note: ER, ES, and SC are Entrepreneurial resilience, Entrepreneurial success, and Scarcity, respectively.

The above analysis and their results mean that the research model can be tested, and its results can be interpreted, since the assumptions are not violated. The results of path analysis are reported in Table 4. The model explains 45% of the variance on entrepreneurial success, according to the R-square statistic. Regarding the direct effects of entrepreneurial resilience and scarcity, results show that their paths are statistically significant for determining entrepreneurial success. Thus, entrepreneurial success is positively affected by entrepreneurial resilience ($\beta = 0.530$, $t = 14.735$, $p < 0.001$). This result support H1, which claims positive effect of entrepreneurial resilience on entrepreneurial success. In addition, scarcity is found to be a statistically significant determinant for entrepreneurial success ($\beta = 0.168$, $t = 4.191$, $p < 0.001$).

Regarding the moderating role of scarcity on the influence of entrepreneurial resilience on entrepreneurial success, the results of the path analysis demonstrate that it is statistically significant ($\beta = -0.128$, $t = 3.383$, $p < 0.01$). This result means that the effect of entrepreneurial resilience on entrepreneurial success is governed by scarcity of the products in the market where the firms operate. Thus, the data fails to reject H2. The moderating effect merits to be

plotted in a graph so to better understand its role. This follow up analysis is elaborated in the Discussion section of this paper.

Table 4. Path coefficients

Path	Original Sample	Sample Mean	Standard Deviation	T statistics	P values
ER -> ES	0.527	0.530	0.036	14.735	0.000
SC -> ES	0.170	0.168	0.041	4.191	0.000
ER x SC -> ES	-0.128	-0.128	0.038	3.383	0.001
Business size -> ES	0.054	0.054	0.030	1.800	0.072
Business tenure -> ES	0.018	0.018	0.031	0.576	0.565
Experience -> ES	-0.040	-0.039	0.032	1.249	0.212
Gender -> ES	-0.055	-0.054	0.030	1.816	0.069
Manufacturing -> ES	0.003	0.002	0.027	0.109	0.913
National market -> ES	0.022	0.021	0.028	0.794	0.427

Note: R Square=0.450; R Square Adjusted=0.442

4. Discussion and Conclusion

This paper aimed to shed light on the influence of entrepreneurial resilience on entrepreneurial success and the role of COVID-19 on the above relationship. The role of the COVID-19 pandemic is investigated by examining the moderating effect of scarcity of products on the entrepreneurial resilience–entrepreneurial success relationship. The reason why is selected this kind of research is that scarcity in the market puts pressure on the business activity and by studying this situation, additional insights can be provided to entrepreneurs and policymakers.

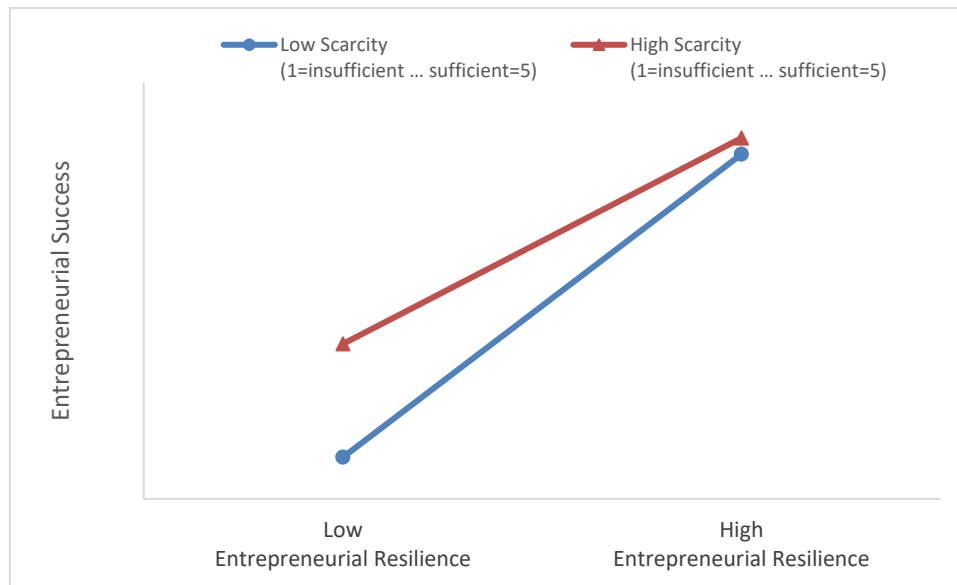
A quantitative methodology was used to examine the proposed research model and test the paths (hypotheses). This kind of methodology foresees the use of data. In this research a questionnaire was developed and distributed to owners of small and medium-sized enterprises. A dataset of 651 valid questionnaires were collected from three post-communist transition countries, which are Albania, Kosovo* , and North Macedonia.

The findings of this paper reveal that entrepreneurial success is positively influenced by entrepreneurial resilience. This finding is in line with prior research conducted not in crisis context such as Ayala and Manzano (2014), Fisher et al. (2016), and Santoro et al. (2020). In addition, the moderating effect of scarcity on the relationship between entrepreneurial resilience and entrepreneurial success is found to be present. This finding means that scarcity in the market governs the effect of resilience on entrepreneurial success.

In Figure 5 is illustrated a visual way of the interplay of entrepreneurial resilience with scarcity and their effect on entrepreneurial success. One can notice that a steeper line is that of the relationship between entrepreneurial resilience and entrepreneurial success with low scarcity (insufficient products in the market), compared to that of with high scarcity (sufficient products in the market). According to the formulated hypothesis, the effect of entrepreneurial resilience on entrepreneurial success is moderated by scarcity, such that the relationship is stronger when products in the market are more insufficient. Thus, the data fails to reject H2.

* This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

Figure 5. Moderating effect



The research of Grözinger et al. (2022) adds to that stream of literature that deals with the organizational behavior of SMEs by emphasizing that, in crisis situations, business performance can be strengthened by their psychological resources. This fact can help the entrepreneurs to prepare for future shocks (Belitski et al., 2022). This logic is supported by the results of this research referring to the moderating effect.

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The Influence of Human Resources Competency Management on the Business Performance of Small and Medium Enterprises from the Internal Business Processes Perspective and the Learning and Growth Perspective

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Abstract

Small and medium enterprises (SME's) are the bearers of permanent innovation that renews, transforms and encourages the development of economies around the world. The success of the organization is based on the quality of human resources, their competencies, motivation, loyalty, and their business results. Competency management consists of: determining the required competencies; determining current competencies and the competency gap; and undertaking activities to ensure and develop the necessary competencies. The basic aim of this research is to determine whether and to what extent human resources competency management influences the business performance of SMEs from the internal business processes and the learning and growth perspective. The empirical research was conducted in 234 SMEs in the Federation of Bosnia and Herzegovina in January 2021. An original questionnaire was created for the survey. Data collected by the conducted empirical research were analyzed using graphic representations; descriptive statistics; structural analysis; Kolmogorov-Smirnov test; Mann-Whitney U test; Kruscal-Wallis test; correlation analysis; factor analysis; and hierarchical multiple regression models. The research results showed the correlation between the studied variables and the influence of human resources competency management on the business success of SMEs viewed from the internal business processes and the learning and growth perspective.

Keywords: business performance; competencies; human resources management; small and medium enterprises; learning and growth; internal business processes

1. Introduction

Human resources (HR) are the most valuable resource of the organization and they use and manage other resources in the organization. The success of the organization is based on the quality of HR, their competencies, motivation, loyalty, and their business results. Senyucel (2009, p. 13) concluded that it is absolutely vital that organisations should see their employees as valuable assets not just a file or a number in a spreadsheet. Employees are now expecting their employers to invest on their training and development and in return the organisations expect employees to be flexible, creative and productive. Due to the uniqueness and specificity of SMEs it can be said that human capital (HC) as a source of competitive advantage is even more important for SMEs despite the scarcer resources, it is one way for them to stand out from

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the competition, because human resources cannot be copied. This stems from the fact that the improvement of the HC has an impact on performance that it is not simple neither easy to evaluate and hence to imitate (Hayton, 2003). Perhaps, it is more important as a source of competitive advantage for SMEs than for large companies because HC is specific and SMEs can use it to differentiate from competitors (Jardon & Gonzalez Loureiro, 2013, p. 255). HC is unique because people cannot be separated from their knowledge, skills, or values in the way they can be separated from their financial and physical assets. “The term ‘human resources’ implies that people have capabilities that drive organizational performance. Other terms such as ‘human capital’ and ‘intellectual assets’ all have in common the idea that people make the difference in how an organization performs” (Dubois & Rothwell, 2004, p. 33). High skilled people are able to perform more efficiently their job and consequently they can reduce their unitary cost, but this is just one of the benefits that quality employees bring to the organization. The benefits are reflected in better employee performance, better results, greater employee satisfaction, etc. Organizational resources lead to a sustained competitive advantage when they are valuable, rare, inimitable and have no substitute. The first four criteria create a potential for competitive advantage, but if the firm wants to obtain this advantage over its rivals, then it will have to be organized to use these resources. (Ulrich & Lake, 1990). The spotlight going to human resources management (HRM) is justifiable since it is a resource that tends to be rare; a resource which is valuable, imperfectly and hardly substitutable and as such should be managed well and very carefully (Machado & Davim, 2020, p. 23-24).

Christiansen and Chandan (2017, p. 21) defined HRM as an administrative function in organizations designed to maximize employee performance through the planning, organizing and coordinating of activities such as hiring, firing, performance management and training. On the other side Bahtijarević-Šiber (2014, p. 5) defines HRM as a complete and integrated system of complex and interconnected initiatives, activities and tasks of management to ensure the appropriate number and structure of employees, their knowledge, skills, competencies, interests, motivation and forms of behavior necessary to achieve current, development and strategic goals of the organization, achieving sustainable competitive advantage and organizational success. The HRM can also be defined as “an inevitable process that accompanies the growth of organizations” (Medina & Medina, 2015, p. 284). Medina and Medina (2015, p. 284) concluded that there is a close connection between an organization’s ability to innovate, the organization’s intellectual capital and the organization’s ability to utilize its knowledge. An organization’s greatest potential contribution to strategy is skill acquisition, learning and accumulation of intangible and organizational assets. HRM allows creating competitive advantage in enterprise and enterprises achieve and retain competitive advantage if they focus on enlarging of the knowledge value for the organization.

2. Theoretical background

McClelland, was one of the first to make the case that behavioral competencies, rather than intelligence, was what differentiated successful people from their less successful peers in the workplace. He defined a competency as a personal characteristic, motive, behavior, skill, or knowledge that is proven to drive superior job performance. He also argued that traditional academic criteria, such as grades in school or academic aptitude, simply did not predict later success in the workplace (Weiss & Kolberg, 2003, p. 21). According to Boyatzis (1982) and Klemp (1980) competency is an underlying characteristic (motive, trait, skill, aspect of self-image, social role, body of knowledge) that an employee uses and that results in effective or superior performance. Later, Bahtijarević-Šiber (2014, p. 124) defined competencies as a complex combination and integration of individual skills, knowledge, abilities, motives and

personality traits that result in forms of work and business behavior necessary to achieve job performance, business and organizational strategies and goals. More simply, these are certain forms of behavior that require the successful performance of certain tasks and roles in the organization based on a specific combination of personality traits, abilities, knowledge and skills of employees. Competency is a cluster of related knowledge, attitudes, skills, and other personal characteristics that affects a major part of one's job (i.e., one or more key roles or responsibilities); that correlates with performance on the job; that can be measured against well-accepted standards; and that can be improved via training and development (Project Management Institute, 2001, p. 82).

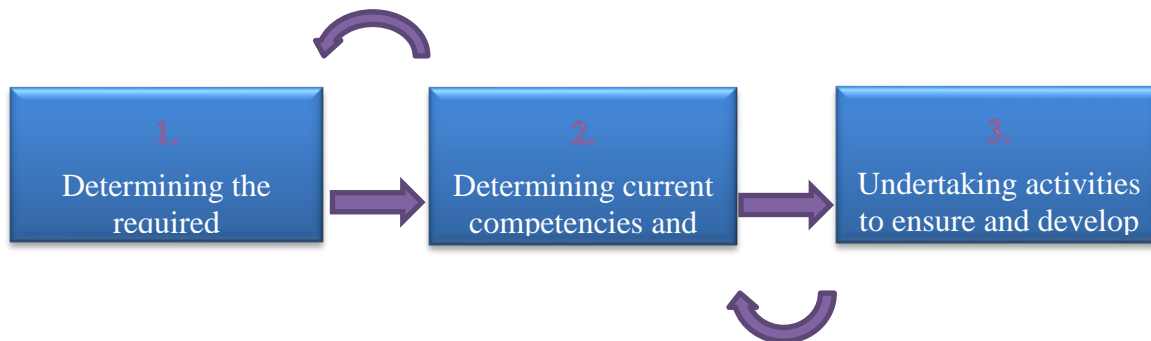
Competencies are now the most prevalent method used to define ideal employees and have become a fundamental part of talent management systems across organizations. In rapidly changing business environments, organizations are recognizing the value of a workforce that is not only highly skilled and technically adept, but more importantly, a workforce that can learn quickly, adapt to change, communicate effectively, and foster interpersonal relationships (Rodriguez et al., 2002, p. 309) (Bücker & Poutsma, 2010, p. 832). Competency analysis is the process of determining the competencies (knowledge, skills, abilities, motivations and other requirements) required for effective work performance (Klinvex, O'Connell & Klinvex, 1999, p. 8). Each organization needs to develop its own competency model that suits its needs and specifics. The competency model determines those skills and behaviors or competencies of employees that will ensure the achievement of strategic goals. It provides the right criteria for determining whether an organization has a HR that will enable it to achieve its goals (Bahtijarević-Šiber, 2014, p. 132-133). Competence management involves the specification of an organization's competence needs, the identification of competence gaps, competence sourcing, competence development through training and coaching, and the staffing of projects (Baladi, 1999). While determining the organization's extant and desired core competencies is generally part of strategic management's macro focus (Simpson, 2002), managing those competencies at an operational level is usually the responsibility of HRM (Bergenhengouwen et. al., 1996) (Lindgren, Henfridsson, & Schultze, 2004, p. 436). The aim of competence management is to plan, implement and evaluate initiatives that ensure that the proper competencies are available to a company, which requires them to achieve its business objectives (Nordhaug, 1993). To preserve a company's competitive edge, it is an inevitable necessity that a competence-management system be developed. In general terms, competence management operates on two levels: the macro- and the micro-. The former is concerned with core competencies and is controlled by business management (Patalas-Maliszewska & Hochmeister, 2011, p. 73-74). Harzallah, Berio and Vernadat, (2006) and Saks and Haccoun (2016, p. 122) developed a three-step competence management model and Gaeta, Marzano, Miranda and Sandkuhl (2017, p. 408) summarized the list of six steps process. Methodology for achieving competence within the Framework of Project Management Institute progresses through also three stages (Project Management Institute, 2001, p. 77). A competency-based approach to performance management was also researched by Dubois and Rothwell (2004, p. 147), Washington and Griffiths (2015, p. 28) and the International Human Resources Development Corporation (2021).

Based on the existing competency management models for the needs of this paper and doctoral dissertation, a modified model is presented as the most suitable, which is a combination of the previously presented models and which consists of 3 phases (Figure 1):

- (1) Determining the required competencies;
- (2) Determining current competencies and determining the competency gap between the required and current competencies; and

(3) Undertaking activities to ensure and develop the necessary competencies.

Figure 1: The human resources competency management model



Source: From *The influence of human resources competency management on the Business success of small and medium enterprises (Doctoral dissertation)* (p. 57) by I. Klepić, 2021. Juraj Dobrila University of Pula, Faculty of Economics and Tourism „Dr. Mijo Mirković” Pula, Croatia; University of Economics in Bratislava, Faculty of International Relations: Slovak Republic; University Sopron, Alexandre Lamfalussy Faculty of Economics: Sopron, Hungary; University North: Varaždin, Croatia; University of Mostar: Mostar, Bosnia and Herzegovina; Czech University of Life Sciences, Faculty of Economics and Management: Prague, Czech Republic.

The Balanced Scorecard (BSC) is such a methodology that identifies and formalizes the main drivers to the business and provides a quick view of corporation's strategic health. It is focused on uncovering the main non-financial drivers of the business, along with the economics of the business (Nair, 2004, p. 3-6). The measures are balanced between the outcome measures – the results from past efforts – and the measures that drive future performance. And the scorecard is balanced between objective, easily quantified outcome measures and subjective, somewhat judgmental, performance drivers of outcome measures (Kaplan & Norton, 1996, p. 9-10). The objectives and measures view organizational performance from four perspectives: financial, customer, internal business processes and learning and growth. These four perspectives provide the framework for the Balanced Scorecard (Kaplan & Norton, 1996, p. 8).

The internal-business process measures focus on the internal processes that will have the greatest impact on customer satisfaction and achieving an organization's financial objectives. The scorecard approach will usually identify entirely new processes at which an organization must excel to meet customer and financial objectives. The second departure of the BSC approach is to incorporate innovation processes into the internal-business-process perspective (Kaplan & Norton, 1996, p. 26). The process perspective represents goals and key figures for the internal processes that are most critical for the provision of services. Processes to be analyzed are usually the innovation process, the order acquisition, order processing and customer care process (Schäfer & Teuber, 2007, p. 42). Metrics based on this perspective allow managers to evaluate how well their business is running, and whether its products and services conform to customer requirements (the mission) (Von Bergen & Benco, 2004, p. 7-8). To satisfy customer and shareholder expectations, companies may have to identify entirely new internal processes rather than focusing their efforts on the incremental improvement of existing activities. Product development, production, manufacturing, delivery, and postsale service may be represented in this perspective (Niven, 2002, p. 16).

The financial, customer and internal business-process objectives on the BSC typically will reveal large gaps between the existing capabilities of people, systems and procedures and what will be required to achieve breakthrough performance. To close these gaps, businesses will

have to invest in reskilling employees, enhancing information technology and systems and aligning organizational procedures and routines (Kaplan & Norton, 1996, p. 26). This perspective includes employee training and corporate cultural attitudes related to individual and organizational self-improvement (Von Bergen & Benco, 2004, p. 7). The learning and growth perspective is the foundation from which all other perspectives spring and lean. It shows how people absorb new ideas and turn them into actions (Nair, 2004, p. 24). Once companies identify measures and related initiatives in their Customer and Internal Process perspectives, they can be certain of discovering some gaps between current organizational infrastructure of employee skills and information systems, and the level necessary to achieve results. The measures company design in this perspective will help the company to close that gap and ensure sustainable performance for the future. Employee skills, employee satisfaction, availability of information, and alignment all have a place in this perspective (Niven, 2002, p. 16).

3. Methodology of research

3.1. Setting hypotheses

The defined problem has also defined the underlying objective of this research, which is to determine the whether and to what extent does the human resources competency management influence the business performance of SMEs from the internal business processes perspective and the learning and growth perspective. The problem and the objectives set for this study determined the content of the two main and six auxiliary hypotheses, which state:

H 1 “The human resources competency management positively influences business performance of SMEs from the internal business processes perspective”.

AH 1.1. “Determining the required human resources competencies positively influences the business performance of SMEs from the internal business processes perspective.”

AH 1.2. “Determining current competencies and determining the competency gap between the required and current human resources competencies positively influences the business performance of SMEs from the internal business processes perspective.”

AH 1.3. “Taking action to ensure and develop the necessary human resources competencies positively influences the business performance of SMEs from the internal business processes perspective.”

H 2 “The human resources competency management positively influences business performance of SMEs from the learning and growth perspective.”

AH 2.1. “Determining the required human resources competencies positively influences the business performance of SMEs from the learning and growth perspective.”

AH 2.2. “Determining current competencies and determining the competency gap between the required and current human resources competencies positively influences the business performance of SMEs from the learning and growth perspective.”

AH 2.3. “Taking action to ensure and develop the necessary human resources competencies positively influences the business performance of SMEs from the learning and growth perspective.”

3.2. The scope of the research, methods of collecting and processing data model

Data collected by the conducted empirical research were analyzed using graphic representations (structural circles or columns); descriptive statistics; structural analysis; Kolmogorov-Smirnov test to check whether the distribution of the analyzed variable satisfies the assumption of "normality"; Mann-Whitney U test for two independent samples for distributions that do not satisfy the "normality" assumption; Kruskal-Wallis test for more than two independent samples for distributions that do not meet the "normality" assumption; correlation analysis; factor analysis; and hierarchical multiple regression models.

In order to test the hypotheses set for this research, a survey questionnaire created for the doctoral research was used as a research instrument in which closed questions with offered limited number of answers were asked, of which for most questions intensity answers with Likert scale from 1 to 5 were offered. The questionnaire was completed by heads of human resources departments, senior managers or employees who are well acquainted with this issue in the company, taking into account the situation before the appearance of Corona virus Covid - 19. The questionnaire consists of three parts. The survey questionnaire was submitted to 234 SMEs in the Federation of B&H (FB&H). The percentage of processed SMEs reflects the real situation according to statistical data on the number of SMEs in the FB&H. Therefore, 159 small and 75 medium enterprises were researched. When determining the share of SMEs in the research for this paper, the structure of enterprises in FB&H was taken into account. There was also an even distribution by sectors by cantons, according to official statistics on the structure of small and medium enterprises in the FB&H. The number of employees was taken as the criterion for the size of the company because only that criterion is identical in all laws for measuring the size of the company within B&H and it is identical to the recommendations of the European Union. The classification of SMEs is taken according to the Federal law on fostering small business development (2006). The research was conducted in January 2021.

4. Research results and discussion

The empirical research included 234 companies from the Federation of B&H, from different cantons. The largest share of companies is from the Canton Sarajevo (30.77%), Tuzla Canton (21.37%) and West Herzegovina Canton (10.36%). The highest share is of those companies engaged in trade (30.34%), manufacturing (23.9%) and construction (11%). More than 88% of researched companies are small limited liability companies. The highest share is of companies older than 10 years (77.78%). According to the ownership structure, companies with domestic private ownership dominate (75.64%). The sample is dominated by small companies (67.55%), which is in line with the actual situation in the Federation of B&H. The sample is dominated by companies that have operated successfully (with a profit) with about 80% of the share.

4.1. Descriptive research results

Three constructs or dimensions are used to measure the human resources competency management in a company. These are: "determining the necessary competencies", "determining current competencies and competency gap (necessary and actual)", and "undertaking activities to ensure and develop the necessary competencies".

"Determining the required competencies in a company" as a construct was measured by a questionnaire. It equals the average agreement of companies from the sample with 12 statements related to determining the required competencies. All claims were measured on a Likert scale of 1-5 (1 - not at all to 5 - excellent). Cronbach's alpha reliability coefficient, which is a measure of the internal consistency of statements or questions, for 12 statements from the questionnaire that express "the determination of required competencies in the company" is

0.938 > 0.7, which means that these 12 statements can be aggregated into one variable. As an average of the answers or an assessment of agreement with the statements from the questionnaire related to a given construct, a variable called “determining the required competencies” was calculated.

For this construct the average grade is 3.93 with a standard deviation of 0.771. The lowest average grade is according to the statement "To what extent are the most successful employees (exemplars) in your company identified and their characteristics, behavior and performance described as an example of excellent employees with whom other employees can be compared?" while the highest average grade is according to the statement "To what extent is there a detailed and accurate job position and job description that an individual employee does at each job position?". The "normality" of the distribution of answers from the sample for all 12 initial statements and for the construct "determination of the required competencies in the company" was also tested. For the initial claims from the questionnaire, “normality” was not satisfied even for the derived variable “determination of required competencies in the company” (p values of KS test are lower than 0.05).

“Determining current competencies and determining the competency gap between the required and current competencies in the company” as a construct was measured on the basis of a questionnaire. It was measured as the average agreement of the company from the sample with 12 statements related to determining current competencies and competency gap. All claims were measured on a Likert scale 1-5 (1 - not at all to 5 - excellent). Cronbach's alpha reliability coefficient, which is a measure of the internal consistency of statements or questions, equals 0.928 > 0.7 for 12 statements from the questionnaire that express “the determination of current employee competencies and the gap in competencies in the company”, which means that these 12 statements can be aggregated into one variable. A variable called “determining current competencies and competency gap” was calculated as the average answer or an assessment of agreement with the statements from the questionnaire related to a given construct.

For this construct the average score is 3.797 with a standard deviation of 0.769. The lowest average grade is according to the statement "To what extent in your company is employee motivation (enthusiasm, passion, ambition, initiative, energy, desire to learn, etc...) continuously/occasionally evaluated and compared with the necessary or required motivation needed to successfully perform the job?", while the highest average grade is according to the statement “To what extent the criteria for the performance evaluation of employees been determined according to which the evaluation of employees and their work performance is performed?”. The "normality" of the distribution of answers from the sample for all 12 initial statements was also checked for the construct "determining current competencies and competency gap in the company". For the initial claims from the questionnaire, “normality” was not satisfied even for the derived variable “determining current competencies and competency gap in the company” (p values of KS test are lower than 0.05).

“Undertaking activities to ensure and develop the necessary competencies in the company” as a construct was measured by a questionnaire which shows the average agreement of the company from the sample with 18 statements related to undertaking activities to ensure and develop the necessary competencies. All claims were measured on a Likert scale 1-5 (1 - not at all to 5 - excellent). Cronbach's alpha reliability coefficient, which is a measure of the internal consistency of statements or questions, for 18 statements from the questionnaire expressing activities to ensure and develop the necessary competencies in the company is 0.943 > 0.7, which means that these 18 statements can be aggregated into one variable. As an average of the answers or an assessment of agreement with the statements from the

questionnaire related to a given construct, a variable called “undertaking activities to ensure and develop the necessary competencies” was calculated.

For this construct, the average score is 3,686 with a standard deviation of 0.768. The lowest average grade is according to the statement "To what extent does your company invests in training and education of its employees in order to improve existing and acquire new competencies?", while the highest average grade is for the statement “To what extent does your company have established general goals of employee training and education (raising competitiveness, improving work performance, updating knowledge and skills of employees, etc.)?”. The "normality" of the distribution of answers from the sample for all 18 initial statements and for the construct "undertaking activities to ensure and develop the necessary competencies in the company" was also tested. For the initial claims from the questionnaire, “normality” was not satisfied even for the derived variable “undertaking activities to ensure and develop the necessary competencies in the company” (p KS test values are lower than 0.05).

In order to see the performance of the company from the **internal business processes perspective**, the introduction of innovations in the business process, the percentage of mistakes made, compliance with deadlines and after-sales service or services are monitored. The percentage of errors made is indirectly related to performance, so a score of 1 is associated with a large increase and a score of 5 with a large decrease. In the context of better performance in the other three variables, grade 1 is associated with a large decline and grade 5 with a large increase.

Cronbach's alpha reliability coefficient, which is a measure of the internal consistency of statements or questions, for 4 statements from the questionnaire expressing the introduction of innovation in the business process, the percentage of errors, deadlines and after-sales service is $0.579 < 0.7$, which means that these 4 claims are not ideally aggregated into a single variable. As an average of the answers or an assessment of agreement with these statements from the questionnaire related to a given construct, a variable called “performance from the internal business processes perspective” was calculated. The obtained results are presented in Table 1.

Table 1: The descriptive statistics for the construct and original variables from the questionnaire that express “performance of companies from the internal business processes perspective”

Results	Descriptive statistics						The Kolmogorov–Smirnov test for “normality”	
	N	Min	Max	Average	Standard deviation	Coefficient of variation	Statistics	P value
INT-PROC1	234	1	5	3.513	0.890	25.329	0.239	0.000
INT-PROC2	234	1	5	3.030	0.863	28.498	0.305	0.000
INT-PROC3	234	1	5	3.517	0.946	26.892	0.255	0.000
INT-PROC4	234	1	5	3.444	0.935	27.151	0.277	0.000
Construct, average	234	1.00	5.00	3.371	0.604	17.918	0.165	0.000

Source: Author’s work

For this construct the average score is 3,371 with a standard deviation of 0.604. The lowest average score is according to the statement "Decrease in the percentage of errors made", while the highest average score is according to the statement "Growth of innovation in business process". The "normality" of the distribution of answers from the sample for all 4 initial statements was also checked for the derived construct "Performance of the company from the

internal business processes perspective". For the initial claims from the questionnaire, "normality" was not satisfied even for the derived variable "performance of the company from the internal business processes perspective" (p values of KS test are lower than 0.05).

In order to see the performance of the company from **the learning and growth perspective**, investment in training and education of employees, enabling employees to use new technologies, mutual cooperation of employees and knowledge sharing and empowerment and acceptance of employee proposals are monitored. Cronbach's alpha reliability coefficient, which is a measure of the internal consistency of statements or questions, for 4 statements from the questionnaire expressing investment in employee training and education, enabling employees to use new technologies, employee cooperation and knowledge sharing and empowerment and acceptance of employee suggestions is $0.845 > 0.7$, which means that these 4 statements can be aggregated into one variable. A variable called "performance from a learning and growth perspective" was calculated as the average of the answers or the score of agreement with these statements from the questionnaire related to the given construct. The obtained results are presented in Table 2.

Table 2: The descriptive statistics for the construct and original variables from the questionnaire that express "performance of companies from a learning and growth perspective"

Results	Descriptive statistics						The Kolmogorov–Smirnov test for "normality"	
	N	Min	Max	Average	Standard deviation	Coefficient of variation	Statistics	P value
LEARN-GROW1	234	1	5	3.410	0.914	26.799	0.263	0.000
LEARN-GROW2	234	1	5	3.479	0.937	26.924	0.255	0.000
LEARN-GROW3	234	1	5	3.551	0.926	26.081	0.258	0.000
LEARN-GROW4	234	1	5	3.372	0.890	26.402	0.264	0.000
Construct, average	234	1.00	5.00	3.453	0.758	21.940	0.157	0.000

Source: Author's work

For this construct the average score is 3,453 with a standard deviation of 0.758. The lowest average grade is according to the statement "Growth of empowerment and consideration of for employee suggestions", while the highest average score is according to the statement "Growth of mutual employee collaboration and knowledge sharing". The "normality" of the distribution of answers from the sample for all 4 initial statements was also tested for the construct "performance of the company from the learning and growth perspective". For the initial claims from the questionnaire, "normality" was not satisfied even for the derived variable "performance of the company from the learning and growth perspective" (p values of the KS test are lower than 0.05).

4.2. Testing research model hypothesis

The aim of this paper is to examine whether and to what extent the degree of human resources competency management has an impact on the business performance of SMEs from the internal business processes perspective and the learning and growth perspective. In this way, the main hypothesis of the work is tested. As previously presented, the management of human resources competencies, as an independent variable, and the business performance of the company from the internal business processes perspective and the learning and growth perspective, as a dependent variable, were "measured" and aggregated through a series of constructs through a questionnaire.

The testing of the theoretical model was conducted in two ways:

1. Previously elaborated final constructs obtained as subconstruct averages were taken for the constructs that will express the degree of human resources competency management and business performance of the company from the internal business processes perspective and the learning and growth perspective.
2. For constructs that will express the degree of human resources competency management and business performance of the company, factors obtained by applying exploratory factor analysis (Principal Axes, the method with "oblique" rotation) to the original statements from the questionnaire related to these constructs. KMO measures and the sphericity test justify the obtained models (KMO > 0.7 and p values of the sphericity test less than 0.05).

4.3. Model with constructs obtained as variables averages

Table 3 shows the correlation matrix (partial correlation coefficients, control by excluded independent variables) for the previously described average constructs.

Table 3: The correlation matrix: degree of “human resources competency management”, as an independent variable, and “business performance of SMEs from the internal business processes perspective and the learning and growth perspective”, as a dependent variable (averages)

The human resources competency management through:		Business success from:	
		internal business processes perspective	learning and growth perspective
Determining the required competencies	Partial correlation coefficient	0.284***	0.229***
	P value	0.000	0.000
Determining current competencies and competency gap	Partial correlation coefficient	0.029	-0.035
	P value	0.663	0.597
Undertaking activities to ensure and develop the necessary competencies	Partial correlation coefficient	0.049	0.249***
	P value	0.460	0.000

(* p < 0.1, ** p < 0.05, *** p < 0.01)

Source: Author’s work

When the influence of the other two constructs that monitor the degree of human resources competency management is controlled or excluded, the conclusion follows that:

- there is a significant positive impact of the level of determining the necessary competencies on the business performance of SMEs from the internal business processes perspective and learning and growth perspective.
- there is a significant positive impact of the level of undertaking activities on ensuring and developing the necessary competencies on the business performance of SMEs from the learning and growth perspective.
- Based on the above conclusions, hypotheses AH1.1., AH2.1. and AH2.3. are fully confirmed. Hypotheses AH1.2., AH1.3. and AH2.2. have not been confirmed. It can be concluded that main hypotheses H1 and H2 have been partially confirmed.

The constructed averages for the degree of human resources competency management and business performance of SMEs from the internal business processes perspective and the

learning and growth perspective obtained in the previously described ways are further modeled by applying hierarchical regression analysis. The control variables included the dummy variable for the size of the company according to the number of employees and the dummy variable for the characteristics of the company, according to which significant differences in mean values for constructs (business and age of the company) were shown in previously performed statistical tests. The dummy business variable had modalities 0 for loss-making firms and 1 for profit-making firms. The dummy variable for company size by the number of employees had modalities 0 for medium enterprises and 1 for small companies. A dummy variable was created for the age of the company, where modality 1 was for companies that were older than 10 years, and 0 for companies up to 10 years old. This was the first block of variables in the hierarchical regression model. The model, where the constructs for business success are considered as dependent variables, gradually includes independent variables constructs for the degree of human resources competence management. According to ANOVA, all constructed models are significant with a coefficient of determination other than 0, which means that they are acceptable. The problem of multicollinearity was not present in the obtained models, so it was not necessary to eliminate independent variables. Outliers were also considered, and one outlier is evident in every perspective however this deviation is not significant.

4.4. Model with constructs obtained as variable factors

Table 4 shows the correlation matrix (partial correlation coefficients, control by excluded independent variables) for the previously described construct factors.

Table 4: The Correlation matrix: degree of “human resources competency management”, as an independent variable, and “business performance of SMEs from the internal business processes perspective and the learning and growth perspective”, as a dependent variable (factors)

The human resources competency management through:		Business success from:	
		internal business processes perspective	learning and growth perspective
determining the required competencies	Partial correlation coefficient	0.262***	0.236***
	P value	0.000	0.000
determining current competencies and competency gap	Partial correlation coefficient	0.112	0.060
	P value	0.090*	0.365
undertaking activities to ensure and develop the necessary competencies	Partial correlation coefficient	-0.019	0.167
	P value	0.779	0.011**

(* p <0.1, ** p <0.05, *** p <0.01)

Source: Author’s work

When the influence of the other two constructs that monitor the degree of human resources competency management is controlled or excluded, the conclusion follows that:

- there is a significant positive impact of the level of “determining the necessary competencies” on the business performance of SMEs from the internal business processes perspective and learning and growth perspective.
- there is a significant positive impact of the level of “determining current competencies and competency gap” on the business performance of SMEs from the internal business processes perspective.

- there is a significant positive impact of the level of “undertaking activities on ensuring and developing the necessary competencies” on the business performance of SMEs from the learning and growth perspective.
- Based on the above conclusions, hypotheses AH1.1., AH1.2., AH2.1. and AH2.3. are fully confirmed. Hypotheses AH1.3. and AH2.2. have not been confirmed. It can be concluded that main hypotheses H1 and H2 have been partially confirmed.

The constructs obtained in the previously described ways, factors for the degree of human resources competency management and business performance of SMEs from the internal business processes perspective and the learning and growth perspective, were further modeled by applying hierarchical regression analysis. The control variables included the dummy variable for the size of the company according to the number of employees and the dummy variable for the characteristics of the company, according to which significant differences in mean values for constructs (business and age of the company) were shown in previously performed statistical tests. The dummy business variable had modalities 0 for loss-making firms and 1 for profit-making firms. The dummy variable for the company size by the number of employees had modalities 0 for medium enterprises and 1 for small companies. A dummy variable was created for the age of the company, where modality 1 was for companies that were older than 10 years, and 0 for companies up to 10 years old. This was the first block of variables in the hierarchical regression model. The model, in which the constructs for business success are considered as dependent variables, gradually includes independent variables constructs for the degree of human resources competence management. According to ANOVA, all constructed models are significant with a coefficient of determination other than 0, which means that they are acceptable. The problem of multicollinearity was not present in the obtained models, so it was not necessary to eliminate independent variables. Outliers were also considered, and one outlier is evident in every perspective however this deviation is not significant.

Based on the results obtained by the research, it can be concluded that there is a significant positive impact of the level of determining the necessary competencies on the business performance of SMEs from internal business processes perspective, observed both through the model with constructs obtained as variables averages and through the model with constructs obtained as variable factors. Based on the above conclusion, auxiliary hypothesis **AH1.1.** is fully confirmed. Based on the results, it can also be concluded that there is a significant positive impact of the level of determining current competencies and competency gap on the business performance of SMEs from internal business processes perspective, observed through the model with constructs obtained as variable factors. Based on the above conclusion, auxiliary hypothesis **AH1.2.** is fully confirmed. Based on the results obtained by the research, it can be concluded that there isn't a significant positive impact of the level of determining current competencies and competency gap on the business performance of SMEs from internal business processes perspective, observed both through the model with constructs obtained as variables averages and through the model with constructs obtained as variable factors. Based on the above conclusion, auxiliary hypothesis **AH1.3.** is not confirmed. Finally, it can be concluded that main hypothesis **H1** “The human resources competency management positively influences business performance from the internal business processes perspective of SMEs” is partially confirmed.

Based on the results obtained by the research, it can be concluded that there is a significant positive impact of the level of determining the necessary competencies on the business performance of SMEs from learning and growth perspective, observed both through the model with constructs obtained as variables averages and through the model with constructs obtained

as variable factors. Based on the above conclusion, auxiliary hypothesis **AH2.1.** is fully confirmed. Based on the results obtained by the research, it can be concluded that there isn't a significant positive impact of the level of determining current competencies and competency gap on the business performance of SMEs from the learning and growth perspective, observed both through the model with constructs obtained as variables averages and through the model with constructs obtained as variable factors. Based on the above conclusion, auxiliary hypothesis **AH2.2.** is not confirmed. Based on the results obtained by the research, it can be concluded that there is a significant positive impact of the level of undertaking activities on ensuring and developing the necessary competencies on the business performance of SMEs from the learning and growth perspective, observed both through the model with constructs obtained as variables averages and through the model with constructs obtained as variable factors. Based on the above conclusion, auxiliary hypothesis **AH2.3.** is fully confirmed. Finally, it can be concluded that main hypothesis **H2** "The human resources competency management positively influences business performance from the learning and growth perspective of SMEs." is partially confirmed.

Conclusion

Leaders of organizations today, in search of competitive advantage, have discovered a new, powerful way to revitalize HRM: competency-based human resource management. The focus of the new approach is the person as the most important unit of the organization, together with their skills, knowledge, characteristics and abilities, which the organization must recognize, invest in them and improve the same skills, knowledge, characteristics and abilities through training and then reward employees. Competency models are more flexible and more enduring than job descriptions. They are based on measurable work results and are specific to the organization's culture and success factors. Competency models are also highly effective at describing the less definable characteristics associated with exemplary individual performance. This may enhance the capability of HR practitioners to link organizational core competencies to the competencies of individual exemplary performers. In the future, however, it is expected that competency-based HRM will be used to align HR practices with the organization's strategic objectives and employee development efforts and to integrate all components of the HR function across an organization.

The fundamental objective of this paper was to reach theoretical knowledge and empirically investigate whether and to what extent human resources competency management influences the business success of SMEs from the internal business processes and the learning and growth perspective. According to the research results, the influence of human resources competency management on the business success of SMEs from the internal business processes perspective and the learning and growth perspective was confirmed.

Given that very little research in this area is in the world literature, and that similar research has not been conducted so far, especially in Bosnia and Herzegovina, the contributions of this paper are reflected in a number of achievements that have made a significant departure from other research on issues of human resources competency management in SMEs and the impact on business performance of enterprises observed through two perspectives of a BSC (internal business processes and learning and growth perspective). Most of the research was related to the research of individual competency management activities, most of them by identifying key competencies and their impact on some of the business performance.

The subject of research has been set in a new and original way linking the human resources competency management and business performance of SMEs through the development of a

theoretical model of the relationship between defined variables. An original theoretical and empirical model has been formed, the purpose of which is to determine the impact, direction and intensity of the links between the human resources competency management and business performance of SMEs observed from the internal business processes and the learning and growth perspective. The validity of the model has been verified by this research, which is a significant departure from other research and models. The mutual influence and connection of groups of activities of human resources competency management and business performance observed through two perspectives of the BSC determined in the set model has been determined. Empirical verification of the defined model expanded and deepened the insight into the paradigm of modern business, and human resources competency management, their development and affirmation in the field of management and business success.

The practical implications of this research are also numerous. Three phases of the human resources competency management process have been identified, and activities for each of the phases of competency management have been identified, which will help SMEs and their management in developing and improving HRM. The practice of human resources competency management in SMEs in B&H has been established. The business performance of SMEs in B&H has been determined, measured through two perspectives of the BSC method, which are to a large extent also predictors of future business performance indicators. The positive impact of all phases of human resources competency management on business performance has been determined through both perspectives, which will provide a quality foundation for SMEs to make further decisions on competency management activities in small and medium but also large enterprises, which can significantly raise competitiveness of enterprises, and affect their business performance. The results of the research will be used as a basis for making recommendations for SMEs to improve the human resources competency management, which can significantly increase the business performance of enterprises themselves, and affect their competitive position, development and survival.

Limitation of a conducted research is reflected in the extent of the sample and the method of creating the research sample. According to the spatial coverage, the research was conducted on the territory of the Federation of B&H, the larger of the two entities. It would be a recommendation for future research to include the area of the other B&H entity, neighboring countries, EU member states and other countries. In the research were used some qualitative data that enable subjectivity because a subjective evaluation of state as well as of impacts has been conducted.

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Efficiency of Promotion in IT firms in Bosnia and Herzegovina

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Abstract

Globally, the strength of information technology (IT) companies is growing rapidly. At the same time, the number of these in Bosnia and Herzegovina is rapidly increasing from year to year, and consequently becomes an extremely important factor, especially in foreign markets. Subjects from any other sector, and also those from aforementioned IT sector, implement different marketing strategies. Adoption of these in specific contexts is a common theme in relevant literature, but that's not the case with promotion, as one of the main marketing tools. The purpose of this paper is to examine and show how IT firms in Bosnia and Herzegovina communicate with their stakeholders. In other words, the main goal is to explore factors that determine ways in which agile and flexible organizations tend to establish and maintain communication with their clients, partners, suppliers and other organizations that have interest in their business activities. In order to get results, semi-structured surveys were distributed to the different IT companies across the whole country, in order to collect as much as possible accurate results. After analyzing the results, we will be able to realize whether promotion is a significant tool in the marketing strategy of companies operating in the information technology industry.

Keywords: information technology (IT), marketing strategy, promotion, IT firms, Bosnia and Herzegovina

Introduction

Usage of digital technologies has overflowed a large number of markets since the beginning of the twentieth century and it has changed the way they operate in their respective environments. Even agriculture, mainly considered as a traditional sector, with minor usage of digital technology, became more digitally transformed with technologies such as *Big data* and *Internet of things* (Sarker et al., 2019). Not just that, “digital revolution” triggered many significant changes in global wealth distribution. According to BusinessPlus magazine, four of the five most valuable companies in the world are Apple, Microsoft, Alphabet (Google) and Amazon - all of them tech companies. Their respective business models are all based on high technologies, although, for example, Amazon operates in the retail sector. Tech companies are not interesting only from the point of their market capitalization and business model characteristics, but also from the marketing point of view. How these companies find their customers (or customers find them), how they communicate with potential and current customers, how they tend to retain them and make them loyal - these are all questions that are relevant to the marketing strategy of tech firms. In the following parts of this paper, it will be

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used *software* instead of *tech* companies, to put more emphasis on firms that have their own software product(s) or participate in many projects that result with some software or part of it. Also, IT consultancy, as a growing part of the IT industry, will be covered as well. This type of product is specific - unlike traditional products that are mainly physical, software is not, their sale and distribution is based on digital channels, not physical, and so on. Regarding this, marketing of software is different from traditional product marketing due to uniqueness inherent in the product (Nigam, 2011). In this paper, priority will be given to promotion, as a very important part of marketing strategy, and its efficiency in IT firms in Bosnia and Herzegovina. This also means that topics including characteristics of software products, their prices and distribution will not be covered within the opus of this paper.

1. Literature review

Digitization is emerging as a new tool for building and maintaining advantages, and in some cases, giving leaders in this field the ability to outperform competition in certain sectors (Sabbagh et al. 2013). In order to understand how digitization, as a destructive force, affects various processes in economic life, it is necessary to analyze its impact on daily operations, the production process, communication with interest groups, and daily organizational activities (El-Darwiche et al. 2012).

Many changes driven by digitization are destructively and completely changing the existing branches of the economy (Matzler et al. 2016). The challenges that come with digital transformation are destructive in nature, and fundamental understanding, monitoring and acting on key factors will be crucial for businesses that want to progress.

Marketing strategy is more important for software companies now than it has ever been. The computer software industry is undergoing some major changes which are impacting software vendor business models, as well as marketing and sales tactics (Singh, 2013). The software product firms needs to be competent in offering services with ever changing demands of the dynamic marketing environment. To overcome these barriers, the firms should deploy holistic marketing strategies based on the established niche markets for specialized software products. (Nigam, 2011). The marketing mix of the software product is very flexible, as it is neither a pure service nor a pure product. The marketing of the software product had to be dealt with sensitively otherwise the firms would lose their brand equity in the market. (Nigam, 2011).

Holistic marketing approach takes how different mediums will interact as well as build upon each other. Instead of multiple planners and groups (i.e. Media, Out-of-Home, Print, etc.) working independently for the same campaign, a single group will evaluate all mediums in order to determine the highest return on investment. Holistic marketing requires strong software support in business processes to serve the clients in an efficient way (Nigam, 2011).

Another characteristic that is important to ensure is developing and maintaining relationships with business partners. In terms of finding suitable partners, the main challenge for the managers of a software company will be to balance the allocation of resources between the expansion of the network through the current relationships and a focus on establishing new relationships and customers independent of existing networks. These two activities are not mutually exclusive, however, due to the limited resources experienced by many small software companies, a balance must be found. (Moen et.al, 2004).

Also, it is essential to discuss challenges that are software companies facing. Security and availability are two main concerns for software as a service (Youseff, Butrico, & Silva, 2008). Since applications are provided over the public Internet, information needs to be further

safeguarded from malicious actors. Often the safeguarding is performed via encryption in both transmission and storage. Security becomes essential for software services providers to convince customers when entering the market. Any incident on security during operation may lead to a situation where the customer goes to other providers.

Data ownership is another concern that needs to be carefully considered before using software firm services. Data is stored on the supplier's or on the supplier's subcontractor's servers. This is important for the customer, especially in case of the provider's bankruptcy or if the customer would like to change to another cloud service offering. Contracts need to address this issue by stating the ownership of the data that the customers inputs into the software service (Youseff, Butrico, & Silva, 2008).

2. Promotion as a marketing tool

Promotion is considered the set of marketing techniques or practices, marketing action, form of communication, aiming at overcoming a sales level by capturing the attention and by attracting potential buyers, through points of sale, information, belief, training and maintaining a customer interested in the product and the manufacturing company (Alexandrescu and Milandru, 2018). It is essential to mention two main promotional strategies that can be used - push and pull strategy (Macura, 2009).

- The push strategy – aims at passing the product through distribution channels, forcing the dealer to find solutions to sell the product faster. It is mainly used for industrial goods, with the promotional effort especially supported by the distributor, towards which the manufacturer pushes their goods. The producer uses predominantly personal sales and commercial promotion, while the intermediary employs advertising, sales promotion, personal sale.
- The pull strategy – directly targets the end consumer who needs to be attracted, causing them to make the purchase. It is used predominantly for consumer goods, for which advertising is widely used. If the product is sold, consumers will demand the product through the distribution channel, who will ask the manufacturer, and in this way consumer demand attracts the product to the distribution channels.

With respect to differences that exist between traditional and digital marketing, the approach to promotion that can be considered as traditional needs to be distinguished from promotion that is mainly driven by digital technologies. The first mentioned approach to marketing uses mass, and mainly not interactive media, to connect with relevant public, unlike its digital counterpart that uses online media, which also enables interaction in real time. Traditional marketing operates with higher costs of its campaigns, in contrast to digital, which is more cost-effective. Also, regarding presence, in the digital approach there are no territorial and time limits. In other words, the reach of its tools is everywhere and anytime (Filipović, 2021). Measurability in the traditional and digital marketing world is not the same, too (Açikel and Çelikol, 2012). For example, in traditional advertising, measures such as Gross Rating Point (GRP) are used, in contrast to digital ads, which are measured with more distinctive methods, such as Cost Per Mile (CPM) or Cost Per Click (CPC). Promotional mix consists of ten tools: advertising, selling, sales promotion, public relations, sponsorship, direct mail, exhibitions, merchandising, packaging and word of mouth (Chaffey and Smith, 2017). This communication mix is relevant to the offline world, but can be also extended to the online environment. Tabular representation of promotion tools and its online equivalents is given below, in the Table 1.

Table 1: Online usage of different promotion tools

Promotional tool	Online usage
Advertising	Interactive display ads, Google ads
Selling	Chatbots, online sales staff, affiliate marketing
Sales promotion	Discount, rewards, online loyalty schemes
Public relation	Newsletters, blog posts, social networks
Sponsorship	Sponsoring product, service, site in an online environment
Direct mail	Email marketing, newsletters, e.alerts
Exhibitions	Virtual exhibitions, white paper distribution
Merchandising	Design of website, personal recommendations
Packaging	Application icons, online photographs of real packaging
Word of mouth	Viral and affiliate marketing, social media, blogs

Adapted from: Chaffey, D., & Smith, P. (2017). *Digital Marketing Excellence: Planning, Optimizing and Integrating Online Marketing* (5th ed.). Routledge. p.83.

3. Research design

Empirical research was conducted in 2022, and it included 52 IT firms. The main aim was to examine whether IT firms use promotion as a marketing tool and which channel of promotion they use. To ensure adequate data, the respondents were from different parts of Bosnia and Herzegovina. Also, the intention was to involve firms of different sizes, different market orientations and different corporate cultures. The research method was a survey and it was conducted fully online.

In the questionnaire there were two different types of questions: yes/no question and intensity questions. After all data was collected, there was a need to analyze all collected data through descriptive analysis.

4. Results and discussion

As it was said earlier, the research was conducted on 52 in Bosnia and Herzegovina with the aim to examine if they use promotion as a marketing tool, as well as a scope of channels which they use. In Table 2. below, the main characteristics of IT firms that took part in this research will be shown.

Table 2: Characteristics of respondents

Characteristic	Frequency	Percentage
<i>Company's age</i>		
Less than 5 years	15	28,8%
5 to 10 years	23	44,2%
More than 10 years	14	27%
<i>Operating in foreign markets</i>		
Yes	33	63,5%
No	19	36,5%
<i>Existence on the BiH market</i>		
Less than 5 years	7	21,2%
5 to 10 years	18	54,5%
More than 10 years	8	24,2%

Source: Empirical research of author

In this research we tend to get information from a wide range of IT firms from different branches and different structures and strategies, in order to get the real condition and data of the sector where they do business. In the first question it can be seen that the IT market in Bosnia and Herzegovina is growing, the majority of firms (almost three quarters) are existing up to 10 years, which means that this market can be considered as an attractive one. The reason why there was strong intention for starting new firms in this sector is because the market can be to the whole world if your product or service is satisfying the needs of buyers. According to the survey, about 64% of firms from this sector are working on foreign markets. As it can be assumed, these are mostly foreign firms that in Bosnia and Herzegovina recognized a skilled, but cheap workforce to recruit. Also, it is important to note that firms which have been existing for more than 10 years (in this research), usually are focused only on the domestic market.

Table 3: Usage of different channels of promotion

Characteristic	Frequency	Percentage
<i>Traditional versus digital channels of promotion</i>		
Mainly traditional	11	21,2%
Mainly digital	30	57,6%
Not using any of these	11	21,2%

Source: Empirical research of author

When it comes to usage of promotion, it can be said that IT companies, as expected, use mainly digital channels of promotion, about 58% of them. Also, some of them mainly focus on traditional channels, almost 22%. But, surprisingly it was unveiled that 11 IT firms do not use any channel of promotion. There can be different reasons for this corporate policy. One of the reasons can be long term contracts with reliable buyers, another one may be focus on specialization in only one area or it can be just corporate culture that does not see benefits from using this marketing tool.

After the introductory part of questions, which are related to characteristics of the firms, and questions that are focused on examination of the usage of different types of promotion channels, it is important to proceed to questions which are more closely related to research of this paper. Those firms who choose that they are focused mainly on digital channels of promotion (30 out of 52), had to choose which digital channel they used the most (banners and Google advertisement, sponsorship of online events, newsletter, search engine optimization (SEO), social networks or other). It was revealed that the most dominant digital channel of promotion for IT firms in Bosnia and Herzegovina are social networks (77% of respondents), which means that IT firms perceive them as the most powerful tool to reach their customers and to communicate with them. What else can be assumed is that IT companies use this type of promotion tool not just to intensify its brand recognition (through posts that show their work atmosphere and their teams, or their rewards and achievements), but also to get in touch with qualified human resources through professional social networks such as LinkedIn. A lot of firms use this channel on daily and weekly level, but it is important to note that many of them use banners and Google advertisements as well as sponsorship of online events even on a monthly level which means they tend to have diverse promotional strategy, and to be adaptable to the market situation and needs. On the other hand, newsletters are not considered as an efficient promotion tool in the IT sector, as it can be concluded based on the fact that just one company stated it as the most frequent tool and less than quarter claimed to use it (usually on yearly basis).

After questions regarding usage of digital channels, there was a question if they use traditional channels besides usage of digital one. 13 out of 30 firms stated that they use traditional channels as well as digital channels of marketing promotion. Two of them are used the most - personal sale and public relations (PR), to be precise, about 78% of respondents use these two. Main reason that lies behind this high frequency could be the fact that software is a complex type of product and it requires high involvement of salesforce or some other persons with high knowledge about the product to communicate main values and benefits of it to current and potential customers. Public relations activities (such as fairs) can be a good way to present a product and its main features to the audience that is interested in the specific type of software or specific domain. They use it roughly on a monthly level. Also, they stated that they almost never use direct mail as a way of communicating with customers.

When it comes to firms that stated they use mainly traditional channels of promotion (11 out of 52), the respondents had to choose which traditional channels they use the most (advertisement, personal sale, public relations, sponsorship, direct mail and other). Respondents have different answers but, it can be said that personal sales and public relations are most used traditional channels with almost 74% of respondents. This can be perceived as an old-fashioned model of promotion and communication with clients which enables key-people in the firm face-to-face contact with potential customers. In comparison with digital channels, intensity of usage is different. For example, none of them are used on daily and weekly level, so we can say that firms which use traditional marketing channels use it less often than firms focused on digital ones.

Almost all companies that use mainly traditional channels, also use digital ones, to be precise 10 out of 11. Social networks and Google Ads are one of the main channels of these firms, which is pretty similar with strategies of firms that use mainly digital channels of promotion. This can be explained as an adaptation to new trends of establishing and maintaining contact with clients, because there is a need for adjustment to the new ways of communication and for adopting new strategies to be able to reach future aims.

5. Conclusion

Since marketing orientation became dominant in the modern business environment, it is essential to establish efficient communication with customers. This must be done in order to introduce products, services and important information to target segments. Through these processes, companies tend to maintain connections that are previously built, but also to build new ones. Some sectors communicate with their customers and other stakeholders more frequently than others. There can be various reasons for that, for example strong competitors could force higher usage of different marketing tools. Different companies across the sector can use a more traditional or more digital approach to get in touch with their clients. Closely related to this, it could be asked whether some industries that are in large expansions, such as the information technology industry, use different tools of communication and to what extent.

According to statements given below, through this paper were analyzed different theoretical and practical aspects of promotion and usage of it in the IT sector in Bosnia and Herzegovina. Their preferences were examined through the distribution of the structured questionnaire, which was composed of yes/no and intensity questions. Related answers helped in shaping the main findings of this research. Regarding general usage of promotion tools, it can be said that roughly 4 out of 5 companies included in the research use promotion, as an aspect of implementing the proper marketing strategy. Besides that, digital tools are three times more represented than traditional ones in a given research sample, when examining a prevalent

medium of communication with stakeholders. With respect to intensive usage of social media, especially social networks, it is not strange that 3 out of 4 companies use different types of social networks for reaching their target segments. On the other side, a minority of the firms that are more oriented on traditional channels, use them in parallel with digital channels. Regarding that, it can be said that in the digital era there is no place for exclusive usage of traditional promotion tools. Digitization is getting deeply rooted not just in promotion, but also in other aspects of marketing strategy, and conclusion of this research testifies in favor of just that. Accordingly, we can conclude that promotion is a significant and powerful marketing tool in promotional strategy of IT firms.

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Possibilities and Limitations of Establishing Science and Technology Park in Banja Luka

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Abstract

Many economies throughout the world tend to become more knowledge-based ones. In that process, policymakers use different methods in order to accomplish it. One of them is establishing science and technology parks, as a place that creates synergy between companies and research and development institutions, leading to economic and social benefits through the creation and commercialisation of technology-based products and services. The aim of this paper is to discuss and recommend how STPs could positively affect the concrete region of Banja Luka in terms of previously mentioned. Using relevant literature and examples of good practice in the surrounding region, the intention was to indicate that a similar model of economic development could be used in the region discussed. In other words, we used a deductive approach to point out positive effects including increased number of startups, commercialised innovations and spin-offs. Moreover, it is noticed that the employment rate went higher as well as export of high technology products and services, which is of immense importance for this region. As the administrative and university centre of it, Banja Luka has the needed infrastructure for the implementation of one of the models of science and technology parks. More precisely, there are many faculties and institutes producing professionals with crucial competencies for positions in STP's incumbents. Additionally, there are other entrepreneurial support organisations that help technology-based startups in reaching their target market. In contrast to this, there is a low rate of venture capital, which is also of high importance for growth and scaling of small and medium enterprises' activities. To conclude, previously explained preconditions make Banja Luka an ideal location for establishing such an institution that will be catalizator of regional development.

Key words: science and technology park (STP), knowledge-based economy, commercialisation of innovations, startup, spin-offs, regional development, Banja Luka.

Introduction

The gradual transition from a labour-intensive to an economy based on knowledge and innovation has brought a multitude of new terms that explained the basic principles and drivers of a new approach in the development of a country. Until a few years ago, it was almost impossible to encounter concepts such as artificial intelligence, cloud computing, the concept of big data, the Internet of things, nano and biotechnology etc. Innovations become the key to

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economic progress, and primacy in this process is given to small and medium-sized enterprises, which are usually much more flexible and innovative than large ones. In this context, the question arises of catalysing and supporting such entities, so that the entire society benefits from their results. Science and technology parks also play a special role in this process, as institutions that will have a significant place in an environment that will be ideal for the creation and growth of new businesses - by enabling easy access to resources, talented individuals, and knowledge that is created within scientific and educational institutions, but also to the knowledge created by other entities stationed within the park.

This paper is designed to contain several basic units. After the introductory presentation and literature review, there is a section in which the theoretical concepts of science and technology parks are discussed, the definitions of several leading institutions in the relevant fields are given, and in addition some of the basic goals and benefits are summarised which entails the establishment of such an institution. The second part contains basic information about science and technology parks in the region, while the third part indicates the potential benefits that the establishment of a park in Banja Luka would bring for the export of high-tech products, as well as the necessary conditions that would have to be met. At the very end, concluding considerations and used literature are given.

1. Literature review

Cooperation between universities and companies can result in many positive outcomes and science and technology parks enable it. While universities are focused on research and because of that are looking for financial support from STPs, companies are oriented to gaining close association with the university and other similar companies (Storey & Tether, 1998). Members of a science and technology park have many advantages and one of them is the possibility for small companies of achieving economies of scale because of clustering (Marshall, 1920). Durao and associates (2005) concluded that the transfer of technology and knowledge between universities and tenant industries is important and possible because of STPs. However, the role of a government should not be neglected, since the effects of establishing an institution such as a science and technology park has some effect on the whole economy of a country. Because of the existence of those positive externalities, the government is willing to fund or allow some tax reliefs to the STP. Related to that is also the question of the management team, whose members need to have qualifications in more than one area, such as R&D, business and marketing (UN.ESCAP, 2019).

Science and technology parks have different aims in different countries. When it comes to the emerging ones, the main goal of creating such an institution is to serve as a catalyst for development in order to support new hi-tech companies (Bigliardi et al., 2006). On the other hand, developing countries are primarily in need of development of an area. For instance, STPs help in creation of new jobs, but also in attracting foreign capital. Consequently, both national and local competitiveness is increased, which is of immense importance for transition economies (Petree et al., 2000). Financial questions might be the problem for these countries, but there are four different models for the financial structure of an STP, according to Lalkaka (1996). The same author claims that the governments of those countries for a variety of reasons could not be interested in directly funding STPs, but rather would be willing to help by releasing them some of the obligations, which was also previously mentioned by other specialists.

2. Concept of science and technology parks

To begin with, it is reasonable to ask what a science and technology park is. There are many definitions, and one of the most complete is given by the International Association of Science Parks and Areas of Innovation (IASP) which says that it is an organisation run by professionals, whose main goal is increasing the wealth of the community in which it lives, through the promotion of a culture of innovation and competitiveness of related businesses and scientific institutions. It is also emphasised here that the term science and technology park (STP) also refers to other similar terms such as research parks, science parks, technology parks, technopolises and similar (IASP, 2018). Another international institution - the United Nations Educational, Scientific and Cultural Organisation (UNESCO) gives a rather broad understanding of STPs, emphasising that they include all types of high-tech clusters (UNESCO, 2018).

Science and technology park is a relatively complex concept and its basic elements are: (1) land and supporting infrastructure - STP must have a certain area where subjects will be located, but also have supporting infrastructure such as shared work spaces, laboratories, incubation and acceleration programs and the like, (2) management - which implies the existence of a management team that will deal with the basic issues of the development of the science and technology park, such as e.g. determination of subjects that will be in it, and encouraging communication and cooperation between subjects, (3) subjects - different companies that cooperate in order to develop new but also improve existing products, (4) promotion of research and development and innovation as the main goals - this means that synergy between subjects is encouraged through the exchange of knowledge and the diffusion of new technologies and innovations, and this may also imply the establishment of new startups (ESCAP, 2019).

In this context, it is necessary to mention the theories that talk about the emergence of technology parks. One of them is cluster theory, and according to its assumptions, science and technology parks are part of a broader cluster context, which includes a set of related companies, suppliers, providers of various services, as well as related institutions in a certain geographical area. A cluster can also be seen as a spatial agglomeration of companies and related organisations and institutions. The main benefits of this approach are reflected in the so-called spillover of knowledge between companies within the cluster, which mostly refers to the transfer of implicit knowledge and ideas. The second theory is known as the 'triple helix' and is based on the model of the same name, which talks about the cooperation of three important actors in the socioeconomic context - the government, the private sector and universities. Each of the mentioned actors makes a certain contribution to the establishment and development of the science and technology park. Universities provide research methodologies, access to research equipment and the like, private companies have knowledge about the market, but also about the opportunities and possibilities of commercialization of research results carried out within the university, while governments provide support for the development of the mentioned processes, e.g. through the implementation of certain strategies that support innovation in science and technology parks. Another theory is the 'growth pole' theory, which questions the role of STP as a catalyst for urban and regional development. The contribution to economic growth is reflected internally (within the science and technology park itself) and externally (outside of it). The first approach implies support for the development of startups and incubation programs, while the second approach highlights the role of technology developed within the STP in accelerating regional development (ESCAP, 2019). It should be emphasised here that science and technology parks are also created for purely pragmatic reasons, such as the possibility of using certain equipment for research that is expensive and

that individual companies can rarely afford. Some of the other reasons why individual companies want to stay within the park is prestige, i.e. the image of the park, connection with universities and other higher education institutions, institutional support, access to markets and the like (IASP, 2012).

In the previous paragraph were given several reasons for which individual companies want to be part of the science park, but what are the reasons on a macro level that testify in favour of establishing them? Primarily, it is the connection of knowledge and business, that is, the generation and sharing of knowledge in the most efficient way possible. This leads to the transformation of a production-based economy to a knowledge-based economy - and refers to the existence of high-tech industries as well as activities with high added value. Through the translation of new ideas and theoretical knowledge into new business models and through the commercialization of new products and services created by entities within the science and technology park, wealth is created for the entire society (Ringlever, 2012). In addition, additional jobs are created, with the inevitable attraction of talented people, as well as companies and investors from the region and the rest of the world. New firms that are established within existing STPs benefit directly from already built infrastructure, an elaborate network of suppliers, access to financing sources, as well as educational and research institutions (Koh, Koh, & Tschang, 2003).

There are other goals for establishing science and technology parks, except the profit orientation of startups and other companies in it. Namely, from the point of view of the creators of public policies, but also of the development of the entire region, more important are the improvements of the entire innovation ecosystem, the creation of new jobs, the diversification of economic activities, the improvement of productivity, and the development of new businesses. It is necessary to point out the interests of the academic community and research institutions, and they are primarily reflected in the promotion of their research activities, technology transfer to the private sector, collaborative research work, greater employment opportunities for their own graduates etc. On the other hand, investors who strive to achieve the highest possible returns on their investments, as well as the shortest possible return periods (ESCWA, 2018), also satisfy their interests.

For some authors, science parks have two basic goals, the first relates to the catalysis of regional economic development, while the second is encouraging the establishment and development of new technological companies and the transfer of knowledge from universities to companies (Vilà & Pagès, 2008). The same authors believe that there are three reasons for opening science and technology parks in a certain area, the first concerns the process of reindustrialization (that is, the creation of new jobs in high-tech industries at the expense of those that are saturated and in decline), the second concerns the inclusion of the region in the trend of opening fast-growing industries, such as the information and communication technology industry or the bio and nanotechnology industry, and thirdly, the synergy that will arise as a result of the mutual action of different subjects (government, companies, universities and other scientific research institutions) is mentioned. The establishment of science and technology parks for developing countries and for countries whose economies are in transition means an incentive for knowledge sharing, entrepreneurship development, inclusiveness, digitalization and internationalisation of small and medium-sized enterprises and the like. Also, the establishment of STP leads to the commercialization of locally developed technologies and innovations, especially those that can be characterised as "green", which ultimately leads to the transition of the economy from linear to circular (UNIDO, 2020).

3. Science and technology parks in the environment

Republika Srpska officially does not have any science and technology park, unlike some countries in the region that already have several institutions of this type. There are science and technology parks in the largest cities of Serbia (Belgrade, Novi Sad, Niš) with the addition of one in Čačak (MNP, 2021). In Belgrade, the opening of the STP began with implementation in 2015 and was completed three years later, and the main goal of this project was to increase the export of products from the Republic of Serbia in high-tech areas. When it comes to important indicators of success of this STP, it should be pointed out that by now it has supported over 150 companies, there are more than 1300 employees and the entities inside the park export to more than 40 countries. Efficiency of the park was confirmed by the metrics mentioned above. Within the complex of this organisation are the Business startups and the Fund for Innovation Activities (provides financial support). The science and technology park in Niš was opened after the one in Belgrade and had a similar role, to attract innovative technological development companies from the country and abroad and to promote the export of products and services. The main goal of the development of this institution is the accelerated technological development of Southern and Eastern Serbia. An example of good international practice, as well as the practice of Belgrade and Niš, was also followed by Novi Sad, whose science and technology park started operating in December 2021. It should be mentioned here that all the mentioned parks were created as a result of a public initiative. Croatia has such an institution in Rijeka called Step Ri and it is part of the University of Rijeka. It was founded with the aim of encouraging cooperation between scientists and businessmen in order to strengthen the knowledge-based economy. Similar institutions are found in other parts of the country, so for example in Varaždin there is a technological park with the same name, in Osijek there is a scientific and incubation business centre Tera Technopolis, on the island Ston there is a technological and business innovation centre for mariculture Maribic and so on (HAMAG-BICRO, 2019). Montenegro also has a science and technology park, as a place that is intended to be a centre for the gathering of university researchers and entrepreneurs, as well as a place for the development of innovative companies and the commercialization of scientific research (STPCG, 2019). As a result of a non-governmental institution, the Intera technology park in Mostar was created, and it is the only institution in Bosnia and Herzegovina that offers services such as renting business premises, business incubation, internationalisation of business, training and education in one place (INTERA, 2018). Despite this, BIH remains the only country in the region (besides North Macedonia) that does not have any science and technology park, and in the next part the question of the potential opening of such an institution will be opened.

4. Possibilities, obstacles and benefits of establishing a science and technology park in the region of Banja Luka

In the previous parts, the basic goals and benefits of opening a science and technology park were given, primarily from the cooperation of scientific and research institutions and business entities, then from the commercialization of innovations, incubation and acceleration of startups and all the way to the catalyst of regional development. Also, in the previous presentation, high-tech products and industries with high added values were emphasised, as the ideal outcomes of the implementation of the science and technology park development project. In accordance with the relevant literature and examples of good practice from the environment, the following will address the basic issues of opening the STP in Banja Luka, as the economic, financial, administrative, cultural and sports centre of the Republic of Srpska.

First of all, it is reasonable to ask whether it is even possible to open an STP in a region. In other words, the question is whether the development of human resources, educational and scientific institutions, and industry allows it. The following recommendations for public policy makers are related to this (ESCAP, 2018). During the determination of basic goals, they must choose techniques and tools to achieve them. For example, for increasing the export of high-tech products and software, one of the instruments is precisely the establishment of a science and technology park. One of the things that is a prerequisite for the functioning of the park is its management, which is responsible for many activities, such as, for example coordination and communication with different interest groups, attracting companies and talented individuals to the park, obtaining financial resources etc. However, even effective management is not possible without other contextual prerequisites that must be taken into account. First of all, it is important to examine whether there is a certain scientific basis in the region (which is reflected in the existence of institutes, universities, laboratories...), whether the region is attractive for talented individuals, whether an entrepreneurial culture is developed, whether funds are available financing etc. Also, it is not possible to establish it without an "agreement" with the institutions that will be the basis of the park's functioning (e.g. some institute or university) about their staying in the park for a certain period. In this context, Banja Luka seems like an ideal place considering the existence of a public university with 46 years of tradition, which has 17 faculties. In addition, there are several other scientific institutes in the mentioned city (some functioning as part of the faculty, and some independent). In addition to scientific institutions, an important factor is the development and support of entrepreneurship in the city. In this regard, there is an Entrepreneurial Centre in Banja Luka, which is designed as a central portal for all entrepreneurial activities in the city, and should also be a thread that connects domestic entrepreneurs and foreign partners and organisations. Entrepreneurial support is also provided by the City Development Agency Cidea, which is also a member of the European Association of Development Agencies (EURADA), as well as the Banja Luka Innovation Centre, which was founded with the aim of supporting the development of companies based on knowledge and application of innovative and advanced technologies. Another of the recommendations concerns the socio-economic benefits of opening a science and technology park, because if the state stimulates the functioning of the park (e.g. through tax breaks, obtaining export permits, etc.) it expects benefits for society, i.e. it expects an increased degree of development of the region in which a science and technology park was established. Here, it is necessary to emphasise certain difficulties that would be encountered by subjects within the park and its management. First of all, the variety of financing means is quite small and this can lead to the fact that potentially successful startups can be left without the necessary funds for further development. Sources of financing in Republika Srpska can almost be identified with bank loans. In addition, it is necessary to mention the means of project financing from the budget of the European Union, as well as grants (grants) from the EU and other governmental and non-governmental organisations. The so-called "angel investors" and venture capitalists are not widespread in the territory of the Republic of Srpska.

A very important issue before the establishment, that is, during the planning of the establishment of a specific science and technology park, is the issue of management, which has several important dimensions (Wasim, 2014). They are: (1) legal status, which defines the existence of STP as an independent entity or as an integral part of an already existing organization - in Banja Luka, it seems that the science and technology park should be part of the University, primarily because of the faculty that are key in the "building" of profiles that have knowledge in the domain of information technology, engineering, entrepreneurship and the like (they should be the basis of the high competence of the park and its future export orientation), (2) property ownership (land, buildings, infrastructure) and its changes over time,

(3) decision-making and control, primarily refers to the selection of entities that will make key decisions that will affect the development of the park, it can be the organization or institution that founded it or a designated committee composed of representatives of the most important stakeholders (interest groups) - there is also a need for the University to have the main say, in cooperation with the Ministry of Scientific technological development, higher education and information society of the Republic of Srpska and the Ministry of Economy and Entrepreneurship of the Republic of Srpska (here it is assumed that the financing of the construction of the park will be mostly public, so the involvement of these two institutions seems to be the basis of future strategic development) (4) guidance, i.e. management, which implies the existence of a team that will have a clear vision of development and that will work in the direction of carrying out the mission and achieving the definition of the goals of the science and technology park, (5) stakeholders, i.e. interest groups, are any individuals or organizations that have an interest in maintenance and development STP - these can be organizations that already operate within it or individual authorities that participated in its creation and the like, (6) key performance indicators, which serve the governing bodies to have an insight into the achievement of the set economic and social goals - basic indicators that can be used are the number of commercialised innovations, the number of companies within the park, the number of partnerships with domestic and foreign entities, exports from the park etc., (7) focus on technologies is a very important issue and refers to the selection of key technologies that will be developed within the science and technology park - it largely depends on the selection of business and other entities that will be part of it, e.g. the focus can be primarily on companies and startups from the field of IT and related branches, and then they are forced to "bring" them to the park itself, (8) target groups, which essentially represent the main users of STP services, e.g. small and medium enterprises, innovative startups, research agencies and the like.

Closely related to the above, it is important to define the so-called management model of the science and technology park. There are four models (Łobejko & Sosnowska, 2015) and they will be briefly explained below. The first model implies the persistence of STP within a university and aims to provide infrastructural support for university research projects, as well as to create an environment suitable for the transformation of innovators into entrepreneurs. The science and technology park has benefits within this model (such as access to public funds), and it additionally enjoys independence when making decisions regarding research and commercial activities. The second model implies independence from the university and in that case the STP is established by one or more public or private institutions. This also implies that he is independent from the university both administratively and financially. This model also has certain flaws, which are primarily reflected in the high initial investment amounts (because the park itself is not stationed within the university campus), but also in the potential decisions of scientific and research institutions, which are reflected in the performance of their activities within the existing framework and in their premises. (and not within STP). The third model is a corporate model and implies the establishment of a science and technology park as a kind of investment that should be repaid within a certain period. This variant implies the existence of independent management bodies, which will be separated from the ownership bodies. This approach can be particularly suitable if one of the investors is particularly successful and as such will be the promoter of the park itself. The last model is a network model, and it interprets the STP as a network of entities that interact with the aim of achieving their goals, and the management of the park coordinates the activities of independent business and scientific research entities. This model provides flexibility and other benefits, such as participatory decision-making, but it can also be quite complex due to the multitude of connections and interactions that are realised between entities that are part of the community, that is, the science

and technology park. In the context of establishing a science and technology park in Banja Luka, the most realistic model is the first (STP within the university), primarily because of the high economic and social benefits that an institution of this type should bring, but also because of the high amount of funds needed for its construction.

Examples of good practice from the region and the rest of the world can be an additional stimulus when making a decision to invest in this type of institution. Although the current economic development is miles away, in the 1980s China was going through an economic transition, and the plan of their government consisted of the development of high-tech industry, and the instrument used to realise this plan was the financing of the development of science and technology parks, which promoted innovation and the establishment of technological based startups. Such parks were opened in eastern metropolises, which already had a significantly developed infrastructure. In addition, the government's plan was to focus on exports, namely in the field of information and communication technologies, electronics and other high-tech products (Rodríguez-Pose and Hardy, 2014). Another example of a successful decision of a government in the context of its impact on development is Singapore, which quadrupled spending on research and development activities (observed as a percentage of GDP) from the 1980s to the 2000s, all in order to become competitive in the global context. In accordance with this decision, the Singapore Science Park was established as a place where synergy between different companies and institutions will be created (Goh, 1998). However, it is not necessary to go that far to see the benefits of establishing institutions such as science and technology parks. In support of this, STP Belgrade is also a witness, as an organisation that has been operating continuously for several years (founded in 2015) and achieves notable results, as well as cooperation with many domestic and foreign institutions. Over 120 companies operate in this science and technology park, with over 1,200 employees, and the result of all this is the export of high-tech products to over 40 countries around the world (STPB, 2020).

5. Conclusion

The aim of this paper was to present basic theoretical concepts of science and technology parks as well as their main benefits, externalities and constraints, especially the ones regarding establishment of such an institution in Banja Luka. Additionally, positive examples of establishing an STP in countries in the region are discussed.

Science and technology park, as an organisation whose main goal is increasing the wealth of the community in which it lives, has proved to be of a significant importance for countries' economies from both micro and macro aspects. The connection between educational and science institutions, and other entities results in positive effects for both members and the environment. The previously said is shown to be true by the examples of STPs in cities in the region. Regarding possibilities of establishing an STP in Banja Luka, it was noted that this city has a good set of prerequisites, such as a public university and many institutes. The role of the previously mentioned would be inevitable for future development of the park. The paper also elaborated on management of this type of institution in a given context. Having in mind the previously said about the role of the university, the best model for managing STP would be the one where it would be within the university itself. The main reason for this is accessibility to public funds and using the already existing infrastructure. Based on the positive experience of other STPs in the region, the combination of government funds and the ones given through the grants would be the most suitable.

To conclude, Banja Luka could be another out of many cities in the region that boosted economic activities and cooperation between different entities. On the one hand, those are

mainly young companies that are technologically oriented and on the other are the universities and other related institutions that could be the source of talented individuals. This praxis has already been verified many times and it has a potential to be implemented successfully in Banja Luka too.

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CONSUMER BEHAVIOUR, MARKETING

Consumer Online Behavior in the European Digital Agenda Context: Should we Rely on a Privacy Paradox?

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Edo Rajh²

Abstract

Strengthening the e-economy is at the core of the EU Cohesion Policy digital goals. Fostering the adoption of e-commerce calls for a better understanding of individual online attitudes and behavior in European countries. This empirical study is unique for including frequent internet users and e-buyers in the analysis as well as the part of the population reluctant to purchase online for privacy and security concerns reasons. It compares the country's digital development and extends the analysis to both EU and non-EU members. The analysis of internet habits and individual e-commerce activities in relation to privacy and security issues resulted in the clustering of European countries. Findings suggest that the status of an old EU member state and progress towards a digital economy and society explain differences among clusters. In both clusters, there is a similar proportion of individuals reluctant to use e-commerce because of privacy and security of payment online concerns. This part of the population is persistent notwithstanding the experience of privacy violations online. Their withdrawal behavior stems from their negative attitude toward e-commerce and e-services. Possible explanations are discussed in terms of the privacy paradox. Policy recommendations and lines of future research are developed.

Keywords: consumer online behavior, e-commerce, privacy and security concern, privacy paradox, cluster analysis, Europe

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1. Introduction

The new EU Cohesion Policy 2021-2027 highlighted the objectives within the EU digital agenda. The development of Information and Communication Technologies (ICT) is considered vital for Europe's competitiveness in today's increasingly digital global economy³, and contributes to seizing economic and social inequalities among EU regions and its periphery. Cohesion policy aims to “make Europe fit for the digital age”⁴ through a set of coordinated objectives and policies enabling smooth digital transformation. The objectives of ‘going digital’, ‘smart specialization’, ‘cohesion’, and other buzzword-alike processes are

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³ https://ec.europa.eu/regional_policy/en/2021_2027/

⁴ https://ec.europa.eu/regional_policy/en/policy/how/priorities/digital-age

supported by immense EU funding: about EUR 500 billion will be available for the EU Cohesion Policy 2021-2027, out of which the allocated EU funds are EUR 392 billion.⁵

One of the components of this multifaceted and complex process of EU cohesion is the increased availability and usage of online activities. Strengthening e-commerce, e-government, e-learning, e-inclusion, e-culture, and e-health are at the core of the EU Cohesion Policy digital action plans leading to a more competitive and smarter Europe. Building infrastructure would allow access to online services and together with advanced ICT skills, these improved capacities would reduce the digital divide gap. This is in turn expected to seize inequalities among European regions. Goals set on the macro-policy level depend on the individual actions, attitudes, and behavior on the micro-level.

Although consumer online attitudes and behavior in European countries are important for fostering the adoption of e-services, relevant research is rare. This comparative study is unique for introducing frequent internet users and e-buyers in the analysis as well as the part of the population reluctant to purchase online for privacy and security concerns reasons. Specifically, we compare the EU countries according to the digital development level attained and extend the analysis by comparing both EU members and non-EU members. The aim of this study is to examine consumer online behavior in European countries. We are interested in how internet usage and e-commerce activities are related to the personal data management applied on the internet and experienced online security incidence. Particularly, we are interested to see if specific groups of internet users are sustaining from e-buying activities for privacy and security reasons. Including these variables in the analysis contributes to the debate on privacy paradox and privacy calculus, which might affect the expansion of e-services across Europe.

The paper is organized as follows. It proceeds with a brief overview of the research background, including the literature review on the privacy paradox and privacy calculus. Information on the data and methodology applied is provided in section three and the results of the cluster analysis are presented and discussed in section four. The last section concludes, derives policy recommendations, and offers directions for future research.

2. Research background

The simplified description of EU cohesion and digital concepts presented in the introduction section serves to portray the umbrella framework for studying individual behavior online. One could note that comprehensive recent studies of consumer behavior online in Europe are rather scarce. Androniceanu et al. (2020) explored the behavior of EU consumers in the online environment by considering consumers' individual attributes and habits. Their results indicated five clusters of consumers differing in socio-demographic and e-buying characteristics. Bădîrcea et al. (2021) found for EU-27 countries that socio-demographic factors such as education, residence, employment status as well as some internet services usage (e.g., e-banking) affect the development of e-commerce. However, none of these studies considered privacy concerns and security incidents online in explaining e-commerce activities practiced by consumers.

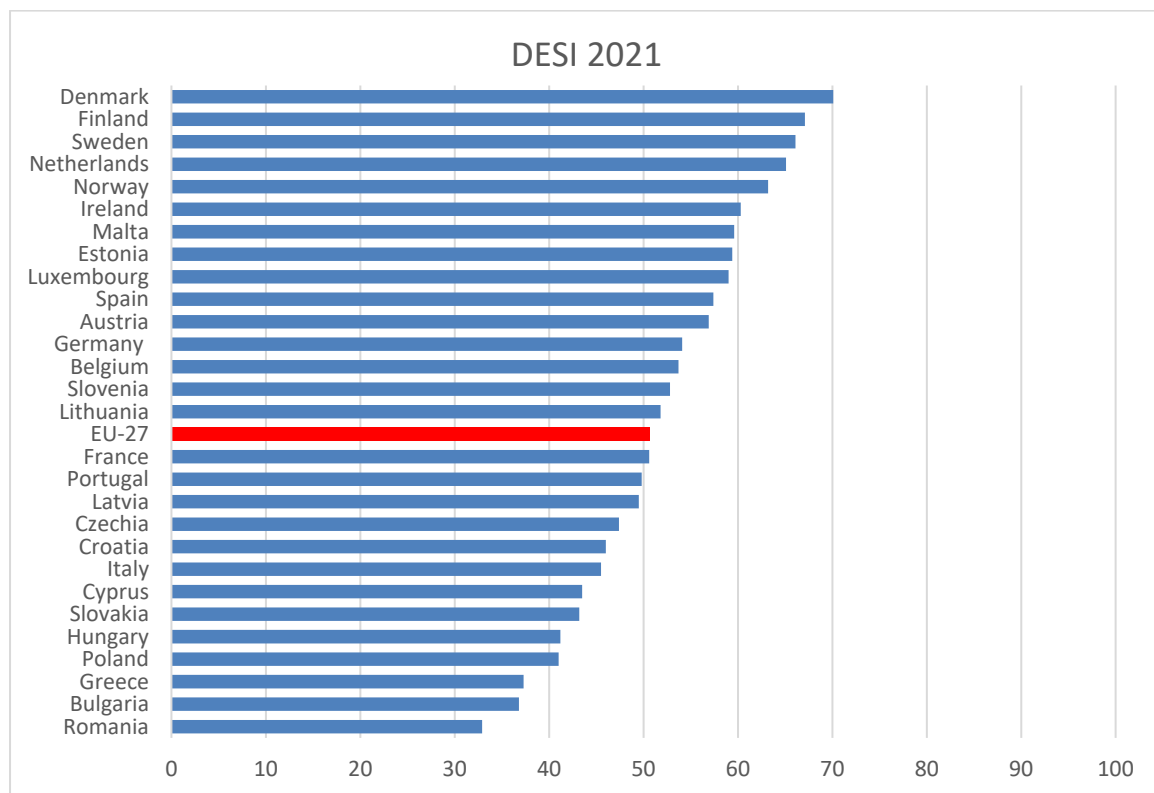
There are more studies on individuals and e-commerce at the country level. For instance, e-commerce penetration in Spain was studied by Valarezo, López and Pérez Amaral (2020), online privacy concern impact on e-commerce in Croatia by Anić, Škare and Milaković (2019) and Wiktor, Dado and Simberova (2021) analyzed e-commerce development in Czechia,

⁵ https://ec.europa.eu/regional_policy/en/funding/available-budget/

Poland and Slovakia in the light of EU Single Digital Market Strategy. The scope of such studies varies so findings are not comparable and do not lead to common conclusions.

Digitalization offers benefits for individuals (Elmassah & Hassanein, 2022), companies (Parviainen et al., 2017; Rosin et al., 2020), and governments (Terlizzi, 2021). Sabbagh et al. (2012) in their analysis of countries worldwide found that digitalization has a positive impact on economic progress, social well-being, and government effectiveness. Dobrolyubova, Klochkova and Alexandrov (2019) argue that government digitalization increases public administration performance, which in turn has positive outcomes for citizens and businesses. However, recent studies point out there are as well negative implications of digital transformation for individuals, organizations, and society (Trittin-Ulbrich et al., 2021). Elmassah and Hassanein (2022) found that in some segments digital transformation negatively affects the life satisfaction of EU citizens.

Figure 1: Digital Economy and Society Index, 2021



Source: European Commission, <https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance>

The level of digitalization is relatively hard to be measured precisely, because of the complexity of the transformation. The methodology of assessing the levels and trends in digitalization has been developed and applied for the EU countries as The Digital Economy and Society Index (DESI). The DESI is a composite index published annually by the European Commission since 2014. It measures the progress made by the EU Member States toward a digital economy and society, bringing together a set of relevant indicators. The DESI is composed of five principal policy areas, which group 37 indicators overall, and ranges from 0 to 100. The latest DESI available for 2021 ranks Scandinavian countries as the most digitalized economies and societies in the EU-27 (Figure 1). Similar attempts of applying DESI methodology to countries worldwide showed that countries with higher GDP have a high level of digitalization of public services and a medium level of digitalization of the business environment. Less developed

countries are lagging in digitalization and still focus on building infrastructure and ICT skills needed for the upper level of digital transformation (Volkova et al., 2021).

One of the issues connected with digitalization is the privacy and data protection nexus. Seemingly the relation is two-fold: the digitalization process requires giving up some privacy for the benefits of e-services, and privacy behaviors are affected by the adoption of digitalization. Adoption of digitalization might face privacy-related obstacles (Linsner et al., 2021).

Economic theory assumes that individual actions are *rational*; people tend to provide personal information voluntarily in exchange for benefits but will keep information undisclosed if they see no benefits in return. The trade-off between privacy concerns “costs” and “benefits” is called privacy calculus. Given the widespread internet usage, the two intertwined concepts of privacy paradox and privacy calculus raised attention in the marketing and information privacy literature (Smith, Dinev & Xu, 2011). A privacy paradox is described as a dichotomy between privacy attitudes and privacy behavior where an individual expresses strong privacy concerns and behaves in a contradictory way.

Empirical evidence produced different results because some studies confirmed the inconsistency and other studies did not prove the existence of the privacy paradox (Kokolakis, 2017; Gerber, Gerber & Volkamer, 2018). More recent studies indicate the gap between privacy attitudes and behavior might diminish due to the overall digitalization (Dienlin & Trepte, 2015).

The privacy paradox is important for exploring consumer behavior online. If a consumer neglects his privacy concerns because the estimated benefits of using the internet surpass the potential losses caused by disclosing private information, he would use the internet and e-services to the same extent or more intensively as a non-concerned consumer. Otherwise, more privacy-concerned consumers would refrain from e-transactions. Further, there is a reason to believe that the result of privacy calculus and the existence of the privacy paradox depends, among others, on how resilient a person is to privacy violations online (Budak et al., 2021).

An increased protective behavior resulting in fewer e-activities stands as an issue for organizations (Gotsch & Schögel, 2021) and nations fostering an e-economy. The individual trade-off decision is a consequence of privacy calculus, so on one side, effective policies should aim to decrease privacy violation costs and on the other side, to increase the benefits of online services. Scattered research on the privacy paradox did not reach a consensus so more studies of its causes and consequences in a comprehensive theoretical model are needed (Kokolakis, 2017). If there is a privacy paradox confirmed in the online behavior of internet users in European countries, the privacy concern might not be seen as an obstacle to wider use of digital services, such as e-commerce, e-government, and other objectives on the EU digital agenda. If it proves the contrary, privacy and security issues might deter citizens from ‘going online’ at least for some specific online activities. If certain activity on the internet is perceived as a security or privacy risk, an individual might refrain or withdraw from using it, notwithstanding their (increased) availability. Our analysis of online consumer behavior in Europe countries, therefore, includes concerns and privacy and security incidents experienced online.

3. Data and methodology

The analysis is performed using the Eurostat secondary data for 38 European countries (a list of countries observed is provided in the Appendix). Data for the latest available year (2021 or exceptionally for 2020) was used.

The population in focus are frequent internet users presented by the percentage of individuals using the internet on a daily basis (I_DAY) and online consumers (I_ECOM). Next, we were interested to include in the analysis the internet users who undertake personal data protection activities such as reading privacy policy statements before providing personal data, restricting or refusing access to the geographical location, limiting access to profiles or content on social networking sites or shared online storage, not allowing the use of personal data for advertising purposes, or checking that the website where personal data provided was secure. Privacy and protection of personal data are captured by the percentage of individuals who recently managed access to personal data on the internet (I_MAPS). Despite controlling for privacy and protection of personal data, internet users exhibit privacy violations and security incidents such as fraudulent credit or debit card use when using the internet, online identity theft (somebody stealing individuals' personal data and impersonating individuals e.g. shopping under an individual's name), who received fraudulent messages ('phishing') when using the internet, who got redirected to fake websites asking for personal information ('pharming') when using the internet, who experienced misuse of personal information available on the internet resulting in e.g. discrimination, harassment, bullying, whose social network or e-mail account was hacked and content being posted or sent without individuals' knowledge, who experienced the loss of documents, pictures or other data due to a virus or other computer infection (e.g. worm or Trojan horse). This part of the internet users population is captured by the variable I_SECANY. Finally to assess the privacy concern as a perceived obstacle to online purchases, we counted for individuals whose reason for not buying online was having concerns about payment security or privacy (I_NBPSC1).

The progress achieved in digitalization is captured by the DESI index. To distinguish European countries according to institutional set-up and EU status, we assigned a dummy variable 1 to 'old'-EU members and more developed European countries, and 2 to new-EU member states, candidate countries, and other non-EU members. Variables definitions and sources are presented in Table 1.

Table 1. Variables and definitions

Variable	Description	Source
I_IDAY	Percentage of individuals using the internet daily	Eurostat ISOC_CI_IFP_FU Individuals - frequency of internet use
I_MAPS	Percentage of individuals who manage access to personal data on the internet in the last 3 months	Eurostat ISOC_CISCI_PRV20 Privacy and protection of personal data
I_ECOM	Percentage of individuals using the internet for e-commerce activities	Eurostat isoc_bde15cbc E-banking and e-commerce
I_NBPSC1	Percentage of individuals whose reason for not buying via a website or an app in the last 3 months was having concerns about payment security or privacy	Eurostat ISOC_EC_INB21 internet purchases - perceived barriers
I_SECANY	Percentage of individuals who experienced a security-related incident	Eurostat ISOC_CISCI_PB Security-related problems experienced when using the internet
DESI	The Digital Economy and Society Index measures the progress made by the EU Member States towards a digital economy and society. The score ranges from 0 to 100.	European Commission country reports https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance
EU Status	Dummy variable denoting EU status. Score 1 denotes old-EU members, Norway, Switzerland, and Iceland; score 2 denotes new EU member states, candidate countries, and other non-EU members	European Union country profiles https://european-union.europa.eu/principles-countries-history/country-profiles_en

The data were analyzed by means of K-means cluster analysis to identify the groups of countries with similar profiles based on variables I_DAY, I_MAPS, I_ECOM, I_SECANY and I_NBPC1. ANOVA and Chi-square test were used to examine the differences between identified clusters for EU status and DESI variable.

4. Results and discussion

The K-means cluster analysis was applied to classify the European countries according to variables I_DAY, I_MAPS, I_ECOM, I_SECANY and I_NBPC1. The Hartigan index was used as a criterion for determining the number of clusters in a data set. Values for analyzed variables for each country were taken as an input in the K-means cluster analysis. The K-means cluster analysis identified two homogeneous clusters of European countries. ANOVA results indicated there are statistically significant differences among those two identified clusters for four out of five analyzed variables (I_DAY, I_MAPS, I_ECOM, I_SECANY). There are no statistically significant differences for variable I_NBPC1 (Table 2).

Table 2. Results of the K-means cluster analysis

Variables	Cluster 1	Cluster 2	ANOVA
	n=19	n=12	
I_DAY	92.5	82.2	F=37.74; p=0.00
I_MAPS	75.4	56.8	F=31.14; p=0.00
I-ECOM	71.3	38.9	F=55.95; p=0.00
I_SECANY	37.7	13.1	F=39.73; p=0.00
I_NBPC1	6.0	6.9	F=0.17; p=0.68

Source: Authors' calculations.

The first group of countries (Cluster 1) has higher values for variables I_DAY, I_MAPS, I_ECOM, I_SECANY when compared with the second group of countries (Cluster 2). Despite the observed differences between these groups of countries, both groups of countries have the same average level of variable I_NBPC1.

Table 3. Differences in DESI and EU status among clusters, ANOVA and chi-square test results

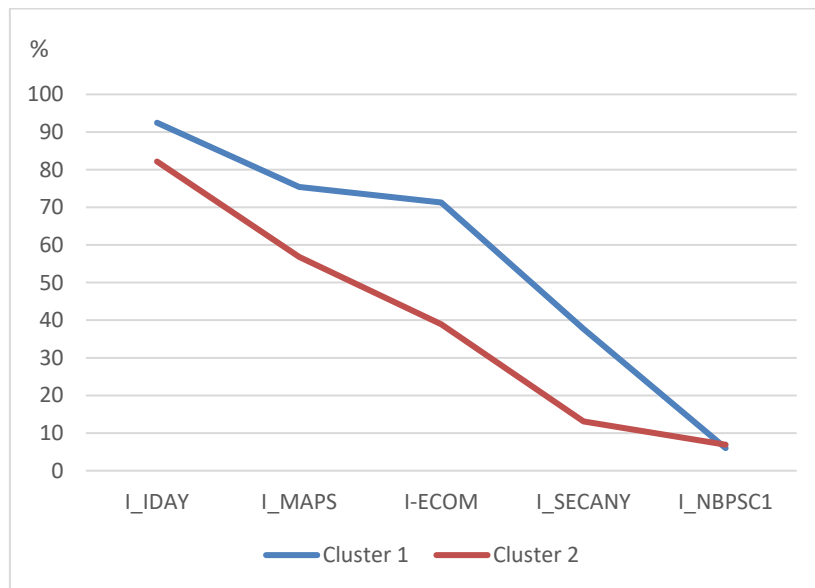
Variables	Cluster 1	Cluster 2	ANOVA
	Means		
DESI	57.3	44.9	F=14.30; p=0.00
	%		Chi-square test
EU Status 1	73.7	16.7	Chi-square: 9.57; p=0.00
EU Status 2	26.3	83.3	

Source: Authors' calculations.

ANOVA and chi-square tests were also conducted to further explore differences among the identified clusters. Test results indicate that there are statistically significant differences among the identified clusters both in terms of DESI variable values, as well as in terms of countries' EU status (Table 3).

The cluster analysis results (Figure 2) generated interesting observations to be further discussed.

Figure 2: Cluster analysis results



Source: Authors' calculations.

Both clusters are composed of 'heavy' internet users because more than 80 percent use the internet every day (I_DAY). However, there are differences in how they manage to control access to their personal data on the internet (I_MAPS). Cluster 1 takes slightly better care of restricting and controlling access to its information online. In comparison to Cluster 2, these are internet users who perform more e-commerce activities, although they had experienced some form of violation of online privacy or security transactions on the internet. Both clusters have the same, low score in giving up internet shopping for the reason of privacy concerns and the security of online payments.

The main characteristic of Cluster 1 members' attitudes and behavior is that despite privacy and security incident experienced, they do not refrain from e-commerce, and manage access to their personal data online. Cluster 1 members are predominantly more developed EU-member states, with advanced digital economies and societies.

Cluster 2 members control the access to their personal data online less successfully, perhaps because they are less concerned and have less experience with payment security put on risk and privacy online violation incidents. The fact they rarely had been victims of privacy violations and security payment incidents might increase their trust in the safety and security of online transactions. Therefore, members of Cluster 2 continue to use e-commerce; however, to a lesser extent when compared to Cluster 1. The general level of digitalization of Cluster 2 member states is lower when compared to Cluster 1. It mostly consists of new and non-EU countries.

5. Conclusion

This study aims to identify the typology of European countries based on the online behavior of their citizens and to observe the findings within the context of the European Digital Agenda.

Special attention is dedicated to the issues of online privacy and security and the phenomenon of privacy paradox in an online setting.

The results indicate the existence of two different clusters of countries with different values for all analyzed variables except for variable I_NBPSC1 which measured the percentage of individuals whose security or privacy concerns stopped them to engage in online buying activity in the last three months.

It seems that privacy concerns did not prevent the majority of consumers to shop online so at least for e-commerce activities, the privacy paradox in the EU countries is confirmed. It suggests that despite potential privacy concerns, internet users are willing to give up some privacy for the benefits of using e-services. Therefore, privacy concerns of the major internet population in European countries should not be seen as an obstacle to further digitalization. However, there seems to be about 6 to 7 percent of surveyed population refraining from e-commerce because of privacy and security reasons. The successful digitalization process should take into consideration this share of European citizens worth involving in e-services (and e-buying).

The most important finding is that in all observed countries there is a part of the internet population who will not engage in e-buying because of privacy and online payment security concerns. This share of the internet users is the same regardless of the experienced privacy violation and reflects the attitude towards e-commerce. Withdrawal from this type of online might be caused by bad experiences (of one's own or close people), information from the media, personal characteristics of an individual, etc. The cluster analysis does not allow us to conclude on causal relations, and more importantly, to match the attitudes, experiences, and behavior of one individual respondent.

Since both clusters have similar shares of citizens engaged in withdrawal from online buying due to privacy and security concerns, policy recommendation might be to employ various measures of education and technology policies to reduce such shares by introducing alternative strategies of dealing with privacy and security concerns. Instead of withdrawing from online activity, the possible alternative strategy might be engaging in protective behavior, which could decrease risks from privacy and security incidents but still allow consumers to participate in e-commerce activities.

This study is based on secondary data that are only available at country level. Further insights might be achieved by collecting primary data on the individual level of consumers. Future studies might be conducted to explore the complex interrelationships among analyzed variables and to gain further knowledge of sources and consequences of privacy and security issues in an online context. Also, further research might be conducted to explore the negative experience and withdrawal from certain online transactions/activities at the individual level.

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Appendix

European countries, n=38	
Albania	Latvia
Austria	Lithuania
Belgium	Luxembourg
Bosnia and Herzegovina	Malta
Bulgaria	Montenegro
Croatia	Netherlands
Cyprus	North Macedonia
Czechia	Norway
Denmark	Poland
Estonia	Portugal
Finland	Romania
France	Serbia
Germany	Slovakia
Greece	Slovenia
Hungary	Spain
Iceland	Sweden
Ireland	Switzerland
Italy	Turkey
Kosovo*	United Kingdom

*This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

The Role of Loyalty Programs on Customer Loyalty in Hotel Industry: A Five-star Hotel Case in Albania

Eduina Maksuti¹

Abstract

In a global market economy where many new products or services and consequently companies make their entry, the tension of competition is always present. The customers tend to go from one offer or attraction to another and it seems to be more and more difficult to bond them to the business and create loyalty. This situation has created the need for businesses to implement loyalty programs in order to keep the customers connected to their offers. The main aim of the loyalty programs is certainly profit based on sales increase but also creating a trustworthy brand for the customers. This leads to the expansion of the company as well as increment of company's responsibility to offer high quality products or services since the moment that the brand name is established. Loyalty programs are based on the system of rewarding the loyal customers, by favouring not only the most loyal but also the most influential ones. In the era of cutting-edge technology and social networks, the implementation of loyalty programs is easy and difficult at the same time because companies can easily attract new customers and lose them with the same speed. The aim of this study is to examine the role of loyalty programs on customer loyalty in hotel enterprises. A survey study was implemented on a hospitality company, a five-star hotel in Durrës, Albania. Participants of the study were randomly selected from the loyal hotel customers and the questionnaires were administered with the help of reception's staff. The data were analysed with SPSS. The results revealed that loyalty programs are a crucial strategy for customer loyalty and help the company develop a competitive advantage in the market. As the results indicate, the implementation of customer loyalty programs helps the hotel achieve its objectives regarding customer satisfaction and customer loyalty. In addition, the findings emphasize the importance of personalized services to improve customer satisfaction and loyalty. Conclusions and further recommendation are provided inferring from the findings of the study.

Keywords: loyalty programs, customer loyalty, customer satisfaction, hospitality industry.

Introduction

In a competitive market, where customers are faced with many choices and opportunities, it is a challenge for companies to keep their customer satisfied, and more importantly loyal to their brands. Customer loyalty is being seen as important to the success of any retail organization, because it is known that drawing new customers is more expensive than keeping existing one. (Sullivan & Adcock, 2002). As an important component of customer relationship management (CRM), reward or loyalty programs have become an increasingly popular tool for managers to build customer loyalty (O'Brien & Jones, 1995).

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Today, the use of loyalty programs as a technique for companies to enlarge customer loyalty is extremely popular as it is believed that both consumers and companies can reap benefits from it. (Wulf et al., 2003). The number of CLPs in business and consumer markets is growing steadily, along with the number of consumers joining these programs (Smith & Sparks, 2009).

The situation is similar in almost all industries, and hospitality would not be an exception.

As hotel firms have difficulties in providing differentiated services and increasing switching costs to customers (Reinartz & Kumar, 2000), most of the hotels make the best use of loyalty programs to attract such customers (Berezan et al., 2017; Tanford et al., 2011). In return, hotel firms can expect increased customer satisfaction and loyalty through the loyalty program, which positively impact long-term financial performance and the relationship between customers and brands (Anderson et al., 1994; Berezan et al., 2017; Bolton et al., 2000)

Albania, being relatively new in the market economy after the political transition, has adopted new contemporary marketing strategies, but still there is a lack of experience and research in this field. In this context, there are some of 5-star hotels in Durrës, Albania, that have started implementing loyalty programs. These hotels scan the internet and social media platforms with focus on the feedbacks and reviews of customers, but deeper analysis is necessary and suggested in order to understand the effectiveness of these programs.

This study aims to examine the effect of loyalty programs on customer loyalty. The survey was focused and implemented in Adriatik Hotel, a 5-star hotel located in Durrës (Albania), being one of the first implementing the loyalty programs in the country. It is one of the most preferred hotels not only during the summer season, but also during winter when most of the hotels are closed.

2. Literature Review

2.1 Customer Satisfaction and Customer Loyalty

Given the crucial role of customer satisfaction many studies in marketing have focused on defining it. Some of the researchers focus on feeling while defining it. Satisfaction is defined as the level of a person's feelings after comparing the performance or perceived results compared with expectations (Susanto, 2010). Similarly, Kotler and Keller (2012) stated that satisfaction is a person's feelings of pleasure or disappointment that result from comparing a product's perceived performance (or outcome) to expectations.

Several authors have defined customer's satisfaction according to the product or service offered by the company. Customer satisfaction portrays the quality of products or services provided to the customer in a positive manner, whereby the level of customer satisfaction enhanced along with an increased level of service quality (Yeo et al., 2015).

Other authors define customers satisfaction as a perception. Customer satisfaction is the result of a customer's perception of the value received in a transaction or relationship - where value equals perceived service quality relative to price and customer acquisition costs (Jahanshahi et al., 2011).

Others tend to define customer satisfaction based on its results and consequences. Customer satisfaction, according to Kuo et al. (2009), is very important part of the business setup because business generates much revenue from the industry when the customer is satisfied by the services being provided.

Customer loyalty, like customer satisfaction, does not seem to unite researchers in one common definition. Auka (2012) defines customer loyalty as, a deeply held commitment to re-buy or

re-patronize a preferred product or service consistently in the future, thereby causing repetitive purchasing of the same brand, despite situational influences and marketing efforts. According to Dimitriadis (2006), loyal customers positively view the organization, endorse the organization to others, and would engage in repurchase.

Some scholars tried to define customer loyalty in a bidimensional way, for instance, Kandampully and Suhartanto (2000) suggested that customer loyalty includes both behavioral and attitudinal dimensions, which can be explained that the behavioral dimension considers consistent repeat business frequency, and the attitudinal dimension considers psychological commitment/interest in the brand. Also, Peppers and Rogers (2011) supported the idea of attitudinal and behavioral loyalty.

Despite many attempts to measure and explain customer satisfaction, there still does not appear to be a consensus regarding its definition (Giese & Cote, 2000). However, there is an agreement that it is an integral part of customer's loyalty. Many authors clearly established a positive relationship between customer satisfaction and customer loyalty. Customer satisfaction has been considered to be a core determinant for creating loyalty (Hu et al., 2010). It has been regarded as a critical antecedent of customer loyalty for many years (Kim et al., 2015). Satisfaction with previous purchase experiences is likely to play an important role in determining future purchase behaviors particularly as an effort-minimization strategy (Jones & Suh, 2000). Loyal customers are not necessarily satisfied customers, but satisfied customers tend to be loyal customers (Fornell, 1992). Lam et al. (2004) claims that a satisfied customer's affect toward a service provider could motivate the customer to patronize the provider again and recommend the provider to other customers.

According to such evidence, the first hypothesis of the present study was:

Hypothesis 1: There is a significantly positive impact of customer satisfaction on customer loyalty.

2.2 Customer Loyalty Programs and Loyalty

Customer loyalty programs are not something new in the marketing appliance. Their implementation date back decades ago when small or medium size enterprises started to reward their most loyal customers. These loyalty programs can be historically traced back to the 1950s, even before they were known when supermarkets first introduced the bonus card to customers who repeated purchases (Pohl, 2006). Later in the early 80s the programs were realized by airlines, mid 80s by hotels, early 90s by retail, mid 90s by credit cards, late 90s by financial services and finally 21st century they are there in every industry (Kumar, 2008).

Customer loyalty programs also generally known as retention programs or relationship marketing programs have long been an important element of customer relationship management for firms in travel related industries such as airlines, hotels, and rental cars (Lewis, 2004). Krafft and Mantrala (2006), define a loyalty program as a marketing process that generates rewards for customers on the basis of their repeat purchases.

Due to the fact that a loyal customer is considered as an asset, companies are always seeking new ways and instruments to build loyalty bond with the customers. For this reason, customer loyalty programs enjoy a high priority as essential tools for companies whose goal is to establish an efficient and effective loyalty management. Many empirical studies have identified the vital role of the perceived value of a loyalty program in building customer loyalty (Hu et al., 2010; Kim, 2018). Rashid et al. (2015) stated that improved customer loyalty programs will keep customers in the company, increase customer satisfaction and affect customer retention

positively. Based on the overall assumption that the membership in CLPs will encourage customers to stay with one brand, retail chain, or product, CLPs have been introduced in various industries (Rosenbaum et al., 2005). Reasons for starting a loyalty program are, of course, related to getting and keeping customers. (Shoemaker & Lewis, 1999).

Based on these arguments, we expect that satisfaction with loyalty programs offered by the company affect customer loyalty as follows:

Hypothesis 2: There is a significantly positive impact of satisfaction with loyalty programs on customer loyalty.

3. Methodology

3.1 Measures of construct

This study examines the relationship between customer satisfaction, satisfaction with loyalty programs and customer loyalty. In order to verify that, the dependent variable is identified as customer loyalty while the independent variables are identified as the satisfaction with the loyalty program and customer satisfaction.

For the purpose of the research, it has been used a questionnaire which consists of 2 parts. In the first parts, customers were asked some demographic questions, whereas the second part has a 3 group questions. The latter were organized and adapted based on existing measures, with the intention to be in accordance with the subject and aim of the research. As a consequence, this part has a total of 15 questions compiled by using a 5-point Likert scale (1 = “strongly disagree,” and 5 = “strongly agree”). The first group consists of 4 questions cited from Hennig-Thurau (2004), in order to measure the satisfaction with the loyalty programs of the hotel’s customers, using statements whether they are satisfied with the hotel’s loyalty programs, if the programs fulfil their expectations, etc. The second group consisting of 5 questions and uses Oliver’s (1980) customer satisfaction measurements, asking customers to evaluate their decision for the hotel, their satisfaction with the choice, etc. The last group uses 3 questions from Han and Ryu (2009), and three other recreated questions in order to measure customer loyalty through statements on whether the customers consider themselves future purchaser, recommend the hotel to the others, etc.

3.2 Data collection and sample

In the research has been used a quantitative method to see the effect of the customer loyalty programs on the customer satisfaction, and more importantly on customer loyalty. The data of the study was collected through the questionnaires distributed with the assistance of the hotel’s staff, to randomly chosen loyal customers staying at the hotel.

Initially, the participants were informed by the researcher about the purpose of the survey, the definition of the loyalty programs, the current application by the hotel and then kindly asked to fill the forms out. The surveys were completed in two days and a total of 92 questionnaires out of 100 were collected. The gathered data was processed and analysed with SPSS. Table 1 indicates the details of the respondent’s characteristics:

Table 1: Characteristics of participants (n=92)

Variables		Frequency	Percent
Gender	Male	42	45.7
	Female	50	54.3
Age	18-30	25	27.2
	31-40	24	26.1
	41-50	24	26.1
	51 or more	19	20.7
Education	High School	25	27.2
	Graduate	51	55.4
	Post Graduate	16	17.4
Income (euro)	Less than 500	5	5.4
	501-1000	11	12.0
	1001-2000	41	44.6
	2001 or more	35	38.0
Frequency of stay	1-2 times	20	21.7
	3-5 times	43	46.7
	6-8 times	21	22.8
	9 or more	8	8.7

4. Results

By conducting a descriptive analysis, we can examine the demographic information of the participants in the research, as shown in Table 1. From 92 people that participated in the study, 45.7% were male and 54.3% were female. The age of participants indicated the following; 27.2 % were 18-31 years old, 26.1% were 31-40 years old. The same percentage, 26.1, were also between 31 and 40 years old, and 20.7% were 51 years old or more. The level of education of participants was part of demographic examination from which resulted that; 27.2% of them had high school education, 55.4% were graduate and 17.4% were postgraduate. When income levels per month were examined, it has resulted that, 5.4% of the participants earn less than 500 euro, 12.0% between 501 and 1000, 44.6% between 1001-2000, and 38.0% between 2001 and 3000 as detailed in the table above. Regarding the frequency of stay in the last 12 months, 21.7% of the participants stayed 1-2 times, 46.7% stayed 3 to 5 times, 22.8% stayed 6 to 8 times, and 8.7% of them stayed 9 times or more.

4.1. Construct reliability testing

A Cronbach's alpha analysis was conducted in order to measure the internal consistency of the constructs of the study. The results of the analysis are summarized in Table 2.

The satisfaction with loyalty programs construct, consisting of 4 items, has a value of $\alpha = 0.929$. The Customer satisfaction construct, consisting of 5 items, has a value of $\alpha = 0.878$, and lastly the customer loyalty construct, consisting of 6 items, has a value of $\alpha = 0.890$. The Cronbach's alpha values for study constructs, were all above the suggested threshold of 0.70, indicating

internal consistency of the measurement items for each construct (Hair et al., 1998). Therefore, the results of measurement models strongly identified the reliability of constructs.

Table 2: Reliability Statistics

Constructs	Number of items	Alpha (α)
CS	5	.878
SLP	4	.929
CL	6	.890

*Note: Customer Satisfaction, SLP: Satisfaction with Loyalty Programs, CL: Customer Loyalty

4.2 Hypothesis Testing

In order to determine whether the variables in this study have any relationship with each other a Pearson Correlation analysis was conducted. The results are as shown in Table 3:

Table 3: Correlation Analysis

	CS	SLP	CL
CS	1		
SLP	.548**	1	
CL	.722**	.748**	1

** . Correlation is significant at the 0.01 level (2-tailed). CS: Customer Satisfaction, SLP: Satisfaction with Loyalty Programs, CL: Customer Loyalty

Pearson product correlation of customer satisfaction and customer loyalty resulted high positive and at the same time, statistically significant ($r(92) = 0.722, p < .001$). The results also show that Pearson product correlation of satisfaction with loyalty programs and customer loyalty is high positive and statistically significant ($r(92) = 0.748, p < .001$).

Due to the fact that there was a high positive correlation of the variables, further analysis was conducted by using Multiple Linear Regression in order to test the impact of independent variables on the dependent variable. It was used to test if customer satisfaction and satisfaction with loyalty programs significantly predicted customer loyalty. Table 4 shows the results:

Table 4: Hypothesis Results

Hypothesis	Regression Weight	Beta Coefficient	t-value	p-value	Hypotheses supported
H1	CS→CL	.669	6.415	<.001	Yes
H2	SLP→CL	.404	7.254	<.001	Yes
R ² .699					
F (2, 89) 103.459					

*Note: $p < .001$ CS: Customer Satisfaction, SLP: Satisfaction with Loyalty Programs, CL: Customer Loyalty

Hypothesis 1: There is a significantly positive impact of customer satisfaction on customer loyalty.

Hypothesis 2: There is a significantly positive impact of satisfaction with loyalty programs on customer loyalty.

The dependent variable customer loyalty was regressed on predicting the variables customer satisfaction and satisfaction with loyalty programs. The independent variables significantly predict customer loyalty, $F(2,89) = 103.459, p < .001$, which indicates that the two factors under study have a significant impact on customer loyalty. Moreover, the $R^2 = .699$ depicts that the model explains the 69.9% of the variance in customer loyalty. Additionally, the coefficients were further evaluated to ensure the influence of each of the factors on the dependent variable (customer loyalty). Hypothesis 1 tests if customer satisfaction significantly and positively affects customer loyalty. The results showed that customer satisfaction has a significant and positive impact on customer loyalty ($b = .669, t = 6.415, p < .001$). As a consequence, hypothesis 1 is supported.

Hypothesis 2 tests if satisfaction with loyalty programs significantly and positively affects customer loyalty. The results showed that satisfaction with loyalty programs has a significant and positive impact on customer loyalty ($b = .404, t = 7.454, p < .001$). Based on these results, hypothesis 2 is also supported.

5. Discussions and conclusion

The aim of this research was to examine the role of loyalty programs on customer loyalty in hotel enterprises. For this purpose, a 5-star hotel in Durrës was selected as one of the leading businesses which has implemented the loyalty programs. After a constructive literature review, two hypotheses were raised and later analysed and verified.

Hypothesis 1: There is a significantly positive impact of customer satisfaction on customer loyalty. The results showed that customer satisfaction has a significant and positive impact on customer loyalty, supporting the linkage between customer satisfaction and customer loyalty (Oliver 1999; Reichheld & Sasser 1990).

Hypothesis 2: Satisfaction with loyalty programs significantly and positively affects customer loyalty. Even in this case the results showed that satisfaction with loyalty programs has a significant and positive impact on customer loyalty, and supports the statement of Rashid et al. (2015) that improved customer loyalty programs will keep customers in the company, increase customer satisfaction and affect customer retention positively.

The support of both hypotheses may have been confirmed in other businesses and in other countries. However, there is very few research evidence regarding loyalty programs in Albania and particularly in a 5-star hotel business. As mentioned above, the implementation of loyalty programs has a considerable impact on marketing strategy and overall incomes of the hotel. Nevertheless, it should be mentioned that considering the studies and researches conducted by various prominent scholars and authors, loyalty programs have shown to be a powerful tool of business marketing.

On the premises of establishing a profitable relationship, the research has shown that the hotel should target a special group of customers, namely those with above average monthly incomes and certainly, well-educated customers. Based on the individual surveys that have been conducted and examined, most of the customers had high incomes (referring to the Albanian financial/economic standards) and were highly educated (holding graduate or postgraduate degrees).

Limitations

This study holds some limitations which should be taken into consideration when drawing conclusions and making further suggestions for future research. Among the limitations, data

collection, measurement and in-depth analysis might be worth noting. The surveys were conducted mostly with the customers that were present in the hotel. More comprehensive data could have been collected if the majority of the customers would have been asked. Due to the fact that it was the peak of summer holidays, the staff of the hotel was extremely busy to provide additional assistance. The survey was conducted in only one hotel which was identified to have used the loyalty programs. In this case, better measurement and a more detailed analysis could have been done if the research would have been extended to at least another hotel of the same standard which was not using loyalty programs. This kind of comparison would have given significant indicators on the impact of the loyalty programs.

Future research directions

A comparative study may be undertaken between businesses/companies that use the loyalty programs and the others that do not use them. The variables used in this research could be used to measure the impact of the loyalty programs in companies that do not use them as a predictive tool for marketing strategies. Considering the fact that loyalty programs are not very commonly used in Albania, this research and methodology could be used to study other strategic sectors such as, banking, communication or transport.

Implications

The study will be of benefit to many mid-size and large companies because it asserts in theory and practise the beneficial use of the loyalty programs to create a solid and loyal pool of customers and to boost incomes. It also shows the rewards of the customers if they adhere to loyalty programs. In this framework, practically, this kind of study should be part of mid- and long-term marketing strategies for companies especially in a country with no extensive expertise in this filed.

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Social Media Communication Habits of Emerging Adults with Brands during the Covid-19 Pandemic

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Abstract

This study examines the social media communication habits of emerging adults regarding their communication with brands, during the Covid-19 pandemic. The research was done through online questionnaires (Google Forms) on a sample of 284 emerging adults, aged 18-29. The paper integrates three different social media in the analysis – Facebook, Instagram and Twitter, as a unique combination of media that were researched during this period. The results show that emerging adults prefer using Facebook and Instagram in their communication with brands and have used them in the past six months, while Twitter is rarely used for this purpose. The frequency of usage of Facebook and Instagram is mostly every day. The results of the relative importance of social media for brand communication with emerging adults show divided opinions, with one part perceiving them as important media for communication and another part of the respondents, as less important. On the other side, most emerging adults find that their preferred social media – Facebook and Instagram are good sources of information for products or services. Additionally, they state that brand communication on these media has a positive influence on their purchase decision. The results show that the communication between brands and emerging adults is not one-way, but mainly an interactive process in which the respondents engage with the content of the communication messages by clicking on it to see more. Based on primary research, this study can be of use to the companies in crafting informed communication strategies and plans, that best suit the habits of their potential consumers in the ongoing and future crisis of similar nature.

Keywords: social media, communication, emerging adults, brands, Facebook, Instagram, Twitter

1. Introduction

Social media has evolved over the last decade to become an important driver for acquiring and spreading information in different domains such as business, entertainment, crisis management, and politics (Stieglitz, Mirbabaie, Ross and Neuberger, 2018). The power of social media lies in the fact that in one second when the information is released, it can be seen by thousands of people - potential consumers. Today in the world more than 59% of the world's population are online users, thus the message can be conveyed the fastest and most securely through social media (Johnson, 2021).

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The growth of social media usage opens new opportunities for analysing several aspects of communication (Golder and Macy, 2011). One of those aspects is online communication which has left a big mark in recent decades. In the world of online communication, emerging adults and adolescents seem to gravitate toward social media (Chan, 2015). Social media provide them with guidance and recommendations from others and enable them to share experiences, locate goods and services, and make purchases (Wang, Chen, Ou and Ren, 2019). The daily life of emerging adults includes social media in order to satisfy their various needs and desires with their use.

The importance of social media is undoubtedly growing for the end users, and businesses as well. For example, Facebook in 2020 had a total of 10 million active advertisers, and more than 1.9 billion active daily users or 2.9 billion active monthly users. (Statista, 2020; 2021) Instagram as a newer social media from Facebook is gaining many consumers, and the predictions are that in 2023 the number of users is predicted to reach 1.2 billion, from 815 million in 2019. (Statista, 2022) Twitter ads can reach 5.8% of the world population over age 13 and their advertising audience is 192 million monetizable daily active users worldwide. (Statista, 2022) However, even though Twitter is seen as one of the leading social media for usage during events and live tweeting, it has been losing market share to its competitor Instagram. The growth in the use of social media “has increased the pressure on businesses to deliver advertising messages to their target audience as fast as possible” (Mitreva, Arsova, Jovanov-Aspasieva and Fotova-Čiković, 2022). Businesses have incorporated new (online) ways and channels focusing dominantly on advertising on social media (Dar, Ahmed, Muzaffar, Nawaz and Zahid, 2014).

The use and increased presence on these platforms from both sides of the market - demand and supply, have been observed in the last two years with the outbreak of the pandemic caused by Covid-19. The Covid-19 pandemic and its aftermath make social media one of the most important media for communicating with the brands they prefer.

In addition to changes in preferred media for communication, changes have been observed in the behaviour as well. All the uncertainties that came with the pandemic have changed the way consumers behave and these new consumer behaviours cover all areas of life—the way people work, learn, communicate, travel, shop and consume, live at home, entertain themselves, and/or deal with health and wellbeing (Kohli, Timelin, Fabius, Moulvad-Veranen, 2020). In terms of consumer buying behaviour, Covid-19 has seriously changed it, consumers are buying more essentials and taking advantage of shopping online (Warner-Søderholm, Bertsch, Sawe, Lee, Wolfe, Meyer, Engel and Fatilua, 2018).

Pandemic communication is known as the form of marketing communication between brands and their customers in a period of uncertainty, present not only in the whole country but the whole world, which is distinct and more significant due to the great deviations from the status quo influenced by the changes in customers’ preferences, their propensity to consume and save, purchase habits and behaviour (Koksal and Ozgul, 2007). During a crisis, the consumers search more for essential product information, thus resulting in an increased focus on advertisements for essentials, health and hygiene products across different media (Accenture, 2020). On the other side, for non-essential product categories, advertising exposure has mainly been restricted to digital platforms (Bajaj, 2020). Moreover, social media are long considered one of the most important platforms for reaching customers as well as other stakeholders (Schivinski and Dabrowski, 2014).

Since communication is a core business activity (Jovanov, 2018; Jovanov, Sofijanov, Davcev, Temjanovski and Mitev, 2019), companies must pay attention to and plan their communication with consumers, accordingly, recognizing the importance and the need for the inclusion of

social media as a channel for communication and distribution in a professional manner. Social media should be a part of their marketing strategies if the brand is to remain successful or become successful in the future.

Information about the preferences and behaviour of emerging adults as the next generation of the working force and financially independent consumers, can help businesses craft better strategies and improve their market competitiveness, thus enabling them to earn greater profit and create employment as a result.

This study aims to help companies regarding their communication and advertising decisions depending on the media usage by consumers in a time of crisis. Primary market research data provides an insight into the habits and behaviour of their consumers, consequently aiding them in the process of funds and resource allocation to relevant media, which are proactively used by the consumers. As a result, this can create savings, and at the same time, improve the visibility of their messages and increase the chances to attract new consumers, retaining the existing ones and generating profit. The old habits of advertising and focusing mainly on traditional methods, cannot create good results for every type of product or service, especially in times when consumer habits are continuously and radically changing. The companies are well-advised to follow market trends and information concerning the consumers' preferences and their habits and behaviours.

Additionally, this paper is of significance because it fills the gap in the research on consumers' behaviour regarding media usage during times of crisis which is scarce, and especially in terms of focusing and incorporating different social media in one study, as shown in the literature review.

2. Literature review

In the past two decades, consumers have increasingly turned to use of social media sites „to search for information and turning away from traditional media, such as television, radio, and magazines” and the social media have gradually become “new channels of brand communication” (Schivinski and Dabrowski, 2014). Moreover, social media has certainly altered how societies communicate and have transformed perceptions and attitudes (Duffett, 2015). The emergence of social networking technologies altogether has provided brands with “an opportunity to lure new customers and retain the existing ones” (Adhikari and Panda, 2017).

The unprecedented crisis caused by the coronavirus pandemic also referred to as “the major global health event of 2020” (Marzouki, Aldossari and Veltri, 2021), has impacted every aspect of people's lives including the communication channels, preferences, online shopping behaviours and social media communication habits with brands (Ali Taha, Pencarelli, Škerhánková, Fedorko, and Košíková, 2021). Namely, during the pandemic, young adults prefer to use social media for meeting their needs in „getting information, communicating, socializing, leisure activities and shopping” (Onat-Kocabiyik, 2021). The pandemic and the social distancing protocols have influenced the increase of messaging on Facebook, Messenger, WhatsApp and Instagram by 70%, whereas the use of Twitter hit new records. A 61% increase in the use of social media platforms has been assessed as a result of users needing to stay in touch with families, friends and colleagues (Holmes, 2020; Onat-Kocabiyik, 2021). This has caused substantial growth in e-commerce, considering that many consumers transferred to online shopping (Dubbelink, Herrando and Constantinides, 2021). After the COVID-19 outbreak, lockdown measures have been deployed globally (Marzouki, Aldossari and Veltri, 2021) and the spread of the virus around the world affected the inception of our so-called “new

normal”, i.e. social distancing, alteration of our habits and preferences, and the alteration of our social media habits.

Smith, Fischer and Yongjian (2012) claim that social media offers more opportunities for marketers and brand managers “to cooperate with consumers to increase the visibility of brands”. In their study, they have focused on investigating differences in brand-related user-generated content (UGC) between Twitter (a microblogging site), Facebook (a social network) and YouTube (a content community). They have conducted a content analysis of 600 UGC for two retail brands. Their findings indicate that YouTube has a culture of consumers’ self-promotion, Twitter is least likely to feature consumer self-promotion, whereas Facebook is placed somewhere in between these two.

Duffett (2015) has explored the impact of Facebook advertising on cognitive attitudes amid Generation Y in the emerging country of South Africa. In this study, the main question is whether the largest social medium’s marketing communications “effectively reach” young adults in South Africa and the findings indicate that “Facebook advertising has a favourable effect on the awareness and knowledge hierarchy-of-effects model levels” among young adults in South Africa.

Duffett (2017) has investigated the influence of social media marketing communications on young consumers’ attitudes, i.e. on Generation Z at colleges and high schools in South Africa. Moreover, the study explores the impact of several additional factors such as usage (access, length of usage, log-on frequency, log-on duration and profile update incidence) and demographic (gender, age and population group) variables on young consumers’ attitudes towards social media marketing communications and found that “social media marketing communications had a positive on each attitude component among adolescents, but on a declining scale”.

Hidalgo and Sánchez Briones (2021) have analysed Facebook as the „social network with the greatest interaction for the promotion and commercialization of goods and services“and its use as a social media marketing tool during the COVID-19 pandemic in Manabi, Ecuador. Their findings show that the COVID-19 pandemic has affected social media, i.e. the social media sites have strengthened their position “as a result of the declared social confinement in the world”. Moreover, they found that Facebook “impacts the purchase decision, while allowing promotion strategies as an interactive link between companies and consumers”.

Mason, Narcum and Mason (2021) have conducted exploratory research on a sample of 327 consumers to examine the impact of the COVID-19 pandemic on consumers’ social media marketing behaviours in the United States. Their findings suggest an increase in the use of social media „as a tool for identifying products, collecting information on products, evaluating products, and making product purchases “, thus highlighting the „growing importance of social media marketing” since the beginning of the COVID-19 pandemic.

Ali Taha, Pencarelli, Škerháková, Fedorko and Košíková (2021) have explored the use of social media and its impact on the shopping behaviour of Slovak and Italian consumers (on a sample of 937 respondents) during the COVID-19 pandemic. Interestingly, their results revealed “statistically significant differences in the use of social media during the first wave of the COVID-19 pandemic in terms of various demographic factors as well as a relatively weak relationship between the social media used and the purchase in the e-shop promoted on the social media”. Namely, they found that WhatsApp, Instagram, YouTube, Facebook, and Skype were the most used media in Italy, whereas Messenger, YouTube, Facebook, Instagram, and MS Teams in Slovakia. Moreover, they found YouTube to be the most used social media

(regardless of respondents' gender, education, age, and country of origin), followed by WhatsApp, Instagram, Facebook, and Messenger.

Dubbelink, Herrando & Constantinides (2021) have proposed a framework in order to answer the question of how can businesses and brands, amidst and after the COVID-19 pandemic, adapt their social media marketing strategy to create positive brand equity. Their findings provide the first insights into COVID-19's impact on consumer behaviour and they indicate that user-generated content brings many benefits to both businesses and consumers. Moreover, they claim that the trend of interactive and influential consumers in the decision-making process has sustained and increased during the COVID-19 pandemic.

Nagpal and Gupta (2022) have assessed the impact of the pandemic communication efforts on brand-specific outcomes while testing the roles of brand attitude and product category. The obtained results reveal "a positive and significant impact of communication during pandemic on all three brand outcomes under investigation".

Even though the literature regarding the impact of social media sites such as Facebook, Instagram, Twitter, YouTube etc. on consumers' behaviours is vast and ever-growing, research and evidence on the habits and usage of social media as a tool for communication during the COVID-19 pandemic are quite modest and recent research have shown the need for additional work in this area (Brennen Simon, Howard and Nielsen (2020); Pérez-Escoda, Jiménez-Narros, Perlado-Lamo-de-Espinosa and Pedrero-Esteban, 2020).

Furthermore, the authors could not find any studies about communication media habits of emerging adults with brands incorporating Facebook, Instagram and Twitter in any of the globally relevant scientific databases. This paper is an attempt to bridge this gap.

3. Methodology

The COVID-19 pandemic has undoubtedly affected people's daily lives and it has visibly impacted media consumption as well. Considering the change in everyday activities, the transformation in the organization of work and education activities, and the increased time spent at home, without any social contacts, it created a need for analysis of how and where (on which media) have people in the role of consumers spent most of their time.

In this study, the media of interest are social media (three different media such as Facebook, Instagram and Twitter), which are integrated into one study in order to obtain a broader picture of the habits of the chosen sample. The decision on researching and investigating the social media communication and habits of emerging adults is due to the existing gap in the literature regarding such studies on one side, and the need of the companies for updated data on communication trends, on the other.

The sample analysed in this paper consists of 284 emerging adults, aged 18 – 29 years. The size of the sample for the chosen generation (age group) is above the national standard for representative samples of 0.5%, since the total population between 15-29 years of age is 480828 (State Statistical Office, 2022), and the size of the sample according to the State Statistical Office standard for representative samples would be 240.

Based on the research from Arnett (2000), the category (i.e. generation) of emerging adults includes youth between 18 and 29 years old, which are in the phase of the end of adolescence going towards young-adult responsibilities of a stable job, marriage and parenthood. Emerging adults are the generation of consumers that has experienced the biggest changes and advancements related to social media, the internet, smartphones and other technological advancements, which became their identity (Singh and Dangmei, 2016). They are characterized

by a high degree of adaptability, flexibility and openness to change. According to Arnett (2014), emerging adults are in the age of self-focus, which comprises of making choices about what to study/do, where to go, and who to be. Their behaviour is expected to continue changing in near future, including a greater degree of technical-technological discoveries as well as inclusion and usage of new social media that will be available to them.

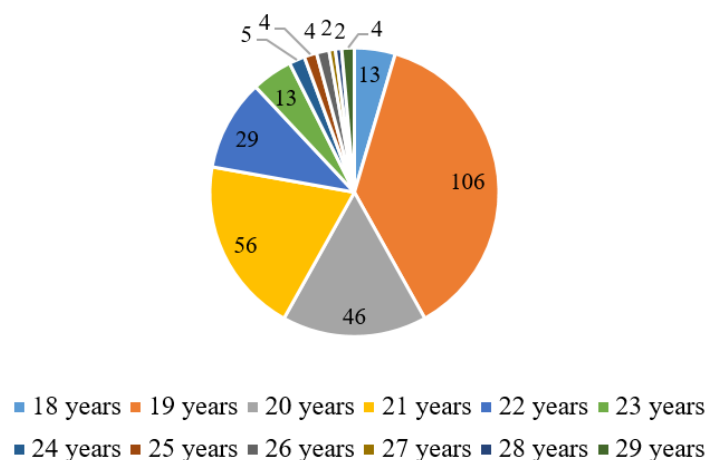
The study is conducted through primary and secondary data collection. A questionnaire was developed, which included a variety of questions with nominal, ordinal and interval (Likert) scales. The survey was conducted with the usage of the Google Forms platform. The questionnaire was distributed through Microsoft Teams to emerging adults which are students at the Faculty of Economics at the state university Goce Delcev – Shtip, Macedonia, who were present in online classes at the time of distribution.

Participants were asked to answer questions divided into subgroups: 1. Provide demographic information, such as age, year of study, available monthly income and work status; 2. Information about their previous experience with brand communication on social media; 3. Information about the frequency of usage of different social media; 4. Perception of the significance of social media for communication with brands; 5. Perception of the quality of social media as a source for product or service information; 6. Perception of the influence of social media brand communication on their purchase decision; 7. Engagement with the communication messages on social media.

The collected data are analyzed on the base of descriptive statistics in combination with relevant information from the existing academic literature. The aim of this study is to provide more in-depth insight into the current trends in social media habits and communication with brands under the influence of the COVID-19 pandemic, through a combination of primary and secondary research.

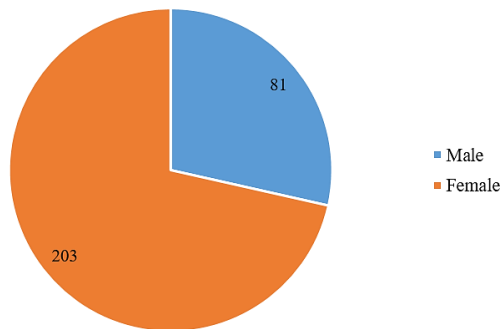
The sample includes 284 respondents from the generation of emerging adults. The analysis of the demographic data shows that most of them are 19 years of age, followed by respondents aged 21, 20 and 24 (Figure 1). Regarding gender, 203 (71.5%) are male, while 81 (28.5%) are females (Figure 2). Most of the respondents, 144 (50.7%) are in their first year of studies, followed by fourth-year 58 (20.4%), third-year 46 (16.2%) and second-year 33 (11.6%) (Figure 3).

Figure 1: Age



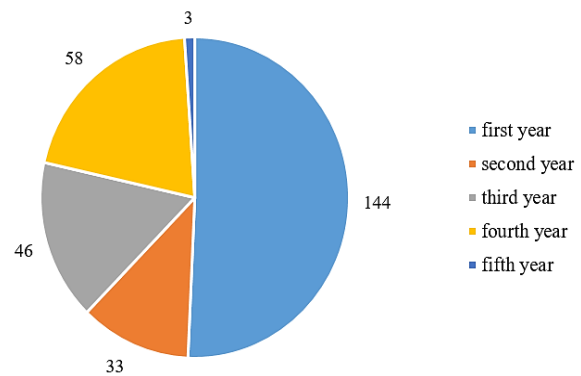
Source: Authors' research

Figure 2: Gender of respondents



Source: Authors' own research

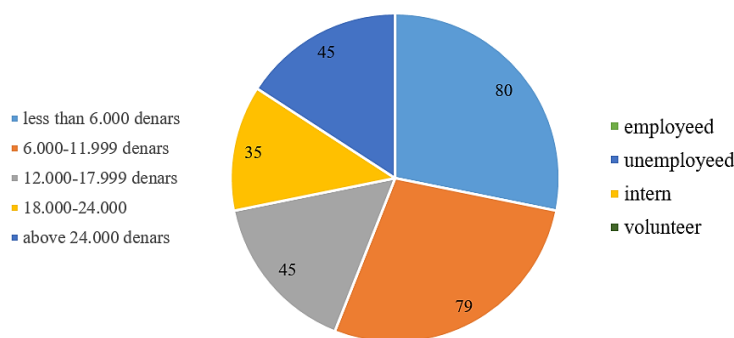
Figure 3: Year of studies



Source: Authors' own research

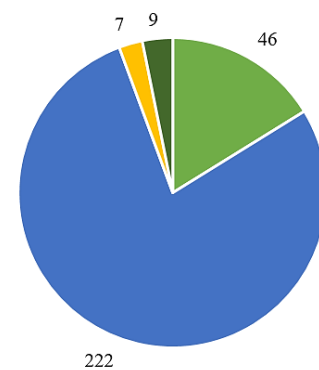
Additionally, regarding the available monthly income of the respondents, most of them (28%) have a low available monthly income (less than 6000 denars i.e. less than 100 euros), followed by the one's with income between 6000 and 11.999 denars i.e. between 100 and 200 euro (27.8%) (Figure 4). From the work status of the respondents, the majority are unemployed 222 (78.2%), followed by the number of employed 46 (16.2%), and the remaining 5.6% are the ones who were interns or volunteers (Figure 5).

Figure 4: Available monthly income



Source: Authors' own research

Figure 5: Work status



Source: Authors' own research

4. Results and discussion

The development of the living standard and the strength of the economy, in general, relies on the ability of the (business) sector to be resilient and adaptive in ways that can ensure the creation of profit in order for them to be sustainable and long-lasting creators of jobs. One of the crucial business activities in this process is efficient and effective communication with the existing and potential consumers. Strong brands are developed through carefully monitored media consumption patterns of the consumers and their implementation in the strategy and communication plans of the companies (Mitreva, Arsova, Jovanov-Aspasieva and Fotova-Cikovic, 2022).

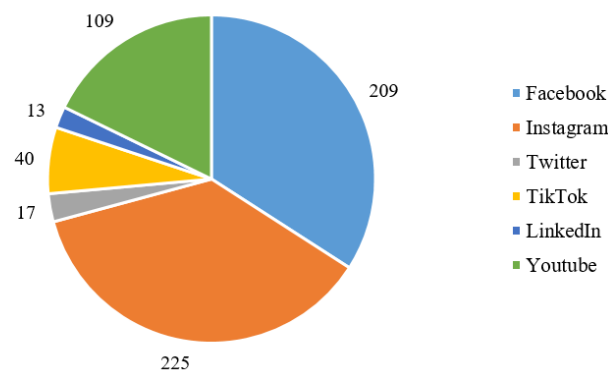
Thus, understanding the behaviour of the new generations, such as the emerging adults' generation, is an important part of increasing the possibilities for the development of improved communication strategies and tactics and the choice of the optimal media investment, when it

comes to brand development and, promotion of the products and the business itself. The first step in this process is the understanding of the current trends and the patterns of behaviour of the consumers, i.e. the way these emerging adults think and behave concerning the usage of social media. This is important since emerging adults are the generation that uses various types of media, with the main disadvantage of having a limited budget and is often unemployed, especially since the occurrence of Covid-19 (BLS, 2021).

As the analysis of the demographic data shows, most of the respondents are unemployed and have a limited (low) available monthly income. This implies that these consumers might not be able to immediately or promptly purchase a product or brand that they see and like on a certain medium, and companies could need additional communicational tactics in order to support the initial communication message.

Regarding the respondents' previous experience (in the past six months) in communication with companies on social media, as we can be seen in Figure 6, they mostly communicate with brands on Instagram (225 or 79.2%), followed by Facebook (209 or 73.6%), then YouTube (109 or 38.4%) and Tik Tok (40 or 14%). Twitter and LinkedIn are used rarely to communicate with brands. This is in line with previous research, that puts Facebook and Instagram at the top of the most used social media for communication with brands, alongside YouTube (Ali Taha, Pencarelli, Škerháková, Fedorko and Košíková, 2021).

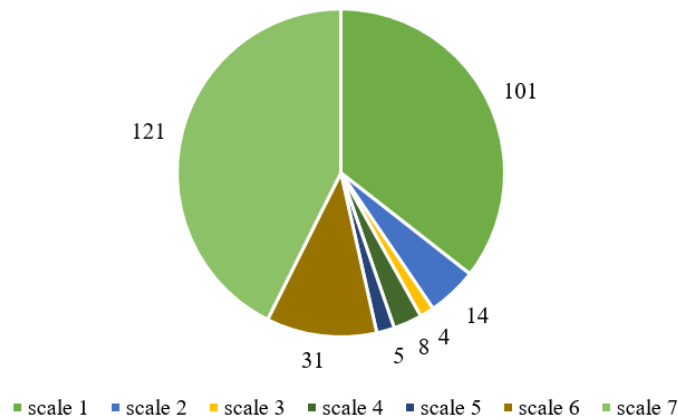
Figure 6: Prior experience with communication with brands on social media



Source: Authors' research

The participants' perception of the importance of social media as a channel for communication with brands was ranked on a scale from 1 to 7, where 1 represents the most important medium and 7 is the least important medium. The results, presented in Figure 7, show that cumulatively (scale values 1, 2 and 3) around 42% (119) perceive social media to be an important medium for communicating with brands. On the other side, cumulatively (scale values 6 and 7) 152 (53.5%) respondents don't think of social media as an important medium for communicating with brands. This is a somewhat unexpected result since the previous experience shows that most of these emerging adults use social media for communication with brands. This finding might be a result of a negative communication experience or a possible overload of information through social media, which in turn creates a negative perception of the importance of the medium for communication with brands. This calls for further examination of the reasons behind this perception of social media as not a very important medium for brand communication.

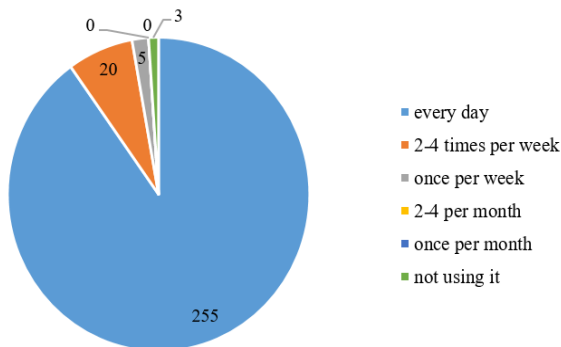
Figure 7: The relative value of social media as a medium for communication with brands



Source: Authors' research

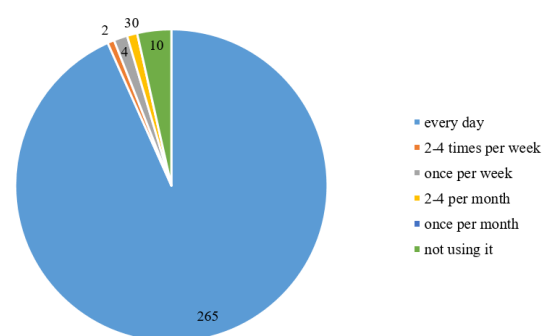
The study also examined the frequency of usage (“from every day” to “not using it at all”) of social media from the respondents. In Figure 8, the frequency of usage of Facebook shows that most of the emerging adults 255 (90%) use this medium every day, followed by 20 (7%) that use it as a medium for communication 2-4 times per week. This means that brands can easily access most of the emerging adults if they include Facebook as a channel for communication. The results are similar for the social network Instagram. Namely, as shown in Figure 9, even more respondents 265 (93.3%) use Instagram every day as a medium for communication. This result suggests that brands can easily access emerging adults on Instagram, as well.

Figure 8: Usage of Facebook



Source: Authors' research

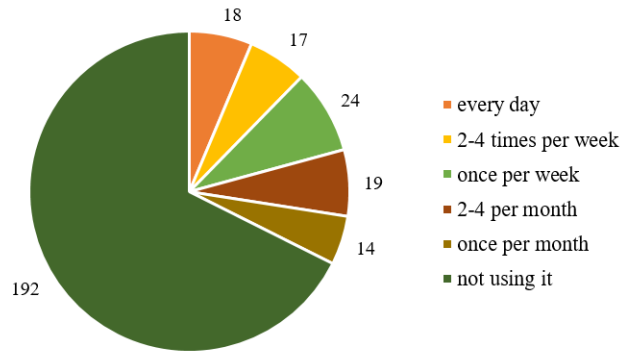
Figure 9: Usage of Instagram



Source: Authors' research

On the other side, the results show a different situation for Twitter. Figure 10 shows that most of the emerging adults 192 (67.6%) do not use Twitter as a medium for communication. Only 18 (6%) use it every day, followed by 17 (5.9%) that use it 2-4 times per week. The result is also in line with the previous experience of the respondents (Figure 6), which shows Twitter as a rarely used medium for communication in the past six months. This result presents Twitter as a less attractive medium for brands to include in their communication with emerging adults since it is not used very often and can make communicating with them less efficient.

Figure 10: Usage of Twitter



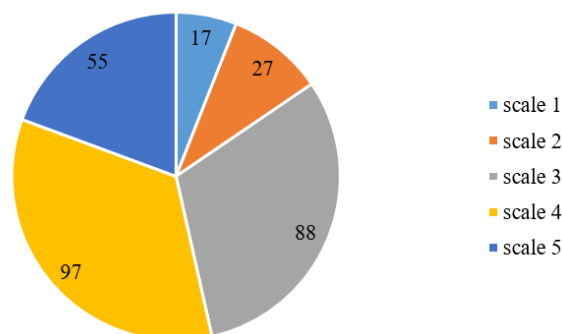
Source: Authors' research

Furthermore, in connection to the presented habits of the respondents towards more frequent use and preference of certain social media (Facebook and Instagram) for brand communication, we provide a more in-depth insight into their perception and behaviour regarding these media.

Based on their perception, the respondents have rated (on a scale of 1 – totally disagree to 5 – totally agree) the eligibility of Facebook and Instagram as a source of information regarding product or service information and their purchase intention i.e. the willingness to buy products or services based on the brand communication on these media.

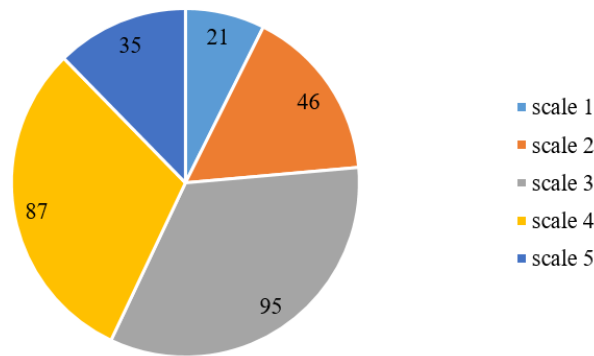
As presented in Figure 11, cumulatively (scale values 4 and 5), more than half of the emerging adults 152 (53.5%) in the sample agree that Facebook is a good source of product or service information, while only 44 (15.5%) disagree. Additionally (Figure 12), concerning their purchase intention, cumulatively (scale values 4 and 5) 122 (43%) agree that brand communication on Facebook has a positive influence on their purchase decisions which is in line with previous research (Hidalgo & Sánchez Briones, 2021), while only 67 (23.6%) disagree with this statement. From the results, we can see that emerging adults mainly show a positive attitude towards Facebook as a medium for communication with brands.

Figure 11: Facebook is a good source of product or service information



Source: Authors' research

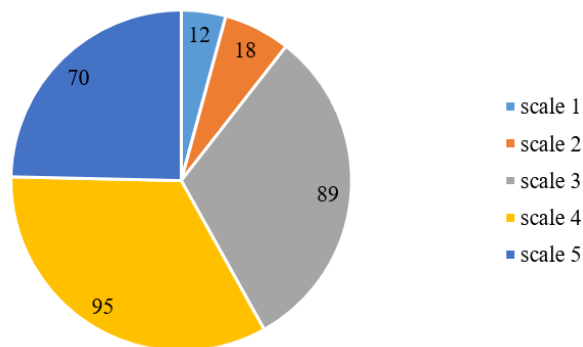
Figure 12: Brand communication on Facebook has a positive influence on my purchase decisions



Source: Authors' research

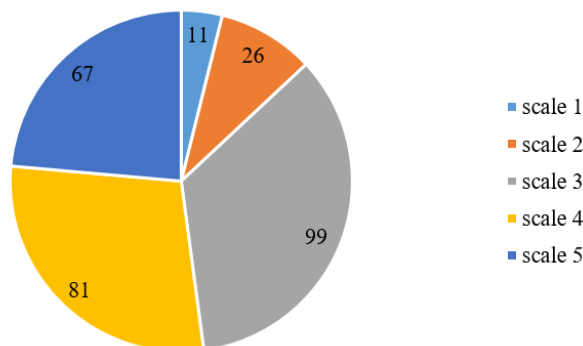
The results for Instagram as a medium for communication are similar to the results for Facebook. Namely, Figure 13 shows that cumulatively (scale values 4 and 5) most of the respondents 165 (58%) agree that Instagram is a good source for product or service information, and only 30 (10.6%) disagree. Accordingly, Figure 14 presents that cumulatively 148 (52%) also agree that brand communication on Instagram has a positive influence on their purchase decisions, while only 37 (13%) disagree. The results show that emerging adults have a mostly positive attitude towards Instagram as a medium for communication with brands.

Figure 13: Instagram is a good source of product or service information



Source: Authors' research

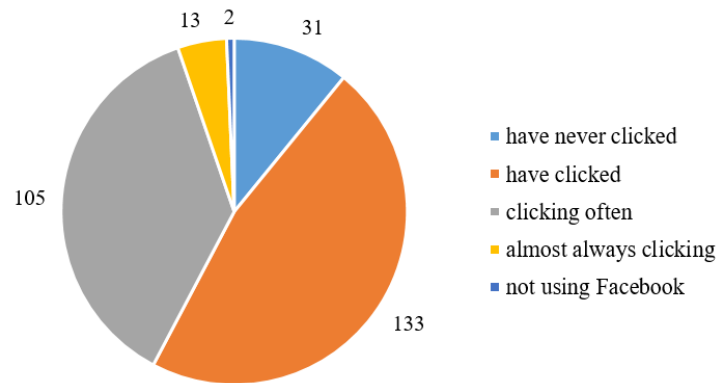
Figure 14: Brand communication on Instagram has a positive influence on my purchase decisions



Source: Authors' research

Moreover, the behaviour of emerging adults in communication with brands on the preferred social media Facebook and Instagram was analysed through their interaction with the brands' messages i.e. clicking on the content. The results (Figure 15) show that emerging adults mainly interact with brands based on their communication messages on Facebook, with 133 (46.8%) of them that have clicked on communication messages from brands, and 105 (37%) clicking i.e. interacting often. Only 31 respondents or 10.9% stated to never have clicked on communication messages from brands on Facebook. Emerging adults show generally reactive and responsive behaviour in the interaction with brand communication messages on Facebook.

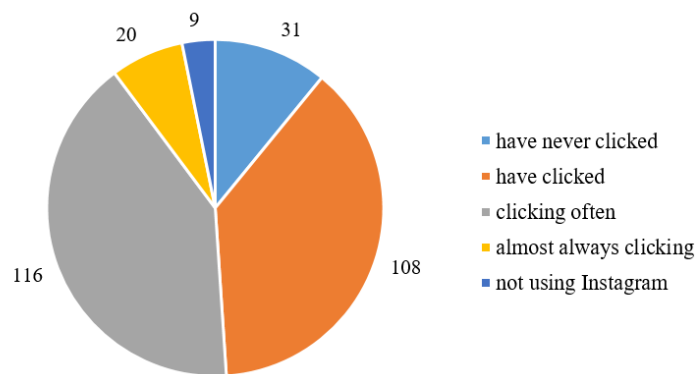
Figure 15: Clicking on the brands' communication messages on social media Facebook



Source: Authors' research

The behavior is similar to Instagram. From Figure 16 can be seen that 108 (38%) have clicked on communication messages from brands on Instagram, and 116 (41%) have been interacting often with the brands. Only 31 (10.9%) have never clicked on communication messages from brands on Instagram. Emerging adults show generally reactive and responsive behaviour in the interaction with brand communication messages on Instagram.

Figure 16: Clicking on brands' communication messages on social media Instagram



Source: Authors' research

5. Conclusion

The pandemic has been and continues to be a significant challenge for the people, the businesses and the world in general. Consumer behaviour and the way of doing business have largely changed and adapted to the measures imposed by governments. For a period of almost three years, consumers have largely spent time at home and in front of their screens, while businesses had to reorganize their operations, increase their digitalization and change their

communication strategies and channels. As we head towards the middle of 2022, the pandemic is likely to stay for the long run and is expected to be a challenge for the future, thus continuously affecting and shaping behaviour and business strategies.

This paper analyses the social media communication habits of emerging adults with brands during the covid-19 pandemic, with the aim to fill the existing gap in the literature, and also provide information that can be useful for companies and their media choice for communicating with consumers.

The study shows that some previously started trends, such as digitalization of business operations, increased use of social media, increased investments from companies in social media channels etc. have been largely accelerated during the pandemic.

Based on the results of this study, we can conclude that most emerging adults as the next generation of financially independent consumers use social media for communication with brands, among other uses. The most preferred social media for communication with brands are Instagram and Facebook. These are also the most frequently used media from the emerging results, with everyday usage frequency. Twitter is the social media that is least preferred by emerging adults.

Research has shown that emerging adults perceive Facebook and Instagram as good sources of information about products or services, and state that brand communication on these media has a positive influence on their purchase intentions. The emerging adult's communication with brands is not only one-way communication but rather an interactive process in which they react to the communication messages of brands with engagement i.e. clicking on the content that is distributed through Facebook and Instagram.

Bearing in mind that brands should follow the habits and behaviour of the customers prior to creating their communications strategy, they are advised to focus on the media that are more frequently used by consumers. In the case of emerging adults' communication habits with brands on social media, the preferred and thus, proposed media for inclusion in the business communication activities of the companies are Facebook and Instagram. These media will enable them to reach the consumers with less effort and finance, compared to the effort to communicate on media that are less frequently used like Twitter, or not used at all.

The study states that understanding consumer communication behaviour and habits on different media platforms is crucial for the development of effective communication strategies that can result in attracting and retaining customers for the business. The findings from this study create a base for additional research on the topic, which can further contribute to generating a broader perspective of media usage and habits of consumers. This can provide businesses with the needed information to plan and implement communication strategies that best suit the needs of their target group during the ongoing crisis, as well as for the upcoming period following the pandemic.

Some limitations of the study are the sampling technique which relies on voluntary partaking which increases the selection bias, and the focus on one generation of consumers – emerging adults, which limits the possibility for generalization of the results on the population. However, we expect the results to be generalizable for the emerging adults nationwide since the size of the sample for the chosen generation is above the national standard of 0.5%. An additional limitation is the absence of a follow-up period for the respondents.

Future research should examine the reasons behind the perception of social media as less important media for communication with brands, as one part of the respondents have created such an indication. Also, additional social media can be included in the research in order to

paint a clearer picture of the usage of the many different social media available. Future research can also examine a larger sample that will include other generations of consumers, so we can understand the communication behaviour on social media of the population in general. Moreover, a comparison between the communication habits of people with brands on different media and not only social media should be made. This could help us better understand which media are best for brand communication with their current and potential consumers, not only in time of crisis but after the crisis as well.

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The Impact of Market Research on Lateral Marketing in Financial Institutions

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Abstract

Financial services marketing is unique and highly specialized type of marketing. Financial institutions depend, more than most other industries, on data collection, processing and analysis to satisfy consumer needs. Knowing what consumer considers the main advantage is an important guideline for further product development, to show in which direction the product should be developed and what the user considers as disadvantage when using newer banking services, it is important to know how to eliminate them in further product development. New financial products are often modifications of existing products, so lateral marketing is very important in the financial sector. The paper presents an empirical research of consumer preferences which lead to modification of existing bank product into new product.

Keywords: lateral marketing, market research, financial services marketing

JEL classification: G2 Financial Institutions and Services, G20 General

Utjecaj istraživanja tržišta na lateralni marketing u financijskim institucijama

Sažetak

Marketing financijskih usluga je jedinstvena i visoko specijalizirana vrsta marketinga. Financijske institucije se više nego u većini drugih industrija oslanjaju na prikupljanje, obradu i analizu podataka kako bi se zadovoljile potrebe klijenata. Znati što korisnik smatra glavnim prednostima važna je smjernica za daljnji razvoj proizvoda, odnosno pokazati u kojem smjeru proizvod treba razvijati i što korisnik smatra nedostatkom prilikom korištenja novijih bankarskih usluga, važno je znati kako biste ih uklonili u daljnjem razvoju proizvoda i stekli povjerenje korisnika. Često su novi financijski proizvodi modifikacija postojećih proizvoda financijske institucije, stoga je lateralni marketing vrlo važan u financijskom sektoru. U radu je prikazano istraživanje potrošača banke u cilju razvoja novog proizvoda banke kroz modifikaciju proizvoda.

Ključne riječi: lateralni marketing, istraživanje tržišta, marketing financijskih usluga

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Uvod

Marketing financijskih usluga može se smatrati jedinstvenim iz razloga što je samo financijsko tržište i njegovo okruženje veoma konkurentno i izuzetno kompleksno. Praksa oglašavanja, promocije i prodaje financijskih proizvoda i usluga je mnogo kompleksnija od prodaje i usluga drugih sektora. Banke bi trebale stalno raditi na poboljšanju uslugama i zadovoljstvom svojih kupaca, jer zadovoljstvo postojećih kupaca ne samo da vodi lojalnosti, već je i dobra promocija tih usluga. Osiguravanje visokog stupnja zadovoljstva klijenata i ostvarivanje dugoročnog odnosa predstavlja ključ uspjeha u suvremenom bankarskom poslovanju. Banke bi trebale poboljšati kvalitetu svojih usluga i više pažnje posvetiti zadovoljstvu svojih potrošača. Ovaj model može biti nova i uvjerljiva strategija privlačenja i zadržavanja klijenata samim time i privlačenje novih. Informacijska tehnologija pomogla je bankama da se nose s izazovima koje je postavilo novo doba. Tehnologija pruža bankama nova sredstva, ali i nove izazove s kojima se moraju nositi. S obzirom na važnost informacija u bankarstvu, nije iznenađujuće da su banke među prvim kupcima tehnologije automatizirane obrade podataka. Banke su željne rasta, a jedan od glavnih odgovora za postizanje ovog cilja je privlačenje novih klijenata, jačanje odnosa s klijentima i fokusiranje na specifične potrebe klijenata. Dakle, povećanje usluge kupcima je prioritet za banke u cijelom svijetu. S obzirom na to da je banka tu zbog svojih klijenata, zadovoljstvo klijenata je jedan od ključnih ciljeva svake banke i temelj za daljnji rast i razvoj. Važno je znati koliko je zadovoljstvo kupaca povezana s novim bankarskim uslugama, kako bi banke imale smjernice za daljnji razvoj usluga, kako bi vidjeli što je korisniku važno, što kupac vidi kao najveću korist tih usluga i koji su nedostaci.

Marketing financijskih usluga

Financijske institucije često su velike organizacije s velikim brojem poslovnica i zaposlenika. Kako bi se ostavio dojam profesionalnosti i povjerenja, vrlo je važno posebnu pažnju posvetiti procesima u pružanju usluga. Zato svaka financijska institucija propisuje svoj poseban popis pravila kojih se moraju pridržavati svi zaposlenici, ali često i korisnici usluga. Praćenje i upravljanje poslovnim procesima unutar same financijske institucije ima za cilj postići visok stupanj standardizacije, ali istovremeno i personalizirani pristup svakom korisniku. Ova dva cilja često su međusobno kontradiktorna, pa je od iznimne važnosti uloga informacijskih sustava koji pomažu zaposlenicima personalizirati komunikaciju uz zadržavanje standardne kvalitete pružanja usluge. Ukoliko korisnik aktivno sudjeluje u procesu pružanja usluge, utječe na kvalitetu samog procesa ali i na rezultat. Korisnici koji imaju aktivnu ulogu u procesu pružanja usluga tako postaju dio samog procesa. Iz toga proizlazi potreba da se i oni uzmu u obzir kao značajan element u upravljanju procesima. Uključivanje korisnika u proces pružanja usluge dovodi do neizvjesnosti u planiranju procesa. Korisnici imaju direktan utjecaj na dužinu procesa. Načinom dizajna prostora, vizualnim i funkcionalnim elementima fizičkog okruženja poslovnica financijskih institucija, pokušava se pomoći korisnicima da što jednostavnije i kvalitetnije budu usluženi.

Financijske institucije ulažu znatna sredstva u fizičke, opipljive elemente kako bi nadoknadile jedno od specifičnih obilježja usluge - neopipljivost. Budući da uslužne ponude nemaju opipljive karakteristike koje korisnici mogu provjeriti prije kupnje, neizvjesnost je povećana. Da bi smanjili neizvjesnost, korisnici traže vidljive fizičke dokaze o kvaliteti usluge. Oni donose zaključke o kvaliteti na osnovi lokacije, zaposlenika, opreme i informacijskog materijala koji mogu vidjeti. Stoga pružatelji usluga imaju zadatak upravljati fizičkim okruženjem - oni pokušavaju učiniti uslugu opipljivom, ili ponuditi konkretne dokaze o ponuđenim koristima. Financijske institucije moraju odisati sigurnošću, a to se postiže pomno

odabranim vizualnim identitetom i fizičkim elementima. Dakle, fizičko okruženje kod financijskih institucija pojačava korporativni imidž kojem je najčešće za cilj dobiti povjerenje korisnika u sigurnu financijsku instituciju.

Promocija financijskih usluga predstavlja marketinšku komunikaciju financijske institucije sa svojim postojećim i potencijalnim korisnicima. Ta komunikacija često je otežana već samom prirodom usluga, što je dodatno naglašeno prirodom financijskih usluga. Iskustva pokazuju kako efektivan marketing zahtijeva strategijsko razmišljanje više nego veliki budžet (Nagdeman, 2009.). Tako se u komunikaciji financijskih usluga javljaju problemi u percepciji odnosa cijene i kvalitete proizvoda te poteškoće u kreiranju željenih emocija. Također, vrlo je teško komunicirati detalje o financijskom proizvodu obzirom da se uglavnom radi o kompliciranijim matematičkim izračunima koje prosječan korisnik financijskih usluga ne može dovoljno dobro razumjeti. Zato financijske institucije često ne komuniciraju detalje o svojim proizvodima, već korisnicima prezentiraju što mogu učiniti s njihovim proizvodom kao npr. kupnja stana stambenim kreditom banke. Uspješna marketinška komunikacija podrazumijeva stvaranje veze između marke i korisnika. Može se reći da je ustvari stvaranje veza ključno za moderni marketing, a da je integrirana marketinška komunikacija ključna za stvaranje veza (Shimp, 2000.). Na ovaj način se stvara lojalnost korisnika. Financijske institucije shvatile su da je puno isplativije imati lojalne korisnike nego konstantno tražiti i pridobivati nove. Marketinška komunikacija predstavlja jednu od ključnih sastavnica uspješne marketinške strategije. Ipak, u marketingu financijskih institucija promocija ima vrlo bitnu ulogu, prvenstveno zbog izrazitog intenziteta neopipljivosti financijskih usluga. Korisnici financijskih usluga često se moraju osloniti na imidž financijske institucije kako bi donijeli odluku o kvaliteti promatrane usluge. Promocija financijskim institucijama olakšava diferencijaciju od konkurencije i komunikaciju ključnih vrijednosti koje organizacija želi isporučiti. Također, promocija na najatraktivnijim lokacijama i u najatraktivnijim terminima komunicira snagu financijske institucije, što je od iznimne važnosti uslijed velikog nepovjerenja korisnika u financijski sustav. U financijskim institucijama oglašavanje se često koristi za informiranje javnosti o novim financijskim proizvodima (poticanje interesa, naglašavanje vrijednosti i koristi proizvoda) i za komunikaciju osjećaja kojima se želi dodati vrijednost proizvodu (kreiranje pozitivne vrijednosti i asocijacije i diferencijacija od konkurencije). Kod financijskih institucija, odnosi s javnošću imaju bitnu ulogu u izgradnji pozitivne slike u javnosti. Svrha odnosa s javnošću je stvoriti i održati pozitivan imidž financijske institucije u svim segmentima javnosti. Odnosi s javnošću funkcija su upravljanja koja uspostavlja i održava uzajamno korisne odnose između organizacije i različitih javnosti o kojima ovisi njezin uspjeh ili neuspjeh (Cutlip, Center i Bloom, 2000.). Financijske institucije, prije svega, moraju biti sigurne. Posebice je sigurnost na prvom mjestu osobama koje se odlučuju primjerice štediti u banci. Često su ugled i sigurnost banke bitniji od visine kamatne stope. Obzirom da su banke često eksponirane u medijima, odnosi s javnošću imaju vrlo važnu funkciju u marketinškom miksu banaka. Stoga se banke najčešće prezentiraju kao društveno odgovorne organizacije, koje svojim poslovanjem rade na dobrobiti i unapređenju društva kao cjeline.

Uprave banaka odavno su svjesne značaja prodajnog osoblja i razvijanja prodajnih vještina kod svojih zaposlenika koji su u kontaktu s korisnicima. Stoga je i interni marketing vrlo razvijena vrsta marketinga u financijskim institucijama. Svi zaposlenici izravno su ili neizravno uključeni u kreiranje odnosno stvaranje usluge. Doprinos svakog od njih značajan je za ukupnu vrijednost financijskog proizvoda. Zaposlenici su zapravo ti koji prezentiraju odnosno predstavljaju financijsku instituciju njezinim korisnicima. Stoga oni imaju značajnu ulogu u marketingu financijskih institucija. Brojne financijske institucije zato ulažu napore u što bolju edukaciju svojih zaposlenika kako bi se uložilo u cjelokupni dojam kojega oni ostavljaju, uključujući i fizičke i psihičke elemente. Pomno odabrani i educirani zaposlenici su temelj za

dugoročni rast i razvoj financijske institucije. Upravo je uloga internog marketinga osigurati da svaki zaposlenik organizacije prihvati i primjeni marketinški način razmišljanja. Jedna od ključnih uloga internog marketinga je privući i zadržati najbolje zaposlenike. Često se navodi kako samo zadovoljni zaposlenici svojim radom mogu zadovoljiti potrebe korisnika. Stoga je zadatak internog marketinga što bolje zadovoljiti potrebe zaposlenika, koje se u literaturi često naziva unutarnjim korisnicima. Njihovo zadovoljstvo i lojalnost poduzeću su preduvjet kreiranja lojalnosti korisnika, koje konačno dovodi do ostvarivanja profitnih financijskih ciljeva. U internom marketingu fokus je na dobrim internim odnosima među zaposlenicima. Primjena ove filozofije smatra se ključnom za uspješno poslovanje. Stoga je važno kreirati korporativnu kulturu. To se postiže internom komunikacijom kojoj je cilj kreiranje pozitivnih stavova i osjećaja pripadnosti vlastitoj organizaciji. Kad je riječ o financijskim uslugama, dio podataka o korisnicima dolazi od zaposlenika koji su u kontaktu s korisnicima. Zaposlenici koji dolaze u direktan kontakt s korisnicima imaju mogućnost da kontinuirano prikupljaju podatke o njihovim reakcijama, prigovorima i žalbama. Sve informacije koje mogu prikupiti, vezane za uslužni proces ili uslugu, izuzetno su važne za uočavanje eventualne razlike između postojeće ponude i onoga što korisnici misle o ponudi. Zato je vrlo važno da zaposlenici iskoriste svaku situaciju i dobiju čim više informacija od korisnika. Stoga zaposlenici moraju biti educirani i motivirani (nagrađeni) za taj posao, ali i moraju biti ostvareni preduvjeti za pravovremeno i neometano plasiranje prikupljenih informacija nadležnim menadžerima. Zaposlenici dolaze do informacija o tome kako korisnici percipiraju financijsku instituciju ili njenu marketinšku komunikaciju, ali i koliko su isti zadovoljni izvršavanjem ranije danih obećanja. S druge strane, usmjerenim dijalogom koji zaposlenici vode s korisnicima usluga, kroz komentare o cijeni usluga ili elementima sadržanim u ponudi, moguće je dobiti informacije o tome što je popularno na tržištu, posebno u konkurentskim financijskim institucijama koje imaju sličnu ponudu i ciljaju iste tržišne segmente. Naime, vrlo rijetko se korisnik odlučuje za određenu financijsku instituciju ili korištenje neke od financijskih usluga, a da prije toga nije napravio značajno preliminarno i ciljano istraživanje. Uobičajeno je da nakon ocjene raspoloživih alternativa posjeti one financijske institucije koje su ušli u uži izbor. U tom slučaju zaposlenici pred sobom imaju mnoštvo informacija do kojih se može doći pomno planiranim razgovorom. Ne treba zaboraviti da je ključni problem u ovom procesu osigurati odgovarajuću podršku zaposlenicima i motivirati ih da aktivno preuzmu svoju ulogu.

Istraživanje tržišta

U teoriji i praksi istraživanja, prikupljanje podataka i njihove analize objedinjavaju se u marketinški informacijski sustav kako bi se osiguralo objedinjavanje marketinga i menadžmenta kao osnovne pretpostavke uspješnog poslovanja uslužnih poduzeća. Nezavisno od toga kako je realiziran, marketinški informacijski sustav trebao bi spriječiti donošenje poslovnih odluka koje nisu usklađene s odabranim ciljnim segmentima i dugoročnim ciljevima financijske institucije (Doyle, Stern, 2006.). Dakle, marketinški informacijski sustav čini kontinuirana i interakcijska struktura ljudi, opreme i postupaka radi prikupljanja, razvrstavanja, analize, procjene i distribucije prikladnih, pravodobnih i točnih informacija za donošenje pravih marketinških odluka.

Marketinški informacijski sustav mora obuhvatiti (Meidan, 1996.):

- Opis ciljanog segmenta, koji obuhvaća demografske, geografske, psihografske i biheviorističke karakteristike potencijalnih korisnika usluga.
- Praćenje rezultata uvođenja nove ponude.
- Kvantitativno mjerenje rezultata marketinških napora kroz tri nivoa istraživanja:

- Praćenje internih podataka o svim vrstama korištenih usluga.
- Praćenje eksternih utjecaja, kao što su poznatost financijske institucije, preferencije u pogledu izbora financijske institucije, odluke o promjeni iste i slično. Ove informacije služe za procjenu uspjeha u primjeni elemenata marketinškog miksa i promjene tržišne pozicije u odnosu na ostale konkurente na tržištu.
- Povremena istraživanja o imidžu i segmentima i promjene u ponašanju korisnika organizirana s ciljem praćenja i procjene eventualnih promjena na tržištu te praćenja trendova na strani potrošnje.

Segmentacija je jedna od glavnih aktivnosti u planiranju marketinga, a podrazumijeva prepoznavanje razlika među korisnicima (Meidan, 1996.). Segmentacija podrazumijeva formiranje segmenta na bazi nekog zadanog i poznatog kriterija poput geografskog, demografskog, psihografskog ili bihevioralnog. Kritičnu točku predstavlja vještina prepoznavanja zajedničkih karakteristika koje su odlika vrijednih i profitabilnih segemenata. Naime, uspješan proces segmentacije treba rezultirati profitabilnim segmentima koji će opravdati postupak i odluku o prilagođavanju ponude (Wilson, Gilligan, 2005.). Identificirani segmenti trebaju biti homogeni kada su u pitanju kriteriji koje financijska institucija koristi kako bi segmentirala tržište, što podrazumijeva sličnost prema određenim karakteristikama vezanim uz mjesto stanovanja, dob, određeni stil života i slično. Najčešći kriteriji koje financijske institucije danas koriste su demografski. To se odnosi na podjele na umirovljene i radno aktivne klijente, djecu, mlade odnosno studente, zavisno od životnog ciklusa. Na osnovi provedenog procesa segmentacije, financijske institucije odabiru ciljne segmente za koje kreiraju različite marketing strategije i marketinški miks, prilagođen specifičnostima segmenta i njihovim zahtjevima. U ovoj fazi financijske institucije se suočavaju s nizom odluka o tome koliko segmenata odabrati i kako im pristupiti. U ovom procesu razmatraju se i analiziraju sljedeći faktori (Wilson, Gilligan, 2005.):

- veličina i potencijal rasta pojedinog segmenta,
- struktura privlačnosti segmenta i
- organizacijski ciljevi i resursi financijske institucije.

Veličina i potencijal rasta pojedinog segmenta važni su za odabir segmenta. Segment mora biti dovoljno velik da bi osigurao profitabilno poslovanje.

Marketinško istraživanje predstavlja prikupljanje i korištenje informacija iz svih raspoloživih izvora, te njihovo prilagođavanje potrebama marketinga (Meidan, 1996.). Obujam i kvaliteta odnosno relevantnost informacija presudni su za poslovanje organizacija, a kod financijskih institucija, ovo je još značajnije, s obzirom na prirodu usluga koje pružaju i rizik plasiranja novca što dodatno jača potrebu za kontinuiranim priljevom upotrebljivih informacija. One bi trebale odgovoriti na niz pitanja, kao što su: Koliki je broj korisnika? Tko su korisnici određene financijske usluge? Tko su vlasnici određenih računa? Koji faktori utječu na preferencije prema određenim financijskim uslugama? Koji korisnici koriste određenu financijsku uslugu i zašto? Lista sličnih pitanja je duga, a podaci koji omogućavaju financijskim institucijama da na njih odgovore podloga su za kreiranje baze podataka o klijentima. Kreiranje, održavanje i korištenje baza podataka kod financijskih usluga predstavlja veliki izazov ali i potencijal. Svaki kontakt korisnika s uslugom omogućava prikupljanje različitih podataka, no samo njihova pravilna organizacija, analiza i korištenje čini ih značajnim i pogodnim za buduće poslovne odluke.

Može se zaključiti da marketinško istraživanje predstavlja vezu između financijske institucije i korisnika, odnosno tržišta, ali i podlogu za kreiranje marketinške komunikacije usmjerene na odabrana ciljna tržišta. Rezultati istraživanja koriste se za kreiranje promotivnih akcija, ali i predstavljaju način za mjerenje efektivnosti i učinkovitosti ovih akcija.

Marketinška istraživanja u financijskim institucijama mogu se grupirati prema vremenskom trajanju, načinu organizacije i predmetu istraživanja. Osnovne kategorije su:

- a) kontinuirana,
- b) povremena strateška istraživanja i
- c) operativna, taktička istraživanja.

S obzirom na prirodu financijskih usluga, nerijetko su mnogo značajnija kontinuirana strateška istraživanja (Meidan, 1996.) koja pridonose u mjerenju i praćenju tržišnog udjela, predviđanju promjena u budućnosti i upravljanju poslovnica. S druge strane, ova vrsta istraživanja omogućava prikupljanje informacije o poziciji financijske institucije u odnosu na konkurenciju, pomaže u identifikaciji promjena u individualnim uslugama, praćenju segmenata koji koriste određene financijske usluge i uočavanju promjena u obrascu njihovog ponašanja. Ove informacije pružaju mogućnost za ocjenu relativne profitabilnosti različitih vrsta financijskih usluga, pronalaze tržišne niše za koje bi se mogle razviti nove usluge i omogućavaju odlučivanje o poslovima u koje financijske institucije žele investirati ili iz kojih se žele povući (Stevenson, 1998.). Da bi strateška istraživanja uspjela potrebno je osigurati dovoljno veliki uzorak korisnika.

Drugu grupu istraživanja čine povremena strateška istraživanja koja se provode za mjerenje korporativnog imidža. Cilj im je da prate kategorije kao što su imidž financijske institucije u pružanju usluga, cijena usluga, financijska stabilnost, odnosi s korisnicima i slično. U ovom slučaju riječ je o aspektima koji su povezani sa poznatošću usluga i ugledom koji financijska institucija ima u javnosti.

Operativna ili taktička istraživanja usmjerena su na geografsku podjelu, pojedine tržišne segmente ili usluge, a provode se s ciljem utvrđivanja kratkoročnih instrumenata kojima se može osigurati (Stevenson, 1998.):

- izvlačenje profita i tržišnih prednosti iz određenih tržišnih segmenata ili financijskih usluga,
- kratkoročna konkurentska prednost zbog pristupa novijim ili bolje analiziranim informacijama u odnosu na one kojima raspolaže konkurencija, te odgovarajuća podrška za ispunjavanje ranije postavljenih ciljeva.

Istraživanja, usmjerena na ostvarivanje nekog od navedenih ciljeva, mogu koristiti sekundarne podatke i to najčešće one koji su prikupljeni u okviru marketinškog upravljačkog informacijskog sustava. Prikupljaju se uz naglasak na specifičnost financijskih usluga, a usmjereni su na praćenje obilježja i karakteristike korisnika, iskustva financijske institucije u poslovanju s određenim segmentima korisnika, te njihovih reakcija na poslovanje i strategiju financijske institucije.

U nastojanju da odgovore na pitanja vezana uz veličinu i strukturu tržišta, potrebe, obilježja i ponašanje korisnika, financijske institucije organiziraju tržišna istraživanja, koja se odnose prije svega na sljedeće (Meidan, 1996.):

- Istraživanje mogućeg potencijala za ostvarenje prihoda i dobiti kroz prodaju dodatnih usluga, segmentima koji već koriste usluge financijske institucije. Ove aktivnosti prodaje i istraživanja pomažu identifikaciji mogućnosti za razvijanje dodatnih usluga i stoga su izuzetno značajne. Podrazumijevaju korištenje strategije modifikacije usluga.
- Istraživanja usmjerena na prepoznavanje potencijalnih korisnika čine sastavni dio procesa segmentacije, izbora ciljnog tržišta i pozicioniranja. Zahvaljujući informacijama o potencijalnim korisnicima, moguće je preciznije definirati elemente ponude i pozicionirati financijsku instituciju.

- Testiranje koncepta novih financijskih usluga treba odgovoriti na pitanja:
 - kako plasirati novi paket usluga namijenjen različitim tržišnim segmentima i
 - koju marketinšku strategiju primijeniti na svakom segmentu.

Dakle, radi se o nastavku prethodne faze, s obzirom da se prema uočenim potencijalnim korisnicima definiraju elementi marketinškog miksa. Osim toga, ova istraživanja daju mogućnost odabira prave marketinške strategije i povećavaju šanse za tržišni uspjeh usluga koje uvode.

- Istraživanje efektivnosti. Uvažavajući ciljeve i interese različitih dioničara potrebno je osigurati optimizaciju korištenja i alokacije marketinških resursa. Tako na primjer, istraživanje efektivnosti oglašavanja može doprinijeti unapređenju efekata i rezultata o ciljeva promocije određenom segmentu.

Ove četiri kategorije istraživanja omogućuju financijskim institucijama praćenje razvoja vlastite tržišne pozicije, promjene u korisničkim željama i njihovim reakcijama, te upravljanje marketinškim miksom i povećanje efektivnosti poslovanja.

Lateralni marketing u financijskim institucijama

Za kreiranje kvalitetnog financijskog proizvoda nije dovoljno imati samo dobru ideju. Svaki proizvod mora biti dobro pravno prilagođen s obzirom da su financijske usluge područje koje podliježe strogoj regulativi države. Novi proizvod mora biti financijski isplativ što uvelike ovisi o informatičkoj podršci i infrastrukturi, a mora biti i prilagođen željama i potrebama korisnika. Financijske proizvode je relativno složeno osmisliti a vrlo jednostavno kopirati. Pomno osmišljena i odabrana ponuda usluga trebala bi poduzeću omogućiti stjecanje konkurentske prednosti, a pravilno upravljanje ponudom njezino održavanje i poboljšanje (Kotler, Wong, Saunders, Armstrong, 2006.). Pregledom literature, može se zaključiti da je nekoliko ključnih elemenata kod definiranja kvalitete financijskih usluga:

- primarna usluga koja se nudi korisniku,
- procesi podrške u pružanju usluge koji su definirani propisima i procedurama organizacije,
- fizičko okruženje u kojem se pruža usluga, atmosfera i ugođaj,
- tehnologija koja je i integralni dio financijskih usluga i
- zaposlenici koji moraju biti stručni prije svega.

Svaki od elemenata bi trebao biti orijentiran na zadovoljavanje očekivanja, potreba i želja korisnika, a ne isključivo na internu efikasnost. Svi elementi sustava pri oblikovanju usluge moraju konzistentno raditi na ostvarivanju zajedničkih ciljeva.

Razvoj novih financijskih usluga ostvaruje se kroz (Meidan, 1996.) :

- dodavanje novih usluga postojećoj ponudi,
- novu kombinaciju postojećih usluga,
- modifikaciju ili proširenje postojećih usluga,
- kombinacijom svega navedenog.

Kada se dodaje nova usluga postojećoj ponudi, radi se najčešće o inovaciji na tržištu bilo tehnološkoj ili samo u konceptu proizvoda. Na taj način se banka diferencira od konkurencije. Nažalost, financijske usluge se lako kopiraju i tu dolazi do problema. Ako konkurenti krenu slijediti i plasirati slične proizvode, u toliko širokoj paleti proizvoda i usluga biti će teško doprijeti do korisnika i komunicirati prednosti nove usluge. Kod kombinacije postojećih usluga

radi se o paketima proizvoda. Moguća je zbog široke palete raspoloživih usluga i činjenice da korisnici često nisu ni svjesni mogućnosti koje im stoje na raspolaganju. Zato je novu kombinaciju, bolje prilagođenu specifičnostima određenog segmenta, jednostavno za percipirati kao novi proizvod.

Modifikacija postojećih usluga predstavlja zapravo bolje verzije postojećih proizvoda i usluga, poput primjerice novije verzije internet bankarstva s dodatnim funkcionalnostima ili poboljšanje kreditnih kartica i uvođenje plaćanja na rate po svim karticama. Kombinacija svih navedenih mogućnosti najčešće se koristi kod velikih promjena na tržištu, ovisno o tome radi li se o tehnološkim, konkurentskim ili promjenama u preferencijama korisnika.

Lateralni marketing može se definirati kao proces kroz koji se od postojećih proizvoda i usluga stvaraju novi proizvodi i usluge. Do potrebe za stvaranjem navedenog dolazi zbog promjena potreba potrošača i stanja na tržištu, a poduzeća se moraju prilagođavati njima. Lateralni marketing primjenjuje se na postojeće proizvode i usluge; cilj je inovirati / modificirati postojeće proizvode i usluge kako bi se dobili novi proizvodi i usluge. The idea is to incorporate lateral thinking as platform for discovering new marketing ideas (Kotler, P., Trias de Bes, F., 2003. *Lateral Marketing*, John Wiley & Sons). Prije početka provođenja lateralnog marketinga potrebno je znati koje su potrebe potrošača koje možemo zadovoljiti s našim proizvodima/uslugama ako iste modificiramo, koje potrošače možemo pridobiti ukoliko promijenimo/inoviramo proizvode i usluge, koji proizvodi i usluge bi mogli nastati na osnovu postojećih proizvoda i usluga. Old world marketing was one to many; one brand to many consumers but today the rise of the Internet allows marketers to build one to one customer relationships by managing and personalizing complex consumer (Burgess, C., Burgess, M., 2020. *The New Marketing*, SAGE.).

Empirijsko istraživanje

Empirijsko istraživanje provedeno je u poslovnicama kreditne institucije na reprezentativnom uzorku od 1008 ispitanika starijih od 30 godina u 5 regija najvećih gradova (Banja Luka, Doboj, Bijeljina, Prijedor i Trebinje) manjeg entiteta Bosne i Hercegovine, u Republici Srpskoj. Istraživanje je provedeno u periodu od 25.01. do 29.04.2021. godine na ispitanicima u trenutku isplate odobrenog nenamjenskog gotovinskog kredita. Istraživanje nije provedeno na klijentima kojima je kredit odbijen, tj. nije odobren iz bio kojeg razloga.

Svrha i cilj provedenog istraživanja je utvrđivanje veličine opsega potražnje za specifičnim proizvodima, tj. za kreiranje specifičnih namjenskim kreditima odabranim ciljnim skupinama koje zadovoljavaju volumen potražnje a time i profitabilnost proizvoda u budućnosti. Obzirom da je općepoznata činjenica da je nenamjenski gotovinski kredit najskuplji za korisnike kredita, postavljamo hipotezu: „Ako kreditne institucije razviju dodatne modificirane kreditne proizvode za specifične skupine korisnika, povećat će broj zadovoljnih korisnika kredita, zadržati iste, a time i povećati profit institucije i dugoročni opstanak“.

Namjenski krediti uz povoljnije kamatne stope zasigurno koristili stanovništvu zbog manjeg opterećenja kućnog budžeta, a kreditnim institucijama kao specifični alat za penetriranje u specifične tržišne niše, kako onih koji koriste danas nenamjenske kredite, tako i one koji uopće ne koriste kredite za financiranje specifičnih troškova na rate. Povećanjem kreditiranja kroz više novih specifičnih namjenskih kredita otvara se mogućnost povećanja volumena kreditnih aktivnosti a time ostvaruju više značajnih ciljeva za kreditnu instituciju; konkurentska prednost u odnosu na ostale institucije, zadovoljavanje već postojećih klijenata, privlačenje novih klijenata, povećanje tržišnog udjela i ostvarivanje većeg profita.

Anketno pitanje:

U koju svrhu ćete koristiti nenamjenski kredit?

Opcije odgovora:

1. Dat ću novac članu obitelji da kupi auto, plati fakultet, plati vjenčanje.
2. Plaćanje redovnih mjesečnih troškova (računi za struju, vodu, grijanje).
3. Održavanje kućanstva (hrana i piće).
4. Ogrjevni materijal (pelet, drvo, ugljen).
5. Renovacija kuće ili stana (renovacija krova, kupaonice, cijevi, podova itd.).
6. Štednja za sigurnost.
7. Za putovanje.
8. Za organizaciju sprovoda, grobnice i spomenika.
9. Za zdravstvene tretmane.
10. Za popravak auta.
11. Za kupnju auta, motocikla, bicikla.
12. Za registraciju vozila.
13. Za kupnju kompjutera ili već mašine ili perilice suđa i sl.
14. Za kupnju PVC vrata ili prozora
15. Za poljoprivredu (nabavu stoke, strojeva, sjemena).
16. Za refinanciranje drugih kredita.
17. Za troškove darova, npr. krštenja.
18. Za troškove rješavanja imovinsko-pravnog stanja nekretnina (advokati, notari, porezi).
19. Za pokretanje vlastitog posla.
20. Ništa od navedenog.

Rezultati ankete:

For which purpose will you use the approved non-purpose loan?	N	%
1. I will give money to a family member to buy a car, pay a college, pay for a wedding.	66	6,548
2. Payment of regular monthly expenses (debt for electricity, water, heating).	152	15,079
3. Household maintenance (food and liquid necessities).	64	6,349
4. Heating material (pellets, wood, coal).	158	15,675
5. Renovation of a house or apartment (renovation of a roof, bathroom, pipes, floors, etc.).	150	14,881
6. Security savings.	12	1,190
7. For travel.	10	0,992
8. For arranging a funeral, tomb and monument.	26	2,579
9. For health treatment.	136	13,492
10. To repair a car.	22	2,183
11. To buy a car, motorcycle, bicycle.	6	0,595
12. For vehicle registration.	42	4,167
13. To buy a computer or washing machine or dishwasher, etc.	30	2,976
14. For the purchase of PVC doors or windows-	34	3,373
15. For agriculture (purchase of livestock, seeds, machinery).	66	6,548
16. To refinance other loans.	4	0,397
17. For the cost of gifts, for example baptism.	4	0,397
18. For the costs of resolving the property status of real estate (lawyers, notaries, taxes).	22	2,183
19. To start a personal business.	4	0,397
20. None of the above.	0	0,000
TOTAL:	1008	100

Zaključak

Nakon dobivenih rezultata vidimo da će se skoro 60% (59,127%) podignutih nenamjenskih kredita iskoristiti za 4 specifične namjene a to su: materijali za ogrjev 15,675%, plaćanje mjesečnih režijskih troškova 15,079%, adaptaciju kuće ili stana 14,881% i 13,492% za zdravstvene tretmane. Sa druge strane promatramo postotke potrošnje nenamjenskog kredita za: kupnju poklona i proslave 0,649%, za putovanja 0,974%, za štednju zbog sigurnosti 1,948% te možemo zaključiti da se isti najmanje koriste za ono što bi im trebala biti osnovna namjena, a to je osobna potrošnja i zadovoljstvo.

Istraživanjem smo potvrdili postavljenu hipotezu. Iz navedenog možemo zaključiti da su povremena strateška istraživanja preferencija korisnika kredita presudna u funkciji lateralnog marketinga kreditne institucije. Takvim pristupom ostvaruje se osobni personalizirani pristup korisnicima te se proizvodi kreiraju sukladno njihovim preferencijama na zadovoljstvo kako korisnika tako i kreditne institucije što u potpunosti ostvaruje obostrani rezultat dobitnika. Kontinuiranim praćenjem preferencija i prilagodbe proizvoda i usluga kreditne institucije postojeći klijenti postaju zadovoljniji, a promocijskim mixom povećavamo mogućnost privlačenja novih klijenata istih preferencija za namjenskim kreditima koji još ne postoje na financijskom tržištu. Ovakav pristup jedina je mogućnost razvoja, ostanka i opstanka kreditne institucije na globalnom konkurentskom financijskom tržištu.

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MIGRATION AND REFUGEES

Integration of Ukrainian Refugees into Croatian Labour Market under the Temporary Protection Directive

Marijana Jukić¹

Abstract

A full-scale Russian invasion of Ukraine in February 2022 caused thousands to flee its territory daily, seeking refuge across Europe. The Council of the EU has approved the adoption of the Temporary Protection Directive (2001/55/EC), which allows a one-year, renewable permit to reside and access essential services across its Member States. This paper compares the Directive's initial introduction in 1990s and its first activation during the Ukrainian refugee crisis. Temporary protection is an emergency mechanism that can be applied in cases of mass influx of persons, which aims to provide an immediate and collective protection to displaced persons who are not able to return to their country of origin. Our focus is on the protection provided in Croatia, mainly in the fields of labour and employment, under the supervision of Croatian Employment Service as a public institution. The main research methods are content analysis and qualitative research, and the purpose of the paper is to contribute to the legal discussions on integration of Ukrainian refugees as persons under temporary protection into the Croatian society and, predominantly, labour market.

Key words: Temporary Protection Directive, war in Ukraine, migration, Croatia, labour rights, unemployment rights, Croatian Employment Service

Introduction

On 24 February 2022 Russian military forces started a full-scale invasion on several Ukrainian cities, an act described by Vladimir Putin as a "special military operation" to "demilitarise" and "de-Nazify" the country (Martz, 2022, p. 29). Since then, nearly one-third of Ukrainians have been forced out of their homes, making this, as UNHCR describes it, the largest human displacement crisis in the world today. Within Ukraine, over 6.2 million people remain relocated by the war and as of July 2022, not even five months after the beginning of the invasion, the UNHCR estimates that there are over 5.6 million refugees present across Europe. In the extraordinary meeting of the European Council, EU leaders condemned the unprovoked and unjustified military aggression against Ukraine, agreeing on further restrictive measures that will impose massive and severe consequences on Russia. President of the European Commission Ursula von der Leyen called on Russia to immediately stop the violence and to withdraw its troops from Ukraine's territory, echoing the EU's full support for Ukraine and its people (European Commission, 2022a).

Right from the beginning, the EU has acted with resolve, adopting between February and May 2022 several rounds of sanctions designed to financially target Vladimir Putin and his inner

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circle of oligarchs, politically deter Russia, and economically weaken its ability to continue the war of aggression. Russian companies in Europe are suffering from the harsh packages of restrictive measures and economic sanctions that the Member States are adopting to isolate Russia. Moreover, following sanctions and limitations on the import of Russian oil and gas, energy prices and global food prices are hitting record highs, and this affects companies' levels of production and employment (Eurofound, 2022). This has also encouraged EU Member States to close ranks and deepen their commitment to mutual defence, with Denmark holding a referendum to abandon its idiosyncratic opt-out on The Common Security and Defence Policy, and Finland and Sweden applying to join the NATO (Fabbrini, 2022, p.2-3). With this, the EU itself and its Member States have put themselves in a precarious position as severing ties with Russia in this manner has led them towards an unsafe future yet choosing the "right side" in this clash and sending the message that this kind of aggression won't be tolerated was of great importance. Probably the most significant of actions by the EU was made regarding the acceptance of numerous refugees crossing the borders and seeking shelter in its territory – namely triggering the Temporary Protection Directive (Council Directive 2001/55/EC) for the first time since its passing in 2001.

In this paper, we will analyse the Temporary Protection Directive, the entire process and the reasons for its activation, as well as the peculiarity of why it hasn't been activated until now. Following that, we will focus on its implementation into Croatian framework, with brief overview of the country's history of migration. In the end, we will examine which rights do Ukrainian refugees have in Croatia, focusing on the support provided by the Croatian Employment Service (hereafter referred to as CES) in accordance with the Temporary Protection Directive and its Article 12 that is dedicated to employment and social security. The purpose of the paper is to contribute to the legal discussions on integration of Ukrainian refugees as persons under temporary protection into the Croatian society and its labour market.

1. Temporary Protection Directive 2001/55/EC

When talking about the subject of international refugee protection today, what sets itself as a centrepiece among the relevant international documents ratified by the vast majority of the states is certainly the UN's Convention relating to the Status of Refugees, adopted in 1951. As a post-Second World War instrument, the Convention, also known as the Geneva Convention, was originally limited to persons fleeing events occurring before 1 January 1951 and within European territory. Its 1967 Protocol removed these limitations and gave the Convention universal coverage and has since then been supplemented by refugee and subsidiary protection regimes in several regions, as well as via the progressive development of international human rights law (UNHCR, 2022). The Convention endorses a single definition of the term "refugee" as someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion (Thorburn, 1995, p.460).

With the crisis in former Yugoslavia Europe was facing the most important exodus of refugees since the Second World War. To cope with hundreds of thousands fleeing conflict and abuses of human rights in the Balkans in 1992, the United Nations High Commissioner for Refugees presented the concept of temporary protection. The idea was to provide protection against refoulement and respect for fundamental human rights while awaiting return in safety and dignity and to avoid overwhelming the national refugee status procedures already considered as overburdened (Luca, 1994, p.193). On 20 July 2001 the Council of the EU adopted Directive 2001/55/EC on minimum standards for giving temporary protection in the event of a mass

influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof (Kerber, 2002, p.193).

This Directive was the first legislative instrument in the field of asylum and was considered a “tool in the service of a common European asylum system”, enabling it to operate smoothly and not to collapse under a mass influx (Beirens et al., 2016, p.8). The term “displaced persons” is defined in its Article 2 as third-country nationals or stateless persons who have had to leave their country or region of origin, or have been evacuated, in particular in response to an appeal by international organisations and are unable to return in safe and durable conditions because of the situation prevailing in that country, and who may fall within the scope of the Geneva Convention or other international instruments giving international protection (Kerber, 2002, p.196). Since 2001 there has been more than one opportunity that called for discussion on the activation of the Directive, yet none of them resulted in it, even though many displaced groups and persons could have fit the term as defined by the Directive.

The migration crisis that shook Europe in 2015 has caused a massive pressure at the external borders of the EU and the question raised was whether the activation of the Directive would have been an appropriate solution for the large-scale arrival of refugees, mostly referred to just as migrants, mainly from Syria but also from Afghanistan, Nigeria, Pakistan, Iraq and other countries. Among those who called upon its activation were members of European Parliament, UNHCR, activists and academics (Koo, 2016). Yet, once again, the Directive was not activated, naming its complex activation mechanism as one of the main reasons for the non-implementation (Ineli-Ciger, 2016, p.13). Among other justifications for this was the suggestion that the EU Member States have a primary responsibility to shelter European refugees, which implies a lesser obligation to extend their generosity to displaced groups coming from other regions. However, in its core, the institute of temporary protection is not and should not be fundamentally regional (Fitzpatrick, 2000, p.297). From current perspective it is quite clear that naming its complex activation mechanism as one of the reasons why the Directive has never been triggered doesn't quite stand its ground. As we were able to witness in 2022, the whole procedure lasted merely a few days – from suggestion to activation, while reaching a unanimous decision wasn't that challenging. In the following sections of this paper, we will focus on this – shortly explaining the theory of the process and its activation in March 2022.

1.1. Temporary Protection Directive – activation procedure

The EU institution competent to start the procedure is the European Commission. After assessing the situation, the executive can put forward a proposal to Member States. The Commission's proposal shall include a description of the specific groups of persons to whom the temporary protection will apply, the date on which it will take effect and an estimation of the scale of the movements of displaced persons (Arenas, 2005, p.447). Considering the Commission's proposal and any feedback from EU countries and the UNHCR, the Council of the EU can vote to activate the institute of temporary protection by a qualified majority, which means 55 % of EU countries (15 out of 27) that represent at least 65 % of the total EU population. The European Parliament must be informed throughout the process but lacks any influential power. The allocation of displaced people is done according to the capabilities of each Member State (Euronews, 2022).

Temporary protection ends at any time by a Council decision adopted by qualified majority on a proposal of the Commission. The Council decision shall be based on the establishment of the fact that the situation in the country of origin is such that permits the safe return of the beneficiaries with due respect for human rights and fundamental freedoms and Member States'

obligations regarding non-refoulement. Temporary protection also ends when the maximum duration has been reached - the first Council decision grants temporary protection for one year and if it is not terminated it is automatically extended for six months for a maximum of a further year, after which it may be extended by qualified majority on a proposal from the Commission, for up to another year. Altogether, it may have a maximum duration of three years (Kerber, 2002, p. 200). Since it was only first activated few months ago, we never got to experience what happens in practice once the temporary protection reaches its expected time limit as it remains to be seen.

1.2. Temporary Protection Directive in 2022

The process we just explained was triggered for the first time by the Council in response to the Russian invasion of Ukraine with the intent to offer quick and effective assistance to people fleeing the war. Due to the scale of estimated arrivals, the Commission identified a clear risk that the asylum systems of EU Member States would be unable to process applications within the deadlines set. This would negatively affect the efficiency of national asylum processes and adversely influence the rights of people applying for international protection. Following the call of the home affairs ministers, on 2 March 2022, the Commission rapidly proposed to activate the Directive. On 4 March, the Council unanimously adopted the Decision, giving those fleeing war in Ukraine the right to temporary protection (European Commission, 2022b). The Council acknowledged it as the most suitable instrument in this extraordinary and exceptional situation, believing that it will facilitate a balance of efforts between Member States, limit the number of displaced persons seeking immediate international protection, and reduce pressure on national reception systems (European Parliament, 2022). The EU's response is a model to be emulated, but it stands in stark contrast to its policies over the years which deny refugees access to the EU and outsource its protection obligations (Musalo, 2022, p.761). The question that raises itself is why was it possible to react unanimously and in such a short time when it came to activation of the Directive, when in the past it was dealt with rejecting the mere idea of it? It made the issue of temporary protection indeed a regional matter, when it shouldn't have been, since a clear difference was made between the refugees coming from Ukraine and seeking shelter from the war and those originating outside of European territory.

Hereby activated Directive, according to the briefing published in March 2022 by the European Parliament, applies to following groups of people who resided in Ukraine before or on 24 February 2022:

1. Ukrainian nationals, as well as their family members.
2. Stateless persons and nationals of third countries other than Ukraine who benefited from international or equivalent national protection in Ukraine, as well as their family members.
3. Nationals of third countries other than Ukraine and stateless persons who can prove that they were legally residing in Ukraine, based on a valid permanent residence permit issued in accordance with Ukrainian law and who are unable to return in safe and durable conditions to their country or region (they are eligible for either EU temporary protection or adequate national protection, depending on the EU country to which they travel).

Beneficiaries are entitled to rights such as a residence permit which can last up to three years, access to the asylum procedure, employment, accommodation or housing, access to medical care, education for minors, family reunification, access to banking services, freedom of movement in and to EU countries, with the exclusion of individuals who have committed serious crimes or who pose a threat to security (European Commission, 2022). Authorities in

Brussels called on border guards on both sides of the Ukraine-EU frontier to ensure everyone is allowed into the EU, regardless of nationality or ethnicity. Concerns grew after widespread reports from African nationals attempting to flee the war that they were being turned back, either by Ukrainian or Polish border guards (The Guardian, 2022). Discrimination such as this poses a breach of international law, but lacks serious analysis by the EU institutions, being only discussed in media and on social networks, causing global outrage.

2. Migration overview in Croatia

Throughout its history, Croatia has always been primarily a country of high emigration, with labour and political emigrants in western European countries and overseas. Homeland war and the dissolution of Yugoslavia in the early 1990s introduced new types of migrants in the area such as refugees, while processes of the EU accession opened up the space for labour immigration into the country (Gregurović and Mlinarić, 2012, p. 99). The conflict in Croatia itself had caused the displacement of over 600.000 people, half of whom remained within Croatian territory. By the end of 1992, there were 618.000 registered displaced persons in Croatia, at least 324.000 of them from Bosnia and Herzegovina, most of them housed by families or friends (Thorburn, 1995, p.473). From the year 2000 right until 2009 Croatia had a positive net migration but starting with the country's EU accession in 2013 up until now this trend has changed drastically. The reduction in the number of immigrants in Croatia was primarily due to negative trends in the economy, since the demand for labour was reduced in sectors such as construction, the hotel industry and tourism, which traditionally employed foreign workers (Gregurović and Mlinarić, 2012, p. 103).

The number of foreign immigrants to Croatia in 2014 was 10.638, most of them coming from neighbouring countries, primarily Bosnia and Herzegovina and it is important to stress out that most of them have dual citizenship – Croatian and Bosnian, which changes the entire context of the statistics since those persons could also be classified as returnees (Knezović and Grošinić, 2017, p.17). During the migration crisis in 2015, Croatia has found itself in the middle of the so-called Western Balkan route which connects the south of the Balkan Peninsula with Central Europe. During the escalation of the crisis, this route became one of the two most-used migratory ways to the EU territory (Bukowski, 2019, p.104-105). Even though, during that time, more than 650.000 people passed through the country, there were only 22 of them who wanted to stay and seek asylum in Croatia, making it only a transit destination and the huge influx of migrants heading westwards did not change the statistics and the country profile (Knezović and Grošinić, 2017, p.17).

When it comes to the Ukrainian refugees in 2022, Croatia is not among those first-stop countries, as are those that are direct neighbours such as Poland, Romania, Slovakia or Hungary. However, it is one of the countries where Ukrainians seek shelter and it is ready to take in around 20.000 people, a number which could go up depending on the further developments of the situation (Ministarstvo unutarnjih poslova, 2022). The predicted number of 20.000 refugees has already been exceeded by mid July 2022 with the total number of registered refugees in Croatia being 20.840 – 10.437 women, 3.404 men and 6.999 children (Hrvatska za Ukrajinu, 2022).

3. Temporary protection in Croatia

At its session on 25 February 2022 Croatian Parliament adopted a Declaration on Ukraine, condemning the aggression and calling on Russia to immediately cease the military attack and

withdraw its troops from the Ukrainian territory. The Declaration stresses how respecting the international legal order and the inviolability of international borders is the key to preserving peace and stability in the region, calling on the Croatian Government to provide humanitarian and technical assistance, and to accept refugees (Deklaracija o Ukrajinu, 2022.) On 7 March 2022 Croatian Government adopted Decision to introduce temporary protection in Croatia for displaced persons from Ukraine, based on International and Temporary Protection Act and its Article 78 and in accordance with the Council Decision 2022/382, which established the existence of a mass influx of displaced persons from Ukraine within the meaning of Article 5 of Temporary Protection Directive. With this, persons under temporary protection in Croatia gained access to the right of residency, access to housing, social welfare assistance, medical care, legal custody and safe placement for unaccompanied children and teenagers, access to education for children and teenagers, access to the labour market and family reunification.

Upon entering the country, the status of protection in Croatia should first be regulated with the Ministry of the Interior, which means applying for temporary protection at the nearest police station or online. Based on the approved temporary protection and the Foreigner Card, a person from Ukraine can be employed in Croatia and registered for pension and health insurance, according to the newly established website “Hrvatska za Ukrajinu”. This page contains useful instructions on reception, but also information for anyone who wants to help the displaced citizens of Ukraine. In fact, many public and governmental institutions in Croatia offered their services and necessary information in Ukrainian language – CES also being one of them. These services and their extent will be covered in the following chapter of this paper.

3.1. Employment and labour rights

Right to employment, labour and social rights all contribute to self-reliance of individuals which provides relief to national social security systems from the need to offer social welfare. It also contributes to the empowerment of those under temporary protection and provides better education and health care for their children and can extensively contribute to the economic growth of the host country (Špadina, 2017, p.774). International law is clear about the undisputable right of asylum seekers and refugees to gainful employment during the temporary stay in the host country with the right to work being the key element to their successful integration. Article 18 of the Geneva Convention regulates the right of refugees to self-employment under the same or better conditions as host country renders to other foreigners in the same circumstances. Article 19 regulates access to liberal professions with the condition for access being a recognized diploma and the willingness to practice said professions. Same as with the right to self-employment, the Convention sets standard of the same or better treatment compared to other foreign persons (Špadina, 2017, pp.774-776). Finding adequate employment can be a difficult task in a foreign country, considering the role a language barrier can play, as well as the fact that employers often discriminate foreign applicants, unable to verify their previous experience and qualifications. Self-employment, on the other hand, requires financial resources or additional institutional support.

In this part of the paper, we analyse the way the Directive has been implemented into Croatian framework, especially regarding employment. In its Article 12, it is explained how the Member States authorise persons enjoying temporary protection to engage in employed or self-employed activities during the temporary protection regime subject to the rules applicable to the profession. For reasons of the labour market priority might be given to EU citizens and citizens of the European Economic Area as well as third-country nationals who receive unemployment benefits. When it comes to remuneration, access to social security systems and

other employment conditions the general law in force in each Member State will be applicable (Kerber, 2002, p.207).

Persons under temporary protection can work in Croatia without a residence and work permit or a certificate of employment application, which means that they don't need an additional permit to enter the labour market, except for the Foreigner Card. Such status implies the full use of the services of the CES and the measures of active employment policies. As of 2021, for third country nationals, the annual quota on employment was abandoned in favour of labour market testing that included coordination between the prospective employer and the CES, according to the Foreigner's Act and its Article 98. If not for this unforeseen situation, Ukrainian citizens would have been subjected to this procedure when being employed in Croatia, as any other third country nationals.

Right before the February invasion, in December of 2021, CES delegation has visited Ukraine where the Second Session of the Joint Commission for Economic Cooperation between the Government of the Republic of Croatia and the Government of Ukraine was held. The intended objective was to work on the cooperation in the field of work and employment between the two states. Previous Cooperation Agreement between CES and the State Employment Service of Ukraine was signed in Zagreb in 2018 and its terms consisted of exchanging experience in the areas of improving public employment offices, providing services to employers and jobseekers which led to a successful employment of around 2.500 Ukrainian workers in Croatia in 2020. During that Session in December, they came to agreement on additional cooperation through educational and training programmes for employed and unemployed persons, active employment policy measures and international mediation. CES agreed to continuously develop friendly relations as well as foster economic and social development through mutual collaboration (Hrvatski zavod za zapošljavanje, 2021). Unfortunately, the war in Ukraine followed soon after that and CES and the partnership was forced to take on a different form.

As pointed out by CES, registering with the local and regional employment registry should be an obstacle free assignment for Ukrainian citizens, as this is possible both in person and by e-mail, with providing basic personal information such as name, date of birth, presenting a valid Foreigner Card, Personal Identification Number (OIB) and a proof of completed education. After being listed in the unemployment register, those persons will be assigned a personal advisor who will guide them throughout the process of joining Croatian labour market. The employment advisors, as consultants, have a duty to support those persons when registering in the unemployment register, in search of the desired employment by referring them to employers, help them create CVs, prepare them for job interviews and introduce them to the possibility of benefiting from participating in active labour market measures. For better communication between the employment advisor and their client, CES offers free translation services.

The CES often organises workshops aimed at various target groups and therefore those can be organised for the persons under the temporary protection in the same way in smaller groups in English or with a Ukrainian translator present. During the consultation a person will be given a possibility of employment outside the place of current residence in Croatia. The advisor will inform them about the vacancies in the desired profession for which they express interest. The labour market in Croatia is very different and demand depends on the part of the country in which one is located. In the Adriatic, different occupations related to tourism are deficient and in continental Croatia occupations in the construction and processing industry are short of workers, while some occupations are deficient throughout the territory of the country. In case of termination of the employment, Ukrainian citizens and other persons under the temporary protection are entitled to monetary remuneration in the form of unemployment benefits under

the same conditions that are applicable to Croatian citizens - it is necessary to have at least 9 months of work experience in the last 24 months on the Croatian territory at the time of termination of employment and submit an application within 30 days from the date of termination of employment or sick leave, as defined by the Labour Market Act.

According to the data provided by the CES from 24 February to 21 April 2022 a total number of 372 employers has expressed interest in hiring displaced persons from Ukraine, and 538 people have applied into the unemployment register. Also, an additional 118 people were referred to one or more jobs and came into contact with a potential employer. The greatest interest is in less complex professions such as waiters, chefs, hairdressers, cleaners, various ancillary jobs in hospitality, manufacturing, and warehouse jobs, but developers, designers and architects are also in demand. The only sector in which the employment of foreign citizens is impossible is the public sector, since a common formal requirement when applying for a position is the submission of a certificate of Croatian citizenship (Špadina, 2015).

According to the unofficial estimate provided by Croatian Ministry of Labour, Pension System, Family and Social Protection, from 24 February to 21 April 636 people from Ukraine acquired the status of pension insured persons, of which 139 were men and 497 women. They are mostly between the ages of 34 and 45 years and with secondary qualifications, majority of them located in the city of Zagreb and region of Istria (N1info, 2022). A common problem when applying for certain positions should be the inability to prove existing level of education, as well as the language barrier. Although perceived similar, Croatian and Ukrainian primarily in script, considering Ukrainian language uses cyclic alphabet. This transition to new language and culture plays a role not only when searching for employment, but also when trying to acquire other rights such as access to education or health care, which is why, aside from translating official webpages, Croatian Red Cross and Ministry of Interior of Croatia printed out brochures in Ukrainian with essential information, contact numbers and addresses aimed at persons crossing the border.

3.2. Other rights

In addition to employment and the possibility to get unemployment remuneration, benefits such as health care, education, suitable accommodation are also accessible to the persons under temporary protection, as is explained in both Croatian and Ukrainian languages on the website “Hrvatska za Ukrajinu”. When it comes to being provided housing, reception centres are available as a short-term solution, up to maximum duration of 48 hours, after which a more permanent accommodation is offered in one of the collective accommodation facilities. At these locations there are hotel employees present for all accommodation questions and issues, and the employees of the Directorate of Civil Protection and the Croatian Red Cross coordinate the activities.

Concerning health and medical care, by presenting their Foreigner Card, persons under the temporary protection are entitled to treatment of acute conditions and chronic diseases by a family physician, paediatrician, gynaecologist, and to emergency dental services. They can get vaccinated, tested, and treated against COVID-19, as well as against other infectious diseases. An additional burden to the situation was the fact that the war happened in the middle of the pandemic so there was an additional factor regarding health risks the refugees had to withstand. Children and minors under temporary protection are fully equal in rights with Croatian children and have full health care available on their disposal. They also have the right to enrol or continue primary and secondary education under the same conditions as Croatian citizens, with schools organizing preparatory classes in Croatian language for all students and providing them

with textbooks. Continuation of tertiary education is also possible, while admission is decided by faculties considering the available places and criteria.

Social Welfare Centres offer their services in the form of the first social service, counselling, psychosocial counselling, accommodation (in accordance with the Social Welfare Act this applies to unaccompanied children, children with disabilities, the elderly, and people with disabilities). Also, necessary assistance and support in exercising the rights of persons with disabilities is available. Family members can join and be granted temporary protection, which applies to spouses and cohabitants, children, and close relatives with whom a person has lived in a shared household and who were completely or mostly dependent on them. Croatian Bar Association offers free legal assistance to the displaced persons in need as a part of their free legal aid programme.

There are also other benefits, such as free transportation on all routes in internal rail traffic in Croatia enabled by the national HŽ Passenger Transport or free roadside assistance by the Croatian Automobile Club. The benefits and free tickets also apply to free of charge visits to the communal pools, cultural manifestations, museums, and zoos. These prospects might not be of vital importance such as those mentioned earlier, but they can improve one's quality of life and provide a sense of security and acceptance in a foreign country.

Conclusion

“The war has led to the senseless loss of thousands of lives, the displacement of ten million people, mainly women and children, the systematic destruction of essential infrastructure, and skyrocketing food and energy prices worldwide. This must stop!” (United Nations, 2022) UN Secretary-General António Guterres proclaimed, leading the reaction of international community as it condemned the invasion on Ukraine. Once again, the war has returned to Europe, causing numerous civilian casualties and destruction of infrastructure, forcing people to flee their homes seeking refuge. The last time this has happened, it was a cause for the Temporary Protection Directive to be passed, as an instrument that was supposed to harmonise EU Member States’ policies regarding refugees. Yet, the Directive was never triggered, not before March 2022, more than 20 years later, even though there were some opportunities for it in the past, naming the migration crisis in Europe back in 2015 as the most obvious one. So why now? How were the circumstances different this time?

The answer to this question is not an easy one and is perhaps better suited for a more thorough and in-depth analysis, but it has certainly put European solidarity in focus. Once the threat was on EU’s doorstep, the reaction was swift and profound – from restrictive measures and economic sanctions attempting to isolate Russia, to the activation of the Temporary Protection Directive intended to protect the refugees. Unanimous decision was not hard to reach and in a matter of days, Ukrainian refugees were granted protected status in the 27 countries of the EU, including Croatia. With this, they gained access to residency and accommodation, health care, social welfare assistance and a right to gainful employment, among others. In this paper, we particularly focused on the latter, considering providing for oneself is key to a person’s independence and self-reliance. CES as a public employment service played a big part in making the inclusion into the national labour market possible, but there is still so much to be worked on.

Only the first step in the long journey of integration has been made and although Ukrainian refugees have been given the right to work and register as job seekers, they still have very restricted access to national labour market, where knowing the Croatian language and having necessary qualifications (and the proof of possessing them) still plays an important role, so they

will mainly be considered for ancillary jobs and those where only minimum experience is required. This leads to having tertiary educated people accepting low skilled occupations, simply because they don't meet the mandatory requirements for the ones they have been educated for, and significantly restricts the possibility of self-employment.

The position of CES should be strengthened as it is an important stakeholder when it comes to integrating persons under temporary protection into the local labour market. Getting education, expert counsel, being included into active labour market measures and linked with employers is all part of a person's journey towards a suitable employment and all these services should be on disposal to those who show interest in participating. A special focus must be given to providing language courses which should contribute to a faster integration and later offer more opportunities, as well as organizing workshops on various possibilities of self-employment.

Since the outcome of this conflict is still very uncertain, EU Member States ought to think about what comes after the intended time limit of three years is reached. Even if the conditions for a safe and undisturbed return are met, this might not mean that every person provided protection under the Directive might be willing to do so, once they've established their lives in the host countries, found employment and have been integrated into the local society. Even though we've been discussing protection in its "temporary" form, a long-term perspective should also be considered, since the consequences of this conflict are going to be felt significantly in the years to come.

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Migration Problem in Light of EU Conservatism and a Multi-layer Solution Approach

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Abstract

The problem of migration is an intensively studied topic and it has appeared in various forms in the past. When dealing with a problem, it is quite important to consider different theoretical approaches, which has been done in this paper. The problem of migration in the EU is of particular importance in the last few years, especially the influence of EU conservatism which is here discussed. Additionally, a strategic plan that may solve the barriers imposed by the heterogeneity of attitudes within the EU is proposed and conceptualized as a specific multilayer approach structured by two phases that consist of the vertical and horizontal decomposition of the solution. A detailed explanation of this approach is provided.

Keywords: migration, EU conservatism, multi-layer approach, labor migration, refugee crisis

Introduction

Migration could be a political and economic issue that helps to set the stage for elections in Europe and around the world. It is strongly interlaced with policies on economics, trade, education and employment. In order to deal with this problem, this paper focuses on some theoretical approaches to migration as well as on migration in Europe nowadays. Namely, the problem of migrations in the European Union (EU) is of particular importance in the recent period, especially the influence of the EU conservatism which is discussed here. It can be observed that the rising nationalism and populism restricted the ability to find smart and future migration policies at the national and European levels, which resulted in a deep division in the EU. Moreover, the EU member states have been trying hard to find common solutions to problems with a vast number of refugees.

The question arises whether an economic migrant who, emigrated seeking a job, still participates in forced migration, because it has compelled him to hinder his circumstances in that way. Also, there is a question if these aggravating circumstances are the result of economic or political hardship. The next question that arises concerns the causes of migration. It is about conceiving a variety of circumstances, for example, expecting better economic opportunities, better educational opportunities, and better living conditions in economic or political terms. Theoretical approaches to the research of all these phenomena are changing and transforming the rhetoric of the destabilization of traditional relationships, the creation of new social networks, and integration. Citizens of many European states and their political leaders require

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important changes in integration policies. The number of participating countries in the global migration system is increasing, and the differences in migrant groups are also increasing. A strategic plan is proposed to overcome barrier caused by some attitude of conservatism blocking any reasonable approach in dealing with the migration problems. The main idea of this plan is to define a comprehensive procedure whose implementation will be guided from the EU level.

The paper is structured as follows. After the Introduction, some of the common theoretical approaches regarding the migrations are presented in Section II, while the Section III deal with conservatism and migration issues in the European Union (EU) as a study case. In the Section IV, a strategic plan for dealing with migration in the EU is proposed.

1. Theoretical approaches

In older theories, theorists mainly deal with the process of labor migration, while recent theories attempt to explain why migrations continue once the aggravating circumstances are over. Through theories, there are three main factors that affect migration; economic, social, and political factors. Theories differ, as does their view of migrations, either as a temporary phenomenon or a recurring phenomenon.

The combination of these three factors determines the size and direction of migration flows. The basic assumption of such migration theories starts from the several factors that encourage migration. Thus, the more emphasized they are, the more frequent the migration will be. However, they do not help determine why, in some regions, migration is more emphasized and more frequent than in other regions, and why some individuals within such regions decide to migrate.

Although economic factors are a prerequisite for voluntary mass migration, political factors are usually sufficient for allowing them to be achieved. Governments in sending countries and destinations have very active roles in promoting migratory flows. Initially, states initiated the arrival of foreign workers, but at the moment when migrants' inflow exceeded demand, the problem became political. Nowadays, all developed countries are trying to limit immigration flows and regulate their characteristics by introducing restrictive legal measures. However, changes in legislation are influenced by the attitudes and interests of employers and trade unions, NGOs, and human rights activists.

One of the oldest and most famous migration theories is the neoclassical macro theory of migration. It was created as an attempt to explain the causes of labor migration. They exist because of differences in labor supply and demand between countries, according to this theory of international migration (Massey et al., 1993; Hollifield and Brettel, 2000; Van Hear, 2010). The advantage of the neoclassical macro theory is the ability to empirically prove the causality of the volume of labor migration flows between the two countries in terms of the amount of their real wage differences. In empirical research, real wages are expressed in per capita income. In order to achieve comparability of data, per capita income is converted into international dollars using purchasing power equality. The later expansion of neoclassical macro theory is based on the difference in expected wages as the cause of labor migration. In empirical research, the expected wages are defined as the real wages of the observed country multiplied by the probability of employment.

The theory of a historical-structuralist approach appeared in the 1970s, seeking for models in the Marxist political economy and the theory of the world system. Inequality is emphasized in the division of economic and political power in the world economy (de Haas, 2010). Migration

is interpreted as a method of mobilizing and employing the labor force. This method was conceived as a consequence of colonialism, the war, and unequal regional development within Europe, which are connected to the dominance of developed capitalist economies over the undeveloped world. This theory is open to criticism: one of the most prominent critics claims that it cannot explain the interaction of Western economic dominance and frequent breakdowns in migration policies. As the neoclassicists ignore the historical role of mobility and the role of the state, the historical-structuralist approaches have emphasized the overall unconditionality of capital interest as well as the role of motivation and actions involved in migration mobility by individuals and communities.

For structuralists, the explanation of migration can only be found at the structural level, below the surface of everyday reasons and beyond the constraints of the categories and concepts of everyday life. The real forces that structure society are concealed by positivist empiricism, observation, and direct experience. Therefore, positivist and behavioral explanations are considered reductive because they ignore the macro conditions in which actors make decisions.

Although structural insights suggest a deterministic conceptualization of migrations in which individuals are almost entirely excluded from the overall picture, this approach reveals significant similarities to neoclassical macroeconomic models. Structuralists, however, try to explain migration as part of overall social relationships and do not treat it as a given natural phenomenon.

The theory of cumulative causality essentially argues that each individual act of emigration creates social and economic changes that promote additional movements. Namely, migrations change social structures and motivations in a way that makes additional movements more likely. In order to reduce the self-sustainability of migration and the large inflow of new populations, some countries implement restrictive and anti-immigration policies. Most of the theory is concerned exclusively with the prediction of migration flows, even macro-economic models do not attempt to explain migration as a consequence of global economic processes.

There is a claim that migration could lead to increased inequality in communities in migrant host countries. From a pessimistic perspective, there are several reasons why it is considered that unproductive costs could weaken the local and regional economies and increase dependency (de Haas, 2010). The first reason is that increased consumption and land purchase by migrants will cause inflationary pressures and rising land prices, from which poor migrants are most likely to suffer, and thus it could lead to inequality. The other reason is that many items such as household appliances, clothes, and building materials will not be locally produced but could be imported from urban areas or from abroad, which would lead to an intensification of the asymmetric growth process and increasing regional differences between the core and the periphery. Also, this would lead to a double effect of forcing out the local production and strengthening the economies of core areas. Finally, the third reason is that the productive investments of migrants would take place in the worst areas. This further aggravates regional differences in wealth. All this is confirmed by the anticipation of a cumulative causal theory, according to which migration will increase rather than reduce spatial inequalities. In some cases, migration positively influences the different dimensions of social and economic development. Empirical research has pointed out that mechanisms of cumulative causality are not always true, but also that the perfect neoclassical world does not exist in reality. Structural constraints have an impact on many people in poor countries. They also limit their ability to overcome poverty and general underdevelopment.

The fact that the rigidity of structuralist and neo-Marxist approaches is rejected does not mean that these restrictions are not relevant. While the neoclassical theory of migration and development tends to underestimate the significance of these constraints, the structuralist

theory tends to overestimate their influence (de Haas, 2010). Structuralist theory is becoming increasingly disproved. This led to a less negative interpretation of the dependency and a more positive value attributed to the global inclusion of regions and countries in the developing world, whose migration processes are an integral part. However, the migration bias and development success stories could reflect the situations in which migration contributes to deterioration in development.

2. Conservatism and the EU as a study case

The way in which European politicians have responded to the challenges of migration suggests that they are divided into leftist 'liberal' and right-wing 'conservative' groups. Migration has become the main and symbolic issue on which conservatism wants to justify a restrictive policy. While liberalism has a traditional emphasis on minority rights, for conservatism it is a characteristic that there is a support for a repressive and authoritarian government that would be described as another kind of right-wing ideology (such as authoritarianism). Using the case study of migration cases, right-wing populist actors claim that they are spreading conservative positions and have a strict and restrictive attitude towards migration in European societies. Conservatives often have a sceptical attitude towards political knowledge by saying that the capacity to acquire and use such knowledge is limited. Conservatism is connected to a worldview where individuals and society are connected. Conservatives consider that the basic aspect of social life is a common commitment to the law, which they see as a politically built-in form of custom (Rampton, 2016; Beckstein and Rampton, 2018; Maricut-Akbik, 2020). A sceptical view of political knowledge is based on a traditional suspicion that something will change (in this case, changes refer to laws and institutions). Conservatives claim that uncertain knowledge means that there is a danger of overcoming benefits from legal or institutional alternatives. However, there is a risk that citizens will not accept an alternative that will be established despite normative superpower, or that citizens will change their behavior in some unexpected way.

The struggle, in which the migration Commissioner Avramopoulos called Tusk's plans 'anti-European', emphasized the disagreement on how to confront the migration crisis' consequences. The EU members have divided opinions on how to replace the bloc of the Dublin Regulation, according to which country is responsible for the asylum-seeker (Nedergaard, 2018, Panebianco, 2022). They considered introducing a mandatory or voluntary resettlement system for those who are entitled to international protection.

Many migrants seek asylum in Germany or Sweden, and these countries want their EU partners to show solidarity and share the common burden (Karageorgiou, 2016). Greece became the main Mediterranean gateway for migrants, which caused tensions between Greece and some EU members. They escalated because Greece was accused of intimidating migrants who should be registered when they enter the EU. The conversation with Austria was so bad that Greece withdrew its ambassador from Vienna. The point was that Greece insisted on not being the only European migrant holding center, and it required fair sharing of the common burden.

At certain points, the immigrants were forwarded to Hungary, which became another gateway for those trying to arrive in Germany. The migrant crisis in Hungary was brought to the attention of the international public, when the Hungarian police fired water cannon on a large group of migrants on the border with Serbia. Hungary was criticized because of the decision to build barbed wire and to prosecute migrants entering the country illegally. Many Hungarians supported such an attitude of the government, which put them in a difficult position. Hungarian Prime Minister Orbán stated that Europe is more likely to be overwhelmed by migrants, being

mostly Muslims, and he claimed they could be a threat to Christian heritage (Zunes, 2017; Scott, 2020). He blamed Germany for encouraging the influx by welcoming so many migrants. Hungary and Slovakia refused to be part of the EU quota for the distribution of 160,000 migrants across the EU.

The next route for migrants was through Austria (Greussing and Boomgaarden, 2017). They moved from Hungary on their way to south Germany, and the authorities did not return them. Austria has again introduced border checks, as Germany did on its border with Austria, as an urgent measure permitted by the Schengen rules. Slovakia did the same on the eastern border with Austria. However, the European Commission protested against Austria, saying that the restrictions are likely to be unlawful in the EU. About a million asylum seekers arrived in Germany in 2015, which is a record number. This caused great pressure on local authorities, who had to set up new emergency shelters for them. Chancellor Merkel claimed that Germany is ready to deal with genuine refugees, fulfilling its international humanitarian duty. Germany wanted EU partners to accept mandatory quotas in order to extend them to the entire EU. However, Germany was criticized for the 'open door' policy for refugees (Mushaben, 2017). Critics came from fellow conservatives, especially the Bavarian party CSU and right-wing movement Pegida, which organized street protests, claiming that they wanted to defend Germany from 'islamization'. This attitude was supported by France, Italy, and Greece, but generally the EU leaders decided on a voluntary plan. The EU plan says that migrants should be aware of the consequences if they try to move illegally to other EU countries. Facing right-wing and anti-immigration opposition across Europe, the EU committed to reinforce the outer border and to do more to remove migrants who were rejected as asylum seekers.

Major countries such as Germany, Great Britain, France, Italy, and Spain have the largest number of international migrants in the world. In addition to global inequality and instability in some regions, these countries are facing a dynamic migration situation that requires a proactive policy to maintain control. Germany's Chancellor Angela Merkel has said she will apply the principle this year, which is adopting measures to address the current situation. During the growing humanitarian crisis, Merkel promised in late August 2015 that Germany would accept asylum applications from any refugees from Syria. Its temporary open-arms policy for migrants was not contrary to conservative principles. However, her critics consider that her choice of politics could have had negative consequences and that Merkel underestimated those unpleasant consequences of her warm welcome of migrants (Murray and Longo, 2018).

It is important to emphasize that the epistemological principle of conservatism implies that politicians should not carry out strict and fast immigration quotas because it is impossible to predict the needs of local labor markets or to try to prevent mass migration during a refugee crisis. The epistemological understanding of conservatism prescribes cautiousness and flexibility to cope with changes in external circumstances (Beckstein and Rampton, 2018). The rising influence of right-wing parties in Northern and Western Europe prompted center-right parties to adopt a variety of extreme attitudes, typically associated with ideologies such as nationalism, anti-globalization, protectionism, and anti-immigration policies. For instance, Brexit encourages anti-democratic populists in Eastern and Central Europe. Four countries of the Visegrad alliance (Hungary, Poland, Slovakia, and the Czech Republic) refused the EU's distribution of refugees. Thus, the European Commission launched the punitive process for violating the agreement. The attitude of these countries could lead to the breakdown of the Union into the East and West (Kanter, 2017). Austria has been a mediator between the countries of the Visegrad alliance and the EU. The Austrian role is quite important having in mind the rigid attitudes of the prime ministers of these four countries. Namely, the former Slovakian Prime Minister Fico, has emphasized the link between terrorism and uncontrolled immigration,

while Hungarian Prime Minister Orbán even highlights the great influx of the Muslim population, recalling the era of the Ottoman Empire. Also, the Polish government has a tenacious attitude toward the refugee issue, preferring sanctions than receiving refugees. The ruling 'Law and Justice' party defends the strict anti-migration stance as a battle to preserve Christian identity. The Austrian chancellor Kurz tries to limit the influence of the far right wing. There will be stricter laws on asylum procedures in Austria and the migration problem will be reduced. He also assured the closure of the Balkan route to migrants in spring 2016. Extremely negative statements against migrants, such as those from the Orbán - Fidesz Party or the far-right in Austria (Freedom Party – FPÖ), point out the security of states that conservative epistemology contradicts.

Migrants who came from Hungary in 1956 and Czechoslovakia in 1968 to Western Europe are understood differently than today. They did not oppose Western political institutions, nor were European culture and traditions unknown to them. Westerners viewed migrants as victims of authoritarian regimes, and their arrival in Western Europe was seen as a confirmation of liberal democratic institutions' superiority. Migration, which followed the EU enlargement to East Europe in 2004, 2007, and 2013, was a serious integration problem. The influx of Romanian or Polish immigrants into the United Kingdom did not cause sympathy. Nowadays, there are immigrants from the main countries of origin of Syria, Afghanistan, and Iraq, as well as the consequence of the war in Ukraine (Stanković, 2022), there is a new wave of refugees from Ukraine in the last half year.

Modern European discourse places Islam as a conception of a world that is incompatible with modernism and European-American values. The right-wing parties used this idea to present the loyalty of Muslims, to the countries that received them, as an issue. This idea applies not only to the right-handers. Even Czech President Miloš Zeman, who is an immigration critic from the center-left, argued that it is impossible to integrate Muslims into Europe. The concept of 'Muslim communities' is a simplified and stable Islam that acts as a contrast to the West.

The integration of Muslims in Europe is a challenge. The characteristic of modern European life is to increase the illegitimacy of the role of religion in the public sphere, which is contrary to Islamic integration and Muslims who have come to Europe with their own understanding of the role of religion. Some data reveal that Islam is not a major factor in shaping the political mobilization of Muslims. There are other elements, such as ethnicity, class, and population distribution, which have a negligible impact.

3. A strategic plan for dealing with migration problem in the EU

Having in mind great differences regarding the development and attitudes in migration issues in EU, it would be very important to define a strategic approach that could treat the problem of migration in the EU in comprehensive way and to bring a policy on the level of the EU. It entails a completely organized, steady and clever approach that will be acceptable for all EU countries and the least painful for migrants. In this section we will propose a Multi-layer problem solution consisted of two phases (Phase 1 and Phase 2) that represents the vertical and horizontal decomposition of the solution, respectively. Both phases are composed of layers: Phase 1 is composed of 2 layers, while Phase 2 is composed of three layers.

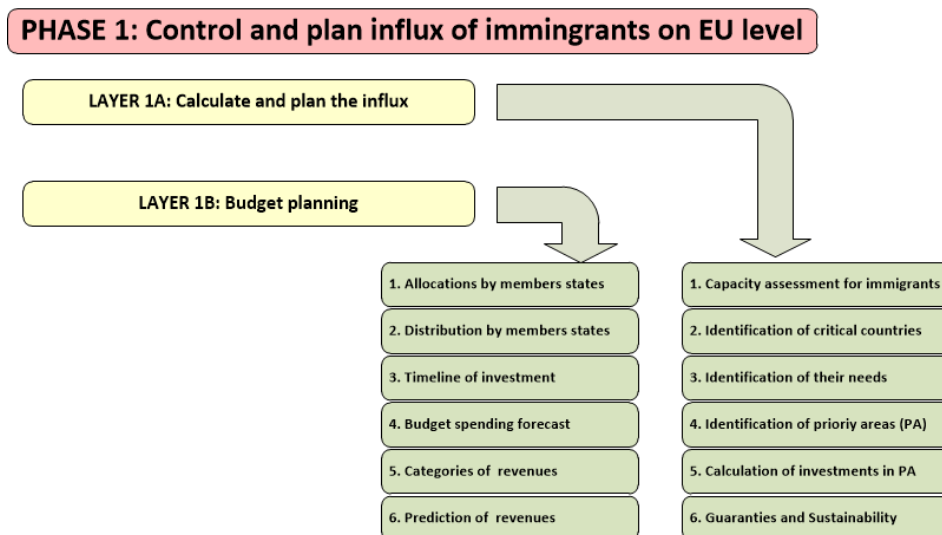
3.1. Multi-layer problem solution

PHASE 1. EU should not allow a stray or unplanned influx of migrants where the member states will shift the problem from one country to another

Layer 1A: Calculate and plan how many EU migrants can absorb (integrate)

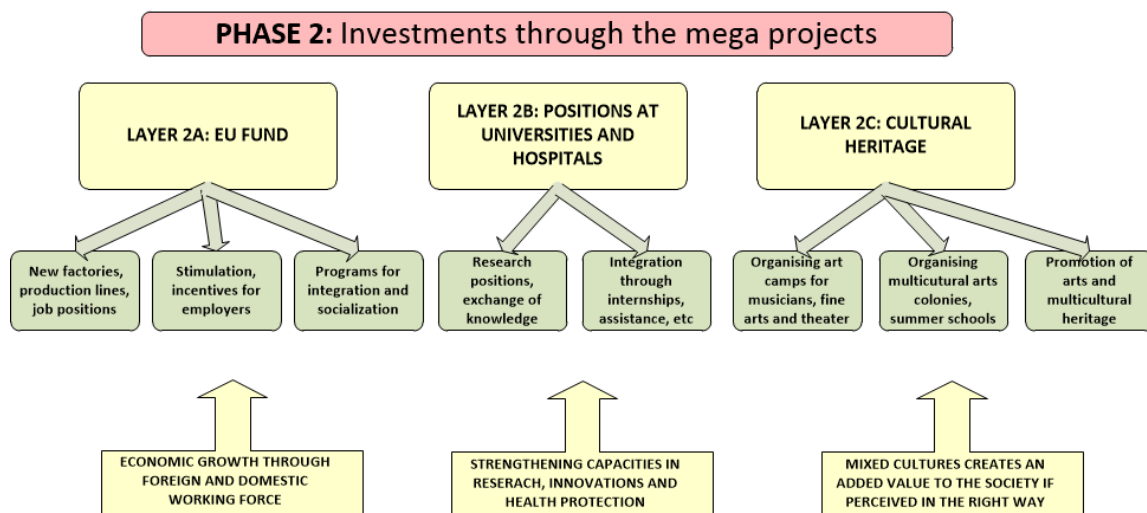
Layer 1B: Identify the sources (funds) that will help their integration.

Figure 1: Vertical planning – Phase 1



Source: Author's research

Figure 2. Horizontal planning – Phase 2



Source: Author's research

PHASE 2. Funds should be defined for three types of mega projects:

Layer 2A. EU FUND committed to enhance production lines and new companies that would primarily employ certain (predefined) quota of migrants. With co-operation of domestic labor force, migrants will become important factor in economic growth in the predefined priority areas. Positive perception- bringing new jobs for the local population and better place for the whole area

Layer 2B. Positions at universities and hospitals: open quotas for migrants who have adequate qualifications - Raising awareness that there are many educated people among migrants who are capable to contribute to development of the society, people who save lives, solve complex problems and they are worthy of respect.

Layer 2C. Cultural heritage: Cultural integration could be achieved through special programs of art camps, focusing on migrants artists, with the aim to show that the new culture creates a new value and enriches the existing one.

Conclusion

In Europe, there are countries with a developed economy and a stable democracy that can easily absorb refugees and integrate them into society to make them useful members. In this case, the population has no fear of different cultures or a possible weakening of the economy. Such countries are Germany and Sweden, which have experience in dealing with a foreign workforce. On the other hand, Eastern European countries still have a fragile democratic system and are suffering from severe economic conditions. In such a situation, they fear the refugees will only bring problems because they cannot even employ their own human resources at a satisfactory level. Also, there are states with a young democracy, fearing that different cultures can bring instability to society. Similarly, states from the south of Europe are primarily thinking of consolidating their economies with their human resources. They still react with nationalism, and as a consequence, too much of the burden should fall on the developed countries. A comprehensive and unified approach coordinated centrally at the level of EU institutions is presented.

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