

Perspectives for the Evolution of Entrepreneurial Education and Sustainable Entrepreneurship in Romania

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Received 14 April 2023; received and revised form 8 May 2023; accepted 23 May 2023; Available online 30 June 2023

Abstract

Entrepreneurial education is what supports young people to establish new businesses that bring profit, to develop new concepts or products, to develop their capacity for professional insertion, to show a strong entrepreneurial spirit in their activity, etc. The present work aims to investigate the prospects for the development of entrepreneurial education and sustainable entrepreneurship in Romania, in the context where entrepreneurship, as a didactic discipline and respectively a field of scientific research, has a fairly recent history in the Romanian universities. This is a qualitative analysis on European and Romanian public data. In order to assess the sustainability of the data, the methodological tools involving analyses are implemented. The results indicate that entrepreneurial education leads to a significant increase in the level of economic preparation of entrepreneurs through educational programs, being at the same time an indicator for evaluating the results obtained.

Keywords: entrepreneurial education, , opportunity entrepreneurs, sustainable entrepreneurship.

1. Introduction

In a settled capitalist economy, where linguistic explanations no longer matter but economic and social practice, entrepreneurship is characterized as "the introduction of a new economic activity that leads to change in the market" [6].

Also, an entrepreneur is a person who creates a new business under conditions of risk and uncertainty, aiming to obtain profit and economic growth by identifying new opportunities, or by having an idea and by gathering the necessary resources [3, 12, 21]. As can be seen, in today's reality, the notion of an entrepreneur is closely linked to the market and

especially to its needs. Instead, we must retain a very important appreciation: even if he has the ability to identify several market needs, in similar or different market segments, an entrepreneur cannot act simultaneously to solve all these needs, but must choose to engage and channel his energy in providing solutions to a single need, at a given time. It is the situation similar to that of a doctor who, based on thorough analyzes and/or a complex screening, can identify several health conditions of a person, but can only treat one condition at a time, following that, once which respective condition is stabilized, to move on to the treatment and improvement or cure of the next condition etc.

An important feature of entrepreneurial activity and educational attainment is that individuals with a higher level of entrepreneurship education are more frequently starting a business venture out of recognized opportunity. Conversely, a larger share of individuals with a lower education level tend to start a business venture out of necessity [18]. Economic growth is significantly influenced by the opportunity/necessity characteristic of entrepreneurial activity.

Opportunity-based entrepreneurs are usually more interested in investing in innovation to increase the competitiveness of their businesses, they have a longer vision of their businesses, and the hope of increasing the human resource in their firms is higher. Necessity-based entrepreneurs are usually interested in their ventures to be channels that overcome situations in which they do not see other employment options. Entrepreneurial education is a critical factor in building the risk appetite and strengthening self-efficacy of entrepreneurs [19]. Education can affect students' attitudes toward entrepreneurship and their entrepreneurial self-efficacy [1]. A low level of entrepreneurial intentions of the students is determined by the lack of entrepreneurial education [9].

Bux et al. (2016) found that entrepreneurship and entrepreneurial attitude can be refined by education, because they are not totally inborn. They also suggested that universities should provide students with a comprehensive entrepreneurial education and facilitate opportunities for them to collaborate with various firms, engage in market analysis, product development, fundraising and corporate operations. before entering the labor market, because it might reduce the risk of failure [4].

Entrepreneurial education may concentrate on modification of attitudes and development of basic skills to encourage entrepreneurship for creating an economically strong country [5]. Increasingly, entrepreneurship education is becoming an essential part of the curricula of universities because entrepreneurial skills are seen as more critical than traditional business skills, which skills can be applied formal businesses, social ventures, personal activities, and the field of politics [10]. Still, the way entrepreneurship education relates to lifelong competencies and how it contributes to the

quality of life through building human and social capital needed for promoting knowledge exchange and collaboration with relevant actors are key [18].

Entrepreneurial education has influences on how a business is managed, for example its level will determine business aspirations, market entry strategy and business performance.

Specifically, opportunistic entrepreneurs are characterized by lower levels of satisfaction [15], reduced returns to education [8], lower performance [25], and shorter periods in which they will be active in entrepreneurship [2] than educated entrepreneurs. At the macro level, opportunity entrepreneurs and those with entrepreneurial education appear to have a differential impact on economic growth, job creation and aspirations [13].

Three main national strategic documents are particularly relevant in the Romanian context to understand the role of tertiary education (and specifically entrepreneurship education): The National Strategy for Tertiary Education in Romania, The National Strategy for RDI and the National Strategy for Competitiveness, but all of them refer very generally to entrepreneurship but do not refer to any of the strategic EU policy documents regarding entrepreneurship competencies and education. Still, they provide a framework for positioning education as a major mechanism for developing human and social capital. More than that, 2 of the 4 smart specializations refer directly to agriculture and rural development. The first one is *bio-economy*, based mainly on the sustainable agricultural potential of each country in the European Union. The second one is *energy and environment*, another critical area answering to the challenges in the field of various resources of energy, the energy efficiency of installations and networks, protecting the water resources and using secure materials [18].

Hockerts and Wüstenhagen defined the sustainable entrepreneurship as "*the discovery and exploitation of economic opportunities through the generation of market disequilibria that initiate the transformation of a sector towards an environmentally and socially more sustainable state*" [14]. Several researchers appreciate that research in the field of sustainable entrepreneurship provides a unique alternative of economic development for the well-being of

future generations, which respects social and environmental values. Likewise, the activities performed by entrepreneurs are considered sustainable when they relate to integrated economic, social and environmental objectives that persist and generate well-being over time. Such companies are considered sustainable development companies [11, 22, 23]. Sustainable entrepreneurs do not seem to be ready to respond to the challenges or to take any risks by investing in green business, but also that the government and educational institutions do not recognize their own role and the need of supporting the development of green entrepreneurship [20].

Therefore, at the base of a sustainable entrepreneurship is an educated entrepreneurship, and the sustainable entrepreneurs are definitely selected out from the educated, or opportunistic-educated entrepreneurs. The present work aims to investigate the prospects for the development of entrepreneurial education and sustainable entrepreneurship in Romania, in the context where entrepreneurship, as a didactic discipline and respectively a field of scientific research, has a fairly recent history in the Romanian universities.

2. Material and Method

The current analysis is predominantly qualitative, starting from public data related to SMEs, both at European and national level. In this sense, we used recognized public databases: on the one hand, we used series of data centralized by European Commission, through the European Court of Auditors [7]. On the other hand, we used series of data centralized by National Institute of Statistics [17], respectively Organization for Economic Cooperation and Development [18]

related to supporting entrepreneurship and innovation in higher education in Romania.

The research methodology was analytically descriptive and comparative, following the evolution of the development of SMEs in Romania over the last 5 years, against the background of the evolution of entrepreneurial education described previously, especially in universities (at the formal level). In order to assess the sustainability of the data, the methodological tools involving analyses are implemented.

Thus, relevance, scoping, impact, comparative, associative and political analyses were conducted.

3. Results and Discussions

At the EU level, 99.8% of enterprises operating in the non-financial business sector in 2018 were SMEs. These SMEs employed 94.87 million people, accounting for 63.4% of total employment and generating 52.2% of value added. Almost all (92.9%) of the SMEs were micro-enterprises (Table 1).

In Romania, we consulted the National Institute of Statistics for the similar data and below we present some series of current data, regarding the dynamics of entrepreneurship in recent years, to give us a clearer picture of the importance of the activity of SMEs in the economy, but also of the need the development of an educated entrepreneurship.

As can be seen in Tables 1 and 2 (the latest published and centralized data), the results of SMEs in Romania are very similar to those in the EU (in terms of percentages), in some places even more relevant. Fig. 1 and Fig. 2 present the evolution of individuals and companies in Romania.

Table 1. Number of enterprises, employees and added value, 2018, EU-28 [7]

Size	Nr. of enterprises		Added values		Employees	
	Million	%	Mil. Eur	%	Million	%
Micro (< 10)	23.13	92.9	1,484,106	18.9	41.54	27.8
Small (< 50)	1.49	6.0	1,303,380	16.6	29.54	19.7
Medium (< 250)	0.23	0.9	1,313,263	16.7	23.80	15.9
Total SMEs	24.85	99.8	4,100,750	52.2	94.87	63.4
Big (> 250)	0.05	0.2	3,753,154	47.8	54.76	36.6
Total	24.90	100	7,853,904	100	149.63	100

Note: added value = gross income from operating activities minus subsidies and indirect taxes.

Table 2. Number of enterprises, employees and added value, 2021, Romania [17]

Size	Nr. enterprises		Added values		Employees	
	Number	%	Mil. Eur	%	Number	%
Micro (< 10)	595,388	91.07	188,151	38.78	950,237	23.80
Small (< 50)	48,804	7.47	38,488	7.93	866,507	21.70
Medium (< 250)	7,876	1.20	52,877	10.90	752,027	18.84
Total SMEs	652,068	99.74	279,516	57.61	2,568,771	64.34
Big (> 250)	1,676	0.26	205,653	42.39	1,423,420	35.66
Total	653,744	100	485,169	100	3,992,191	100

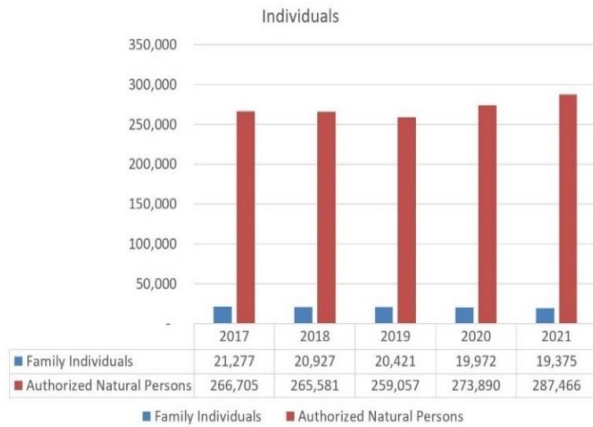


Figure 1. Evolution of individuals in Romania [17]

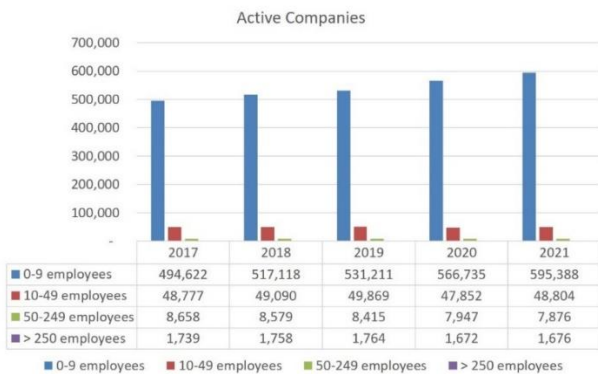


Figure 2. Evolution of companies in Romania [17]

Table 3. Companies dissolved in Romania [17]

	2017	2018	2019	2020	2021
Companies	48,120	49,199	48,547	45,884	59,459
Individuals	26,297	35,308	51,246	16,622	21,919
Other legal entities	235	255	289	230	262

Table 4. The evolution of the turnover of Romanian companies [17]

Employees	2017		2018		2019		2020		2021	
	Bill. EUR	%	Bill. EUR	%	Bill. EUR	%	Bill. EUR	%	Bill. EUR	%
0-49	104.0	35.1	113.3	34.8	125.1	35.7	123.4	36.7	144.8	36.3
50-99	26.7	9.0	28.9	8.9	29.9	8.5	28.6	8.5	34.0	8.5
100-249	40.7	13.7	45.1	13.9	48.0	13.7	45.4	13.5	54.2	13.6
SME Total	171.3	57.9	187.3	57.6	203.0	58.0	197.4	58.7	233.0	58.4
250-499	24.6	8.3	29.4	9.0	30.8	8.8	29.3	8.7	37.9	9.5
>= 500	99.9	33.8	108.6	33.4	116.2	33.2	109.4	32.5	128.3	32.1
Total	295.8	100	325.3	100	350.1	100	336.1	100	399.2	100

Considering that:

- more than 100,000 of new companies are created every year (according to National Trade Register Office in Romania),

- the natural growth in business is about 15,000 – 25,000 companies (Fig. 1 and Fig. 2), we can draw the conclusion that *an average of 75-80% of the number of companies that are established every year in Romania end up being dissolved.*

This aspect shows us that opportunistic entrepreneurship is still practiced in Romania and that time and money are being consumed with the management of a situation that could be greatly improved by implementing an educated, predictable and assumed entrepreneurship.

This conclusion is also supported by the data in Table 3 below. On the other side, we can conclude that *relative to the population of our country, 1 out of 25 people could be an entrepreneur!*

The Table 4 below shows the evolution of SME’s turnover in Romania in the last 5 reported years. For the RON-EUR conversion, we used the average annual EUR exchange rate calculated by the National Bank of Romania [16].

Referring to the statistical data presented in Tables 1-4 and Figs. 1-2, we can make some **assessments** regarding the importance of SMEs in the economy:

- create new jobs in the economy: SMEs provide 63.4% (at the level of the European Union), respectively 64.34% (in Romania) of the total number of employees;
- they bring money into the economy, which then circulates on all the economic-financial markets: they make almost 60% of the turnover of the companies and are responsible for 57.6% (in Romania), respectively 52.2% (at the level of the European Union) in terms of the value added to the economy;
- poly-qualification being useful, it constitutes a favorable climate for the professional development of employees. Moreover, it seems that SMEs offer employees more professional development programs than large enterprises, and SME employees benefit more from these programs than employees of large firms [21];
- in capitalizing on a competitive advantage in the market, innovation, creativity and flexibility are stimulated - basic elements of the entrepreneurial process. Further, these elements are the basis of technological progress, the benefits of which also return to society;
- as a direct consequence of stimulating innovation and creativity, by cultivating flexibility at the level of partnerships and by using new technologies, the phenomenon of globalization of SMEs at the international level is developing;
- the large number of SMEs stimulates competition, and competition breeds performance;
- supports the functioning of large enterprises, by the fact that certain activities or processes can be better carried out by small and medium-sized enterprises. Other times, the activity of large enterprises relies to a very large extent on the activity of partner SMEs.

There are, however, a number of **barriers** that prevent the development of SMEs [18, 24], among which we list:

- very poor entrepreneurial education and organizational culture;

- the decrease in the capacity of the internal market due to the migration of qualified human resources;
- difficult access to financing, reduced possibilities of guaranteeing loans;
- high taxation (dozens of fees, taxes and contributions to over 15 special funds);
- insufficient incentives for investment and development;
- discrimination of SMEs vis-à-vis big companies (especially state-owned ones);
- overbearing bureaucracy regarding the establishment and especially the liquidation of companies;
- the lack of state involvement in guaranteeing SMEs against external contracts;
- the difficult access of SMEs to internal and external economic information based on market studies;
- insufficient managerial and economic training of entrepreneurs: in Romania for the last 30 years, education has been in decline;
- corruption in public administration and the judicial system;
- excessive controls on SMEs;
- incomplete economic legislation, with very frequent changes, sometimes even contradictory;
- lack of predictability;
- SME organizations insufficiently strong to defend and promote their specific interests;
- the absence of a coherent national strategy for SMEs, in the medium and long term.

Entrepreneurship in agriculture and rural development. Without launching into the presentation of sensational figures, appreciating only what can be seen with the naked eye (and sometimes what should be seen, but is not), we can conclude some aspects that we consider relevant for agriculture in Romania. First, at the level of **motivation**, we can appreciate that in Romania there are:

- very large and diversified natural resources,
- a high capacity to assimilate human resources,
- a low competitive environment,
- huge unregistered areas, lack of land records,
- a still clean environment, with great possibilities for leisure,

- a high market demand for healthy food and a healthy lifestyle,
- the need to capitalize on traditional, natural and natural products, with controlled geographical origin, anchoring in our own identity.

On the other hand, we must also point out a series of **obstacles**, which make the actual situation rather difficult to manage, and entrepreneurship in agriculture more difficult to develop, at least from several perspectives:

- an aging population in rural areas,
- a deficient rural infrastructure,
- an almost non-existent entrepreneurial education in the rural environment,
- an old, outdated and ineffective agricultural technology,
- a harmful political influence in the agricultural sector (areas leased only for subsidies or incompetent exploitation of natural resources),
- lack of a coherent national strategy for the sustainable development of the rural environment.

4. Conclusions

The realization of entrepreneurship education in universities seems important for stimulating entrepreneurship because it gives individuals a sense of autonomy, independence and self-reliance, makes people aware of alternative career choices and broadens the horizons of individuals, thus creating people better prepared to perceive the market opportunities. At the same time, education provides knowledge that can be used by individuals to develop new entrepreneurial opportunities.

Entrepreneurial education leads to a significant increase in the level of economic preparation of entrepreneurs through educational programs, being at the same time an indicator for evaluating the results obtained. The results of such educational programs are not immediate. Thus, entrepreneurial education is also measured by the rate of new business creation.

Even if most of the mentioned obstacles can only be overcome through direct state policies (so through interventions from the public sector), we consider that the motivations above are strong enough to stimulate the private sector to develop as many businesses as possible in the rural,

agricultural area or non-agricultural: animal or vegetable farms, meat-milk-flour-vegetable-fruit processing units, sanitary or veterinary offices.

References

- [1] Basu A., M. Virick, 2008, Assessing Entrepreneurial Intentions Amongst Students: A Comparative Study, National Collegiate Inventors & Innovators Alliance.
- [2] Block J.H., K. Kohn, D. Miller, K. Ullrich, 2015, Necessity entrepreneurship and competitive strategy. *Small Business Economics*, 44(1), 37–54.
- [3] Borza A., C. Mitra, O. Bordean, 2009, Entrepreneurship. Management of small and medium-sized companies, Concepts and case studies, Risoprint Publishing House.
- [4] Bux S.R., G.F. Gul, I. Ali, 2016, Analysis of Influence of Personality Factors on Entrepreneur Intentions among Students. *International Journal of Management Sciences and Business Research*, 5(12), 289-301.
- [5] Çolakoğlu N., I. Gözükara, 2016, A comparison study on personality traits based on the attitudes of university students toward entrepreneurship. *Procedia – Social and Behavioral Sciences* 229, 133–140.
- [6] Davidson P., 2016, What Is Entrepreneurship? *International Studies in Entrepreneurship, Researching Entrepreneurship*.
- [7] European Court of Auditors, 2022, Special Report: The competitiveness of SMEs, <https://bit.ly/3Zro5TW> (accessed on 19.09.2023).
- [8] Fossen F.M., T.J. Büttner, 2013, The returns to education for opportunity entrepreneurs, necessity entrepreneurs, and paid employees. *Economics of Education Review*, 37, 66–84.
- [9] Franke N., C. Luthje, 2004, Entrepreneurial intentions of business students: a benchmark study. *International Journal of Innovation and Technology Management*, 1(3), 269-288.
- [10] Gedeon S.A., 2014, Application of best practices in university entrepreneurship education. Designing a new MBA program. *European Journal of Training and Development*, 38(3), 231-253.
- [11] Gibbs D., 2009, Sustainability entrepreneurs, ecopreneurs and the development of a sustainable economy. *Greener Management International*, 55, 63–78.

- [12] Hatten T., 2009, Small Business Management, 4th Edition, USA, Houghton.
- [13] Hessels J., M. van Gelderen, R. Thurik, 2008, Entrepreneurial motivations, aspirations and their drivers. Small Business Economics, 31(3), 323–339.
- [14] Hockerts K., R. Wüstenhagen, 2010, Greening Goliaths versus emerging Davids: Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. Journal of Business Venturing, 25, 481–492.
- [15] Kolstad I., A. Wiig, 2015, Education and entrepreneurial success. Small Business Economics, 44(4), 783–796.
- [16] National Bank of Romania, <https://www.bnr.ro/Home.aspx> (accessed on 13.09.2023).
- [17] National Institute of Statistics, <http://bit.ly/2sMukUk> (accessed on 13.09.2023).
- [18] OECD/EUROPEAN UNION, 2019, Supporting entrepreneurship and innovation in higher education in Romania, <https://bit.ly/3QzAD7r> (accessed on 13.09.2023).
- [19] Salisu B.G., U. Salisu, A.M. Abdu-Abdissamad, Z. Muhammed, 2022, Moderating Role of Entrepreneurship Education on The Relationship Between Personality Attribute and Entrepreneurial Intention. Creative Business Research Journal 2(2), 69-75.
- [20] Sarango-Lalangui P., J.L.S. Santos, E. Hormiga, 2018, The Development of Sustainable Entrepreneurship Research Field. Sustainability, 10, 2005.
- [21] Scarborough M.N., L.D. Wilson, W.T. Zimmerer, 2009, Effective Small Business Management, An Entrepreneurial Approach, 9th Edition, New Jersey, Pearson/Prentice Hall.
- [22] Schlange L.E., 2009, Stakeholder identification in sustainability entrepreneurship. Greener Management International, 55, 13–32.
- [23] Tilley F., W. Young, 2009, Sustainability entrepreneurs: Could they be the true wealth generators of the future? Greener Management International, 55, 79–92.
- [24] Vac C., 2019, Entrepreneurial education, Școala Ardeleană Publishing House .
- [25] Vivarelli, M.Is., 2013, Entrepreneurship necessarily good? Microeconomic evidence from developed and developing countries. Ind Corp Change, 22(6), 1453–1495.

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