

Entrepreneurship Education as the key to unlocking the internationalization of Small and Medium-sized Enterprises in Romania

Ioana-Alexandra DINU*

National University of Science and Technology Politehnica Bucharest, Bucharest, Romania

ORCID ID: 0009-0004-1596-079X

*Corresponding author, e-mail address: dinuioanaalexandra99@gmail.com

Roxana-Mariana NECHITA

*National Institute of Research and Development in Mechatronics and Measurement Technique,
Bucharest, Romania*

National University of Science and Technology Politehnica Bucharest, Bucharest, Romania

ORCID ID: 0009-0004-7556-5572

e-mail address: roxana.nechita2000@gmail.com

Iuliana GRECU

National University of Science and Technology Politehnica Bucharest, Bucharest, Romania

Best Paint Distribution SRL, Bucharest, Romania

ORCID ID: 0000-0001-5440-9520

e-mail address: iuliana.grecu@upb.ro

Sorin-Cristian IONESCU

National University of Science and Technology Politehnica Bucharest, Bucharest, Romania

e-mail address: sc.ionescu@gmail.com

Abstract. This study explores how entrepreneurial training contributes to the global expansion capacity of Romanian Small and Medium Enterprises (SMEs), with a focus on the manufacturing sector. The research addresses how limited access to formal entrepreneurship training programs hinders international growth among SME owners, many of whom depend on experience-based learning. A qualitative methodology was employed, combining a systematic literature review with empirical data from a doctoral study on Romanian manufacturing SMEs. Findings suggest that formal entrepreneurship education significantly improves capabilities such as market analysis, risk assessment, and international strategy development – essential factors for competitiveness in global markets. The study highlights the need for an update in the curriculum of educational programs that should reflect the current status quo and challenges entrepreneurs face, with a focus on emerging economies. It enhances understanding of the topic by framing internationalization as both a strategic and educational process, and offers practical insights for policy-makers, consultancy firms, and training institutions aiming to support SMEs international growth.

Keywords: internationalization, entrepreneurial education, manufacturing sector, globalization, sustainable market expansion

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Introduction

Romania's economy is dominated by Small and Medium-sized Enterprises (SMEs), as they represent nearly 99% of all active companies of the country, employing more than 60% of the national workforce and generating almost half of the gross value added (GVA) in the non-financial sector of the country [1]. Part of this segment is the manufacturing industry, that plays a significant role, contributing with approximately 28% of Romania's Gross Domestic Product (GDP) and supporting a large proportion of SMEs in terms of both employment and turnover [2].

However, despite all these facts, Romanian SMEs have a limited degree of internationalization, as only 12.5% of these companies were engaged in exports in 2021, compared to the EU average of 17.3%, and their participation in global value chains also remain low [1]. An important contributor behind this is the insufficient managerial skills and the limited access to structured entrepreneurship education. Following the post communist Romanian context, many entrepreneurs still rely on experiential learning, although valuable, it is not sufficient for overcoming the complexity of today's global markets.

Therefore, entrepreneurship education (EE) comes as the necessary tool for addressing these barriers, providing entrepreneurs with strategic planning frameworks, cross-cultural competencies, analytical skills, competitiveness and readiness for global integration. The present study therefore investigates the connection between entrepreneurship education and SMEs internationalization in Romania, following the structure as follows: in the literature review, there are briefly introduced the concepts of entrepreneurial education and internationalization. Methodology proposes a qualitative study over academic literature and European Commission reports in order to address the research question: *How does entrepreneurship education contributes to the international expansion capacity of Romanian SMEs?* The hypothesis that is guiding this study is that structured training programs give entrepreneurs clearer strategies and stronger managerial skills, which improve their ability to compete internationally. Part four provides the results obtained through the research and the paper concludes by laying down potential research directions.

Literature review

Entrepreneurship education is being considered as a fundamental driver in strengthening the competitiveness of SMEs. Well-structured education programs suggest that training initiatives can improve the motivation and skills of entrepreneurs, particularly by supporting opportunity recognition, risk evaluation and the design of well-established strategies for business internationalization [3]. Other researchers had confirmed that experiential learning is common, but formal training provides the structured frameworks required to engage effectively in the global economy [4].

Internationalization represents a complex concept that can be briefly summarized as the process in which a firm conducts business outside its home country, or does business with entities from foreign countries [5]. This whole process requires a mix of managerial competences, including market knowledge, planning ability, and organizational learning. These are difficult to acquire only through experience and are more developed in structured training environments. Comparative research stresses that export performance is linked to the strength of managerial and strategic competences, that can be reinforced by entrepreneurship education [6][7].

Moreover, globalization had changed the conditions of work and learning, and the new international labour market expects from its new entries to have a specific set of skills, knowledge and understanding in order to interact well in global settings. However, this perception is often related to entrepreneurship education that the actors involved need to have so that international business can be conducted properly [8]. In this way, problem arises from the lack of entrepreneurship education that the companies contain into their internationalization process.

The way in which education is delivered it is impacting directly the outcome, as for example, a meta-analytical work shows that while EE has, in general, a positive effect, its size varies considerably: programs based on experiential learning, simulations, and projects achieve better results than purely lecture-driven courses. Moreover, in another study, global perspectives and cross-cultural content were integrated into EE programs and that concluded into a successful entry for graduates and entrepreneurs in foreign markets [9].

Considering the Romanian market, globalization had made its path into the economy of the country and had increasingly integrated itself into the market through the help of multinational enterprises. However, SMEs are a different type of firm which present a higher level of risk, uncertainty in doing business, high competitiveness and for them the option of accessing educational tools it can be quite expensive or time-consuming, which comes as a disadvantage, because due to their size, they have a limited amount of employees and capital, while studying they also need to run the business, as most of the SMEs from Romania are small businesses [3]. Considering the below figure from Eurostat [10], that shows the participation rate in non-formal education and training that are job related in Romania, in comparison with the European Union average, Romania has a substantial lower level, but it had risen

considerably from 2022 till 2024, which can be seen as an improvement in the national learning culture and a potential enabler for future entrepreneurial training initiatives.

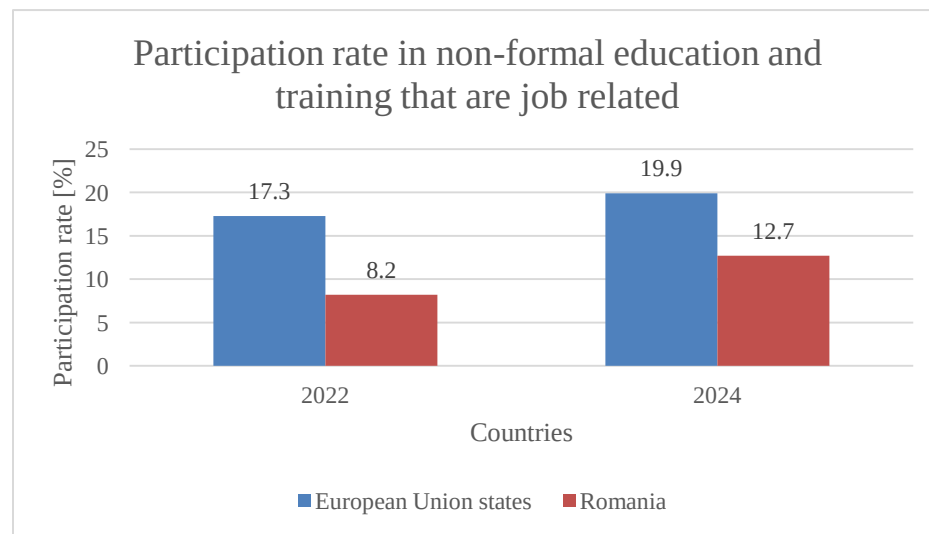


Figure 1: Participation rate in non-formal education and training that are job related (EU vs Romania)
Source: Eurostat, 2024

Another key consideration is digital preparedness. Research found that SMEs with strong digital capabilities are more competitive in cross-border e-commerce and more integrated into global value chains [11]. However, research done by the European Commission in 2023 had shown that over 53% of SMEs have a basic level of digital preparedness, while in terms of innovation, Romania has the weakest performance indicator in the European Union, which can only deepen the need for education and formal training for enterprises [12].

Nevertheless, research highlights the importance of institutional collaboration in supporting SMEs internationalization. When universities, government bodies, and business associations work together, firms gain more targeted training and strategic support. Countries such as Poland and the Czech Republic are frequently highlighted as encouraging examples of effective institutional support models in Central and Eastern Europe [13]. Such collaborations remain rare in Romania, which contributes to the country's internationalization performance when compared to other EU member states.

Methodology

In order to examine the contribution of entrepreneurship education (EE) to the internationalization of Romanian SMEs in the manufacturing sector, a qualitative research design was used. This method was chosen for examining processes and meanings in contexts with limited or fragmented statistical data [14].

In this study, two complimentary approaches are used: first, there has been a systematic review of academic literature addressing the issue on entrepreneurship education which was performed by retrieving peer-reviewed articles from Scopus and Web of Science databases using keywords such as entrepreneurship education, SME internationalization, Romania, and manufacturing along with data from European Commission reports and Eurostat statistics. The analytical procedure involved content analysis, aimed at identifying recurring themes related to training access, managerial competences, export readiness etc.. Secondly, empirical data was extracted also from one of the authors doctorate reports done on the internationalization of Romanian SMEs from manufacturing sector in order to enhance the arguments presented in the study.

For a better understanding of this paper, this research is guided by the research question of “*How does entrepreneurship education support the international expansion capacity of Romanian SMEs in the manufacturing sector?*”. Starting from the working hypothesis, organized EE programs enhance managerial competencies, especially in risk awareness, strategy planning, and cross-cultural understanding, which are relevant with SMEs' preparation for global markets. This assumption aligns with earlier research that link managerial and strategic skills to improved export and international performance [6][7].

Results and further discussions

Entrepreneurship education and assistance programs supported by the European Union (EU) have become essential resources for SMEs to improve their international exposure. The European Commission supports SME internationalization through initiatives such as the Enterprise Europe Network (EEN) and Erasmus for Young Entrepreneurs (EYE). The EEN assists companies in partner search, support in innovation, access to new markets, while the EYE promotes cross-border entrepreneurial learning through mentoring and business exchanges. The initiatives collectively reduce informational and financial barriers and strengthen SMEs' capacity for international growth [15].

Despite the availability of these various EU support instruments, Romania shows limited participation in educational programmes that include training and consulting services. This is largely due to firm-level constraints associated with their size, as well as systemic issues such as bureaucracy and insufficient access to clear information regarding project procedures, implementation steps, documentation. [16] This implies that Romanian enterprises are not using channels meant to provide both financial aid and entrepreneurship education, therefore compromising the process via which knowledge transfer and management training may facilitate internationalisation.

According to the Education and Training Monitor 2024, just 19.1% of Romanian people engaged in education or training during the previous year, compared to 39.5% for the EU average. Even when programs are accessible, SMEs' ability to benefit from training opportunities is limited due to a low participation rate in ongoing learning. These findings strengthen the notion that the efficiency of entrepreneurship education is determined not just by the quality of the programs, but also by the learning culture in which they are implemented [17].

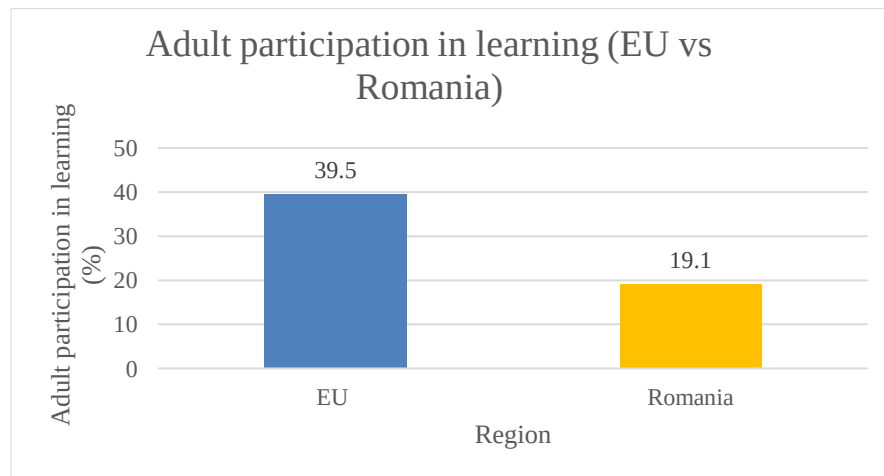


Figure 2: Adult participation in learning programs (EU vs Romania)

Source: European Commission, 2024

However, research from case studies shows that when Romanian SMEs receive structured guidance, they see significant benefits. Cattus, a medical device manufacturer from Romania, transitioned from a domestic supplier to a worldwide provider with ongoing support from the Enterprise Europe Network, which offered targeted assistance, market information, and regulatory guidance [20]. This example illustrates the study's working hypothesis: organized training courses, when accessible, improve management competencies and aid in the internationalisation process.

Taken together, the data indicate that the main challenge for Romania is not whether entrepreneurship education is successful, but whether SMEs can regularly access it and whether programs are geared to meet their internationalization requirements. Low uptake of non-financial assistance and low engagement in adult learning reflect structural barriers that limit the impact of EU and national efforts. Compared to countries like Poland and the Czech Republic, where institutional coordination between universities, chambers of commerce, and policymakers has resulted in increased export intensity, Romanian SMEs continue to face an environment in which educational support is fragmented and underutilized [12].

During the doctoral research conducted in 2024 by one of the authors [5], a study involving 42 Romanian small and medium-sized enterprises (SMEs) from the manufacturing sector was carried out, focusing on the

internationalization process. The findings revealed that more than 33.3% of respondents identified firm-specific characteristics as major challenges in entering international markets. Among these, the lack of education, training, and an appropriate organizational culture were highlighted as significant factors. Additionally, 60% of participants cited organizational barriers, particularly the lack of expertise in researching foreign markets, as the primary obstacles to international expansion, while 32% reported limited knowledge of information technology as a key technical barrier.

When asked about the role of education in the internationalization process, more than 73% of respondents acknowledged it as a highly important factor. Nevertheless, only 17% reported actually using available support mechanisms such as EU instruments, financial assistance, best practice guides, or specialized training programs. The findings further indicated that due to insufficient entrepreneurial education, over half of the surveyed entrepreneurs (51.9%) rely mainly on personal experience and immediate customer needs, often overlooking broader aspects such as global trends, political developments, and continuous educational opportunities [5].

Moreover, along with the deficiencies identified in Romania's usage of guidance and instruction services, it is worth noting that the European Union has created many specific instruments to assist SMEs, which also act as drivers for entrepreneurship education. For example, the COSME programme (2014-2020) aimed to improve SME competitiveness and sustainability, whereas finance efforts like the Enterprise Europe Network integrate advice and training modules. The Instrument for Cooperation with Industrialized Countries (2007-2013) encouraged active engagement and information sharing with advanced countries, exposing SMEs to worldwide best practices. Similarly, the European Neighbourhood Instrument (ENI, 2014-2020) sought to promote inclusive economic and social development in partner countries, frequently through capacity-building and training components [18][19].

Conclusion

This study examined how entrepreneurship education (EE) supports the internationalisation of Romanian SMEs in the manufacturing sector. The evidence from both comparative data and scientific articles indicates that the working hypothesis is valid, and structured EE enhances managerial competences such as risk assessment, strategy development, and cross-cultural communication, strengthen SMEs' preparedness for global markets.

Compared with countries from Central Europe, Romania's weaker export performance is largely explained by the lack of structured training opportunities and the predominance of theoretical curricula. Addressing these gaps requires joint action from universities, policymakers, and firms. Universities should integrate modules on export procedures, cross-border negotiation, and digital trade into entrepreneurship programmes. Policymakers need to improve outreach and coordination of EU support instruments, ensuring that training and advisory services are more visible and accessible. At the same time, SMEs must treat investment in managerial education as a strategic priority directly linked to their competitiveness in international markets.

The main limitation of this study lies in its reliance on secondary data, which cannot fully capture the diversity of entrepreneurial practices. Findings had confirmed that entrepreneurs of SMEs are relying mostly on experiential learning, rather than relying to educational patterns. Future research will, however, expand the analysis through primary data collection from SMEs entrepreneurs, in order to validate the framework and measure quantitative relationship between participation in entrepreneurship education and export performance.

In conclusion, internationalisation is not only a strategic process but also an educational one. Strengthening Romania's entrepreneurship education ecosystem, both in content and accessibility, is essential if SMEs are to align with EU standards and achieve sustainable competitiveness in global markets, as it has been proven that training programs give entrepreneurs clearer strategies and stronger managerial skills, which improve their ability to compete internationally.

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