DOI https://doi.org/10.30525/2592-8813-2025-spec-13

THE IMPACT OF BOARD MEMBERS' EDUCATIONAL LEVEL ON THE PROSPECTS OF SUCCESSFUL DEVELOPMENT OF SMALL BUSINESS ENTREPRENEURSHIP

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Abstract. This article examines the influence of the educational level of board members on the success of small business development. Based on the analysis of theoretical approaches and empirical data from EU countries and Latvia, the study reveals how the education of executives affects strategic planning, innovation activity, and business sustainability. The findings highlight the necessity of enhancing the educational potential of managerial staff to ensure the competitiveness of small enterprises.

Key words: small business, education level, management, human capital, innovation, competitiveness, sustainability.

Introduction. Introduction In the contemporary economy, characterized by a high degree of uncertainty, accelerated digitalization, and global competition, the successful development of small business has become one of the key priorities of socio-economic policy. This issue is particularly relevant for the European Union, where small and medium-sized enterprises (SMEs) constitute more than 99% of all companies and provide approximately 67% of employment in the private sector (European Commission, 2022). SMEs form the backbone of the European economy, generating around 65% of jobs and more than 50% of added value in EU countries (European Commission, 2023). In Latvia, SMEs play a particularly significant role, accounting for 98% of all enterprises and ensuring employment for 70% of the workforce (Central Statistical Bureau of Latvia, 2024). The success of these enterprises is largely determined by the quality of governance, where a central role is played by the members of the board. The educational level of executives – including formal higher education, specialized programs (such as MBA), and professional development courses – shapes their ability to make strategic decisions, adapt to changes in the market environment, and implement innovations.

The theory of human capital (Becker, 1993) conceptualizes education as an investment that enhances productivity and efficiency. In the context of small business, where managerial decisions are often made under uncertainty and resource constraints, the educational level of executives becomes a critical success factor. According to the resource dependence theory (Pfeffer & Salancik, 1978), the knowledge and competencies of board members represent strategic resources that contribute to organizational adaptability and long-term resilience. Within the cognitive theory of management (Hambrick & Mason, 1984), the educational background of decision-makers determines their capacity for strategic thinking, information processing, and problem-solving efficiency. Thus, education forms the intellectual foundation of managerial activity, fostering innovation, analytical reasoning, and competitive advantage. Higher levels of education among board members enhance the organization's ability to absorb knowledge, recognize market opportunities, and implement effective strategic solutions. Education therefore serves not only as an individual attribute but as a systemic factor that increases the overall quality of governance and the stability of small business development. One of the key factors determining the efficiency and long-term sustainability of small enterprises is the quality of managerial decisions made by board members. The academic literature emphasizes that the educational level of executives has a direct impact on strategic flexibility, innovation capacity, and the ability to adapt to rapidly changing external conditions (Wiklund & Shepherd, 2003; Unger et al., 2011). At the European level, initiatives such as the Small Business Act for Europe and the SME Strategy for a Sustainable and Digital Europe emphasize the importance of strengthening human capital in the SME sector. They underline the necessity of developing managerial and entrepreneurial competencies through both formal and informal education. In Latvia, the level of education of SME board members positively correlates with innovation implementation, successful digital transformation, and international market expansion (Ščeulovs & Gaile-Sarkane, 2016; Kaščekovs, 2020). Contemporary studies highlight that human capital, including education, is a critical factor in organizational success. According to Paul De Grauwe, Professor at the London School of Economics, "the education of managers determines not only their technical skills but also their capacity for strategic thinking, which is particularly important in times of economic instability" (De Grauwe, 2022). Similarly, Latvian economist Andris Vilks (Vilks, 2023) stresses that "in Latvia, where small businesses are often constrained by limited resources, the education of leadership becomes a key factor of competitiveness in the European market." Recent empirical studies increasingly confirm the significance of board members' educational levels for the effective functioning and strategic development of small and medium-sized enterprises (SMEs). For example, Bužavaitė and Korsakienė (2022), in their study "Does board usage of knowledge and skills affect internationalization performance of SMEs?", demonstrated that managerial knowledge and professional competencies of board members significantly improve internationalization performance, innovation potential, and resilience to global competition. Zehir, Can, and Karaboga (2015) found a direct relationship between education and strategic leadership effectiveness, emphasizing that firms led by highly educated directors tend to exhibit greater adaptability, innovation capability, and financial performance. Similarly, Zakaria, Abas, and Karim (2021), based on a sample of Malaysian SMEs, revealed a positive correlation between directors' education level and profitability indicators such as return on assets and equity growth. The authors noted that the impact of education is particularly strong in high-technology and innovation-driven industries, where analytical and strategic competencies are most essential. Further evidence is provided by Lumenta, Tulung, and Tumewu (2025), who established that the educational background and size of the board jointly influence financial stability. Boards with higher educational diversity were more effective in managing risks and ensuring sustainable growth. Consistent results were obtained by Rashid and Saeed (2023), who argued that companies with well-educated and diverse boards show superior innovation capacity and digital transformation performance, especially during economic crises. Taken together, these studies affirm that the educational level of board members not only enhances managerial practices but also creates long-term competitive advantages for small enterprises. Education strengthens strategic decision-making, supports innovation adoption, and improves resilience in volatile market environments. These arguments confirm the relevance of research into the impact of educational level of board members on the success of small entrepreneurship. The purpose of this article is to analyze how the educational level of board members influences the financial performance, innovation activity, and sustainability of small enterprises in Europe, with a particular focus on Latvia. The research aims to identify correlations between educational attainment and key performance indicators, as well as to provide recommendations for supporting the competitiveness of small business.

Theoretical Approaches to the Study of the Impact of Managers' Education

Human Capital Theory (G. Becker, 1964; T. Schultz, 1961) According to the human capital theory, education represents an investment in knowledge that enhances labor productivity and generates added value. In the context of small business, the education level of board members: increases their ability for strategic analysis and long-term planning; contributes to the formation of an innovative organizational culture; reduces the likelihood of managerial errors and inefficiencies. Well-educated executives are more capable of adapting to technological and market transformations, which improves business resilience under conditions of economic uncertainty.

Agency Theory (M. Jensen & W. Meckling, 1976) Agency theory views the relationship between owners and managers as a system of contractual obligations that requires control and minimization of agency costs. In small enterprises, where owners often serve as board members, a high level of education contributes to: a better understanding of the principles of corporate governance; transparency and accountability in decision-making; reduction of information asymmetry between business participants and investors. Thus, well-educated board members foster a culture of trust and accountability, which increases the investment attractiveness and sustainability of small firms.

Resource-Based View (RBV) (J. Barney, 1991) The resource-based view asserts that unique and hard-to-imitate resources define a firm's competitive advantage. In this framework, the education level of board members represents an intangible asset that enhances organizational capabilities and the firm's innovative potential. Educated board members: possess analytical and strategic decision-making skills; effectively manage knowledge and promote innovation; develop professional networks and partnerships, broadening access to resources and markets.

Institutional Theory (P. DiMaggio & W. Powell, 1983) Institutional theory emphasizes the importance of a firm's conformity to social, legal, and normative expectations. Board members with higher education are better equipped to: understand the regulatory and economic environment; ensure compliance with legal and ethical standards; strengthen the firm's legitimacy and reputation among stakeholders. Therefore, education enhances the institutional legitimacy and external credibility of small businesses.

Scientific Contribution: This study contributes to the understanding of the role of human capital within managerial bodies as a critical factor in the sustainable development of small enterprises. Education is conceptualized not merely as a social attribute but as a pivotal component of managerial competence, shaping the strategic decision-making and behavior of firms.

Practical Implications: The findings of this research offer practical applications in several areas: Establishing robust criteria for evaluating the managerial potential of small enterprises; Designing targeted professional development and executive training programs; Informing and enhancing public policy initiatives that support small businesses, with a particular emphasis on cultivating managerial competencies and advancing management education.

Materials and Methods

To analyze the impact of the educational level of board members on the success of small enterprises, a combined methodological approach was applied, including a literature review and empirical research. The study sample consisted of 200 small enterprises from selected European countries (Germany, France, Sweden, and the Baltic States – Latvia, Lithuania, and Estonia) over the period 2020–2024. Among them, 50 enterprises represented Latvia. The educational level of executives was classified into three categories: – Secondary vocational education; – Higher education (Bachelor's, Master's); – Additional professional education (MBA, professional development courses).

The analysis of enterprise performance was based on key success indicators (Table 1).

Table 1

Key success indicators of small enterprises

Category of success	Key metrics	Relation to educational level
Financial sustainability	ROA, ROE, EBITDA	Improved accuracy of strategic planning
Innovation	New products, R&D participation	Higher readiness for technology adoption
Risk management	Liquidity, debt ratio	Greater resilience in crises, risk diversification
International activity	Export, international projects	Higher openness to new markets and partnerships
Digitalization	Automation, e-commerce adoption	Broader use of IT solutions in business
Human resource management	Retention, training, development	Stronger leadership, engagement, and team development

The research design relied on questionnaires, financial reports, and structured interviews with executives. Analytical methods included correlation analysis, regression modeling, and data visualization. This methodological approach ensures a reliable assessment of how board members' education correlates with strategic decision-making, financial performance, innovation capacity, and overall business resilience.

Results and Discussion. Research evidence consistently demonstrates that the educational level of board members significantly influences the strategic orientation and performance outcomes of small enterprises. The findings of this study confirm the hypothesis that higher education levels among executives are positively associated with innovation, financial resilience, and internationalization. Human capital as a determinant of business development According to human capital theory (Becker, 1964), investments in education and training enhance productivity, innovation capacity, and adaptability. In small enterprises, where decision-making power is concentrated in a limited number of individuals, the importance of education becomes especially pronounced. Human capital can be defined as the combination of knowledge, skills, experience, motivation, and intellectual potential that can be applied in managerial and entrepreneurial activity (Becker, 1964; Sproģe et al., 2024). For SME executives, human capital serves as a strategic asset: – Education and qualifications enhance innovation, adaptability, and strategic thinking (Gonzalez Varona et al., 2024). – Communication and management skills strengthen teamwork, partnerships, and access to financing (Navickas et al., 2025). – Digital competencies enable technology adoption, process optimization, and responsiveness to market changes (Sproģe et al., 2024; DESI, 2020). Unlike physical and financial resources, human capital possesses the properties of reproducibility, scalability, and multiplicativity, making it the critical resource in post-industrial economies. Comparative analysis: the Baltic States and EU experience Studies (Unger et al., 2011) demonstrate that entrepreneurs with higher human capital are significantly more likely to achieve success in SMEs and startups, particularly through competencies in management, finance, marketing, and digitalization. In small enterprises, where staff is limited, the influence of each board member is amplified. Often, a single executive assumes multiple functions (director, accountant, marketing manager, HR specialist), making human capital the cornerstone of business growth. In Latvia and other Baltic States, access to further education, accelerators, and mentoring programs (e.g., ALTUM, Startup Latvia) substantially strengthens entrepreneurial skills, especially in the early stages of company growth. The Global Entrepreneurship Monitor (GEM, 2023) indicates that entrepreneurs with a Bachelor's degree or higher are 45% more likely to demonstrate business resilience and innovation.

Country-level differences are observable. In Germany, the Netherlands, and Finland, the education level of SME executives is strongly correlated with higher export activity. In Latvia, Ščeulovs &

Gaile-Sarkane (2016) report that 63% of successful SMEs are managed by individuals with higher or professional education. Kaščekovs (2020) found that companies with executives educated in economics and management are 30% more likely to demonstrate revenue growth within the first five years. Similar tendencies are evident in Estonia and Lithuania. For example, Estonian Business School graduates (MBA) exhibit higher entrepreneurial activity and export orientation, while ISM University in Lithuania has shown that Master's graduates are more likely to expand businesses internationally.

Table 2

Education of SME executives and business success in the Baltic States

Country	SMEs with executives holding higher education (%)	Business sustainability (5 years)	Example institutions supporting SMEs
Latvia	63	58%	RISEBA, University of Latvia
Lithuania	67	61%	ISM University
Estonia	72	64%	Estonian Business School

Return on investment (ROI) in human capital.

An effective way to measure the contribution of human capital to SME development is through ROI (Return on Investment) from education and training. In the Baltic States, ROI varies, reflecting differences in educational policies and entrepreneurial support ecosystems:

- Estonia demonstrates the highest ROI (~150%), supported by digital platforms, state-funded training, and a well-developed business education system (EBS). However, around 78% of SMEs report a lack of qualified managers and ICT specialists as a barrier to growth and innovation.
- Lithuania achieves an ROI of ~135%, due to a flexible system of professional education and a strong focus on export-oriented SMEs supported by ISM University. Tamasauskiene & Poteliene (2013) found that returns on education in Lithuania are comparable to advanced economies such as Denmark, Germany, and Finland.
- Latvia shows ROI at ~120%. While positive, its efficiency could be improved through closer integration between academia and entrepreneurship (RISEBA, University of Latvia, ALTUM). According to OECD (2024), Latvia's innovation potential requires greater investment in ICT and STEM programs, alongside stronger incentives for academic-industry collaboration. (Figure 1)

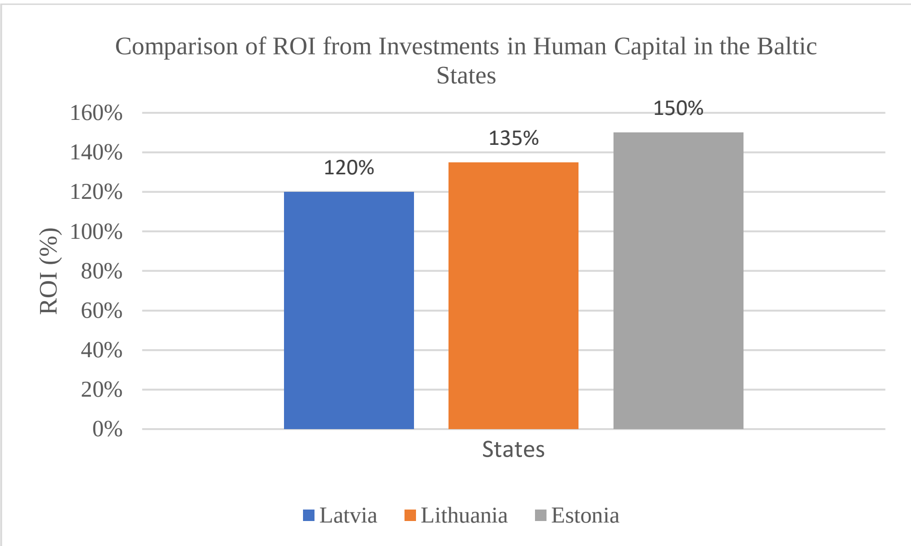

Fig. 1. Comparison of ROI from Investments in Human Capital in the Baltic States

The LV PEAK (2024/25) report proposes a national monitoring model for human capital policy, with indicators designed to increase ROI at the state level. Furthermore, DESI (2020) data reveal that Latvia lags behind in digital skills, hindering the efficiency of investments in human capital and slowing digital transformation in SMEs.

Interpretation of findings.The results highlight that education improves not only technical and managerial competence but also strategic resilience. Higher-educated executives demonstrate better financial management, innovation readiness, and openness to international markets. For Latvia, this is especially critical as SMEs are resource-constrained and exposed to global competition. Education thus becomes a key driver of sustainable competitiveness.

Scientific Contributions

- **Clarification of Human Capital's Role:** The research refines the understanding of human capital as a critical factor in small business sustainability, highlighting its direct impact on strategic behavior and organizational outcomes.
- **Education as a Component of Managerial Competence:** The study positions education as a core element of managerial competence, showing its significance beyond social status or formal qualifications.
- **Systemic Perspective:** By analyzing the interplay between human capital, organizational structures, and external support, the study provides a systemic view of the factors driving small business sustainability, emphasizing the mediating role of managerial competence.

Practical Implications

- **Assessment of Managerial Potential:** The findings can be used to develop robust criteria for evaluating the managerial capabilities of small business leaders, facilitating targeted interventions and talent management.
- **Professional Development Programs:** Insights from the study inform the design of executive training and professional development programs aimed at enhancing managerial skills, strategic thinking, and decision-making capacity.
- **Policy Recommendations:** The study underscores the importance of aligning state and institutional support programs with initiatives that strengthen managerial competence, fostering more resilient, adaptable, and competitive small enterprises.

Methodological Contributions

- **Analytical Framework:** The research proposes a framework for assessing the impact of human capital on small business sustainability, integrating educational, managerial, and strategic dimensions.
- **Empirical Basis for Future Research:** The methodology and findings provide a foundation for subsequent studies, including comparative analyses across regions, industries, and longitudinal assessments of managerial education programs.

Directions for Future Research

- Examination of additional dimensions of human capital, such as social and emotional intelligence, and their influence on strategic decision-making and organizational resilience.
- Comparative studies across industries and economic contexts to validate the generalizability of the findings.
- Longitudinal research to assess the long-term impact of managerial education and training programs on the sustainability and growth of small enterprises.

Conclusion. The research findings confirm that the educational level of board members has a decisive influence on the success of small enterprises, affecting their financial stability, innovation activity, digital transformation, and international competitiveness. Human capital, represented by the knowledge, skills, and strategic competencies of executives, functions as the most valuable intangible resource of SMEs. In the context of Latvia and the Baltic States, education significantly enhances the ability of entrepreneurs to adapt to external challenges, implement innovative solutions, and achieve sustainable growth. Higher education, complemented by professional development programs such as MBA courses, fosters long-term competitiveness by strengthening strategic decision-making and innovation capacity. The comparative analysis with other EU countries demonstrates that investment in human capital yields substantial returns (ROI) for small enterprises. Estonia and Lithuania show particularly high efficiency of educational investment due to strong integration between academia, business, and governmental support. Latvia, while demonstrating positive results, still faces the challenge of improving digital skills, fostering STEM education, and strengthening cooperation between universities and SMEs.

The study emphasizes the following key conclusions:

1. The educational level of executives directly correlates with the resilience and competitiveness of small enterprises.
2. Human capital should be viewed as a strategic investment rather than an auxiliary resource, with measurable ROI.
3. National policies aimed at fostering innovation and SME growth must prioritize education, digital literacy, and academic-industry collaboration.
4. For Latvia, enhancing managerial education and expanding access to professional training programs are essential for strengthening small business competitiveness in the European market.

Future research should focus on longitudinal studies of SMEs in the Baltic region, with particular attention to digital transformation and the role of executive education in sustainable development under conditions of global economic uncertainty.

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