ENTREPRENEURIAL TALENT: THE BALTICS IN THE MIRROR OF INTERNATIONAL STUDIES

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Abstract. The aim of this article is to confirm empirically the role of education in shaping and enhancing the role of entrepreneurial talent in the economic development of the Baltic countries. The following tasks were consistently solved: clarifying the relevance of the topic of entrepreneurial talent and reflecting this multifaceted phenomenon in the socio-economic works of contemporary authors, studying the experience of teams of international research projects, where the main or great attention is paid to entrepreneurial talent, then, in a comparative perspective, assessing the role of entrepreneurial talent in the Baltic countries, the most important factors that act both as the most significant positive conditions of its impact on the economic growth of individual countries, and inhibit positive dynamics. The empirical basis for the research was composed of the international research projects, Global Entrepreneurship Monitor (GEM), Global Talent Competitiveness Index (GTGI), the report of the World Economic Forum as well as the authors’ own research into student entrepreneurial potential and entrepreneurial universities. Causal analysis and comparative analysis were used as the main research methods. In the course of the research work, the terminology used is clarified in relation to the main subject of the research - entrepreneurial talent as the most important factor in the economic development of countries and regions. The ranking of factors positively influencing the effectiveness of entrepreneurial talent, especially from the standpoint of opportunities in the field of education, has been carried out. The article includes three sections. The first section is devoted Entrepreneurial Talent as an important element of economic activity, second section - Entrepreneurship and entrepreneurial talent as a subject of international research and the third section - Entrepreneurship in the Baltic States in the evaluation of international studies. The research shows both the importance of entrepreneurial talent among other drivers of economic growth and the quality of entrepreneurial education in general education schools and universities. Therefore it is extremely important to expand the practice of entrepreneurial education for students of all specialties, gradually turning educational and research higher education institutions into entrepreneurial universities.

Keywords: talent; entrepreneurial talent; entrepreneurial education; talent competitiveness; economic growth; Baltics

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JEL Classifications: L26, J24, M13, I21
1. Introduction

Talent is the outstanding abilities of a person, manifested in a certain field of activity, allowing to achieve high results on the basis of making non-standard decisions.

Talent determines a high level of development of abilities that enable a person to successfully, independently and originally perform a certain activity. Such a combination of abilities makes it possible to obtain a product of activity that is distinguished by novelty, a high level of performance and social significance. Whether the existing potential will develop, owing to which a person will begin to think, reason, solve some problems better than others, which will allow him to see natural phenomena from a different unexpected side - is a "competence" of not so much biological as social factors: living conditions, obtained knowledge, education, acquisition of labour skills.

Recent advances in the social sciences, neurophysiology and neuroentrepreneurship indicate that the personality of entrepreneurs has its own characteristics. The science has gone even further: the results of research in the field of cognitive science indicate that entrepreneurs have a special type of thinking. Based on this specificity of thinking, the sociology of personality and human psychology, it is possible to build a system for preparing entrepreneurs and supporting the development of their projects in a different way. Proper training of entrepreneurs is the key to effective development of entrepreneurship.

An entrepreneur is a person who organises the use of production resources in the most profitable way in order to obtain a regular income. Entrepreneurs take on the risks of the uncertainty of the external environment, possible failures. Entrepreneurial talent is needed to find a way out of various non-standard situations.

Entrepreneurial talent is a very complex subject. Entrepreneurial talent lives in a very dynamic and complex world, it is the successful reaction of an entrepreneur to the yet hidden opportunities for innovation in various spheres of society in order to ensure profit and economic growth.

Small and medium enterprises (SMEs) play a critical role in job creation. Since there is a close relationship between the performance of small and medium-sized firms and key policy goals such as employment or economic growth, it is necessary to focus on a more detailed understanding of the entrepreneurial drivers of economic growth. The role of entrepreneurial talent is considered crucial in the innovation arena due to the role that start-ups play. We would like to highlight the fact that (as in case with innovation) entrepreneurial talent reflects a state of mind that must permeate all economic and social systems in order to be fully exploited. In other words, entrepreneurial talent should be seen as a strategic factor not only in nascent and smaller organisations, but also in larger organisations and in central and local governments. Available data and experience point to some practical ways in which entrepreneurial talent can actually grow, be attracted and nurture.

2. Literature review

In fact, the entrepreneurial talent as a resource is often wasted and suffers from overall misuse: many entrepreneurial talents will eventually disappear, working in inefficient and risk-averse organisational structures where their potential contribution to innovation and growth will be ignored or suppressed. In the modern economy, such irrational distribution remains a frequent phenomenon, while its cost is constantly growing making it a priority goal for increasing the competitiveness of talents in general. Therefore, the interest of researchers in general in the problems of entrepreneurial talent has increased significantly in recent years. Let us analyse, for example, the reflection of the issue of entrepreneurial talent in the authoritative Scopus database.
The results displayed in Figures 1 and 2 confirm the high interest of scientists from various fields of science in the topic “Entrepreneurial talent”. Publications were indexed especially rapidly in the Scopus database in 2020 and 2021, when the number of such publications increased compared to 2014 and reached 107. Most of the publications are related to business, management and accounting, however, 20.6% of the total number of publications are related to social sciences.

Fig. 1. Number of papers (by year) that contain the words “Entrepreneurial talent” in the title, abstract, or keywords in the Scopus database from 2014 to 2021

Source: elaborated by the authors based on SCOPUS database

Fig. 2. Number of papers (by field of science) that contain the words “Entrepreneurial talent” in the title, abstract or keywords in the Scopus database from 2014 to 2021

Source: elaborated by the authors based on SCOPUS database
Scholars allocate a central place to entrepreneurial talent in the economy (Baumol, 1990, 2010). Moreover, significant variance is assumed within the dependent level of the enterprise performance (Chaganti & Schneer, 1994; Zou et al., 2010). Mayer-Haug K., Read S., Brinckmann J., Dew N., and Grichnik D. in their research expand the analysis of entrepreneurship by combining empirical data on differences in the nature of entrepreneurial talent with differences in the results of enterprises led by entrepreneurs (Mayer-Haug et al., 2013). From a policy point of view, a better understanding of such element as entrepreneurial talent is associated with such an aspect as enterprise efficiency, that is, the ability to effectively use limited resources. If the relationship were well understood, funds could be directed towards developing those aspects of entrepreneurial talent that have the greatest impact on the desired outcomes of the enterprise (Nyström, 2008). Moreover, previous work by researchers suggests that cultural and economic contexts influence the availability and use of entrepreneurial talent (Zhang et al., 2010; Zhang et al., 2022). Therefore, understanding the impact of these contextual factors on the relationship between entrepreneurial talent and SME performance can also be useful to policy makers around the world. The results of the many studies show the positive impact of talent development on sustainability, company performance, given the moderating role of environmental dynamism (Kafetzopoulos & Gotzamani, 2022; Vaillant, 2022; Mudijjah et al., 2022; An & Xu, 2021).

Latvian researchers in their article argue that talent in the information society is most likely a synthesis of creative work, culture and creativity, which acquires special value in the talent economy and contributes to the competitiveness of a country (Selivanova et al., 2021).

In these terms entrepreneurial talent plays a special role, which leads to success in any sector of the economy, education, state and local government.

3. Theoretical basis and methodology of the research

The general and special methods were used for the study, in particular: historical – to research the state of study of the problem; analytical-synthetic, comparative – to identify trends in the field of media criticism on the basis of the collected empirical material; inductive – to generalize and systematize the
conclusions. The method of typological analysis was used to differentiate the amount of media-critical studies. The method of content analysis was used to study the documents.

*Entrepreneurial Talent as an important element of economic activity.* To be competitive in a globalised economy requires local knowledge and skills. That is why new models of regional development emphasise development based on the unique assets and circumstances of the region, as well as the development of knowledge-based industries.

Governments naturally view higher education institutions as sources of knowledge and innovation, as well as drivers of regional development. Our research into the entrepreneurial potential of students has shown the enormous resources of university youth in real and potential use of their entrepreneurial ambitions and talents for the benefit of their regions. However, there exist many obstacles. Among the 10 factors being present in the university environment and affecting the opening of a business, Latvian students most often indicated the risk, probable losses and threats in the implementation of such an intention (83% agree with this statement). As can be seen from the students’ responses, they unequivocally attribute risk to an obstacle to starting their own business, when the HEI does not form a broader and more positively coloured view of the risk phenomenon. Apparently, neither in academic affairs, nor in research work or meetings with successful entrepreneurs, our students receive knowledge and beliefs about the positive role of risk, about its functions such as protective, analytical, innovative, regulatory ones.

When starting any new business, it is necessary to evaluate not only risks, but also chances. Lectures, conversations and discussions with students should dwell upon both risks and chances - both forms of updating the results of decisions made and actions taken in an uncertain and unpredictable future. In this case, the risks are unfavourable events for the person, while the chances are favourable ones. At the same time, it is important to show young people that in order to make rationally justified decisions, one needs to predict and evaluate both risks and chances, since when setting goals and making decisions, a person relies primarily on achieving success, that is, chances, rather than on failure, that is risks (Menshikov & Ruza, 2021).

Unfortunately, higher education institutions do not always have established contacts with local economic players. Institutional culture, inadequate funding, public policy direction, and the limited ability of local and regional agents to engage in higher education or vice versa are just some of the barriers to strengthening links between these different actors. Using the entrepreneurial potential for better interaction is a way to promote regional economic interests.

The strategic role of higher education institutions in supporting regional development can be implemented through: knowledge creation through research and technology transfer; knowledge transfer through education and human resource development, and cultural and community development through entrepreneurial talent, which can help create an environment in which innovations flourish.
Entrepreneurship is a complex process involving many variables that interact with each other to provide the context for starting and running a new business. Successful entrepreneurship is specifically the result of how the individual, human capital and the environment contribute to the activity. The process always takes place in the context of a particular national culture (Frese, 2009; Brandstatter, 2010). In terms of talent competitiveness, the key question suggested in Figure 4 is: which of the factors mentioned can influence or be influenced by strategies, policies and targeted measures? As noted by Kerr et al. (2018), “researchers in some disciplines (but rarely in economics) go beyond studying interactions to construct a ‘complex model of an entrepreneurial process’ in which the relationships between these variables are displayed and ultimately determine the success of the enterprise.”

The approach described above (Kerr et al., 2018) offers a valuable starting point for transferring personality traits into reproducible skills, which can then be transferred into policies, priorities, and targeted actions adapted to different economic conditions.

**Entrepreneurial Talent is important to reduce skill inequality.** The fact that entrepreneurial talent cannot be reduced to personal qualities (rather opposite, it can be defined as a combination of skills that can be measured, improved, and better used), is particularly important in poorer and faster-growing economies, as talent disparities between rich and poor countries tend to increase. Lerner M., Brush C., and Hisrich, R. (Lerner et al. 1997) showed that entrepreneurial talent is likely to vary (change) depending on the level of development of the country’s economy. Nobody can one ignore the fact that becoming an entrepreneur may be an option (or an ambition) in developed countries, while it is often simply a necessity to survive in poorer conditions.

The example of China is particularly revealing in this context. It is quite striking that the rise of China has been strongly correlated with the transfer of a significant amount of talent from the public sector (including state-owned enterprises) to the private sector, which has led to the rapid emergence of such giants as IT company Tencent, e-commerce giant Alibaba and home appliance manufacturer Haier (Chakravarthy & Yau, 2022).

China’s economic miracle over the past three decades can be explained by the redistribution of entrepreneurial talent from the government/state and the agricultural sector to entrepreneurial activity. This shift was unprecedented in the last two thousand years of Chinese history. When entrepreneurial talent shifted more to business activities, it created wealth and an unprecedented growth of the economy. Three dominant groups of entrepreneurs provided this dynamics and result: (1) peasants who became entrepreneurs, (2) civil servants who became entrepreneurs, and (3) overseas-return, and engineers-turned entrepreneurs. The success of the Chinese economy arises from a gradual replacement of position-based rights with property-based rights that has triggered this reallocation of entrepreneurial talent.)
4. Research results and discussion

Entrepreneurship and entrepreneurial talent as a subject of international research. Governments and other stakeholders are increasingly in need of reliable and trustworthy information to make key decisions aimed at stimulating sustainable and efficient forms of entrepreneurship that promote fair competition and the development of entrepreneurial ecosystems. Accordingly, the role of the Global Entrepreneurship Monitor (GEM) as the largest collaborative international research initiative that analyses entrepreneurship in all its forms and types, and the characteristics associated with it, taking into account temporal and spatial factors, is becoming increasingly important. This project is a collaborative effort between the non-profit organisation Global Entrepreneurship Research Association, the founding institutions London Business School (UK) and Babson College (USA), and a combined consortium of national teams, predominantly represented by researchers from leading academic institutions. The GEM Global Report 2021-2022 (GEM, 2022) compares the situation in the 52 GEM study countries in 2021, during this challenging turbulent period dominated by the global COVID-19 pandemic. More than 148,000 people responded the GEM surveys in 2021, adding to the core GEM database, which has been collected since 1999 and now includes more than three million responses. 50 national teams took part in the preparation of the GEM 2021 study. These 50 countries are grouped by income level:
Level A: 19 high-income countries with GDP per capita over $40,000;
Level B: 19 countries with GDP per capita between $20,000 and $40,000;
Level C: 12 countries with GDP per capita less than $20,000.

For each country, GEM considers two elements:
1. Entrepreneurial behaviour and perception of entrepreneurship in society.

The second part of the study analyses environmental factors and their impact on business conditions in the country, and more recently also assesses government responses to the pandemic. GEM describes the “context” in terms of the entrepreneurial characteristics of a certain country. These characteristics of the socio-economic environment are called Entrepreneurial Framework Conditions - EFC. To assess the national conditions for the development of entrepreneurship, National Expert Survey (NES) are conducted. The need to conduct them is explained by the lack of data on the specific factors that determine the business environment at the international level. The sample of experts should consist of at least 36 respondents who are carefully selected based on the area of their expertise (must meet one of the conditions for entrepreneurship development) and knowledge.

Since 2018, as part of the GEM study, a composite indicator that reflects the framework conditions for entrepreneurship in the country has been calculated - the National Entrepreneurship Context Index (NECI), which assesses Entrepreneurial Framework Conditions in the country by the ease of starting and developing a business. The National Entrepreneurship Context Index (NECI) brings together EFCs into a single indicator.

The results for 2021 support earlier assertions: the consensus among experts is that the United Arab Emirates, with the highest NECI score of 6.8, may be the best place to start a new business. This is followed by the Netherlands, Finland, Saudi Arabia and Lithuania. All of these countries, with the exception of Lithuania, are Level A economies. Of the five countries with the lowest NECI scores, all but Belarus (Level B) are Level C economies. Latvia, with a NECI of -5.0, ranked 16th (Verhovskaja et al., 2022).

As expected, there is a U-shaped relationship between early-stage entrepreneurial activity and economic development, indicating that higher entrepreneurial activity is not necessarily found in regions with higher economic wealth per capita. The main explanation is that less developed countries have the highest levels of entrepreneurial activity motivated by limited opportunities in the labour market (necessity-driven}
entrepreneurship). However, this does not mean that entrepreneurial activity in such countries is not a driver of socio-economic development. In fact, the quality of entrepreneurship and the number of entrepreneurs, as well as the extent to which entrepreneurship can become a locomotive of social and economic transformations, depends on the conditions created in the country for the development of entrepreneurship.

**Global Talent Competitiveness Index.** In the global research practice, in relation to a territory, talent is measured either from the position of the competitiveness of a particular territory in relation to talent, or from the position of the creative industries of the economy. In particular, the Global Talent Competitiveness Index (GTCI) is used, the conceptual idea of which is that countries compete with each other in the global space in terms of adapting to talents, nurturing, attracting and retaining talents that contribute to the economic development of a country (Cornell et al. 2018).

![Global Talent Competitiveness Index (GTCI)](image)

*Source:* elaborated by the authors based on (The Global., 2019).

The GTCI calculation paradigm is an entry-exit model, combining an assessment of the opportunities and means aimed at developing talent in each country (“talent input”) with the quality of human capital available to states for use in labour markets (“talent output”). In each country, analysts assessed six key indicators: market and regulatory conditions in the labour market; chances for career growth; the ability of employers to attract skilled labour from around the world; the ability to retain highly qualified personnel; production skills of employees and their global knowledge. (Govorova, 2018)
Let us compare the GTCI performance over 3 trienniums: 2014-2016 compared to 2017–2019 and 2019-2021. Comparing and contrasting the earlier period with the later period helps to identify general trends in talent competitiveness. A total of 86 countries participated in the GTCI project, of which 42 were high income countries, 27 were upper middle-income countries, 16 were lower middle-income countries, and 1 was a low-income country.

![Global Talent Competitiveness Index 2019, 2021 ranking](image)

**Fig. 6.** Global Talent Competitiveness Index 2019, 2021 ranking

*Source:* elaborated by the authors based on (The Global.. 2019, 2021).

Switzerland leads the index in 2021 with a score of (82.09). Singapore (79.38) and the USA (78.81) take the second and third lines of the index. Switzerland is recognised as the most attractive country for talented and qualified specialists (for the fourth time), and Zurich is one of the most popular cities in the world (2nd place). European countries consistently dominate the rankings, with 7 in the top ten and 14 in the top 20.

According to GTCI, high-income developed countries continue to occupy the top positions in the GTCI scores, and there is a high correlation between GDP per capita and GTCI performance. European countries continue to lead the GTCI rankings; 16 of them are in the top 25, including Estonia (rank 21). Latvia in 2019 occupied the 27th position and Lithuania the 32nd position, noticeably yielding to Estonia. In 2021, the situation has changed somewhat - Estonia, Latvia, Lithuania have moved to new positions – 23rd, 34th, 35th ranks.

Not only states, but also individual regions and cities participate in the competition to attract talents. A special section of the publication is dedicated to the analysis and assessment of cities as key players in the global arena of talent. Addressing the societal challenges associated with digitalisation and automation requires close communication and interaction between stakeholders such as government, municipalities, businesses and educational institutions. The top ten cities also include an overwhelming majority of “Europeans”. Judging by the rating, small cities and megacities are able to combine high quality of life and international career opportunities.
As the authors of the research note, the pandemic has changed the definition of international talent mobility. As online tools opened new doors to “work from anywhere”, a new disparity arose between those who could work online and those who had to be physically present at the workplace. At the same time, according to the authors of the index, more developed countries have the stability to invest in lifelong learning, strengthening skills, and attracting and retaining talent from around the world.

*Global Competitiveness Report of the World Economic Forum.* The Global Competitiveness Report of the World Economic Forum (2017, 2018) also has metrics that measure countries’ talent competitiveness through two separate components included in the Global Competitiveness Index: country capacity to attract talent and country capacity to retain talent.

Latvian researchers, using data from the Global Competitiveness Reports of the World Economic Forum, back in 2014 empirically established the priority of attitudes towards talents in comparison with the quantitative indicators of people with higher education for the economic growth of countries and regions. (Stankevich et al. 2014; Voronov, 2020; Voronov, 2018)

The analysis of the factors analysed in international projects and playing a key role in the struggle of countries for talents allows us to conclude that the real “drivers” of a country’s competitiveness include entrepreneurship, science, technology, logistics and education, and the key players here are often not the entire states, but rather individual regions or cities. The traditional physical infrastructure is gradually pushed away to the background in the economic accents of developed countries. The generation, storage, transfer of information and knowledge, healthcare and environmental conservation, focused on the development of human potential, especially the cultivation, retention and attraction of talented entrepreneurs, come to the fore. This means, first of all, an active policy in the labour and educational spheres, promoting entrepreneurship, mobility, lifelong learning and adaptation to dynamically changing market needs.

**Entrepreneurship in the Baltic States in the evaluation of international studies.** The Baltic countries (Latvia, Lithuania and Estonia), according to international studies, occupy quite high positions in the ratings, in one way or another reflecting the role of entrepreneurship in the economic growth. Thus, Lithuania is highly rated in the latest GEM report. Lithuania ranks 1st among Level B countries in terms of the totality of assessments of various entrepreneurship indicators. This country leads in many areas related to entrepreneurship as the absolute leader of Level B countries. Lithuania leads in the transfer and application of research and development (collected 5,8 out of 10 points), entrepreneurial education in schools (4,7 out of 10 points), commercial and professional infrastructure (6,8 out of 10 points), ease of entry into a new business (in terms of potential difficulties and rules) (6,5 out of 10 points), social and cultural norms (6,2 out of 10 points) and in many other areas.
However, when analysing the GEM for Lithuania, one has to emphasise the significant reserves of support for entrepreneurship. Lithuania, like other EU countries, has relatively low scores in entrepreneurial education both at school (4,7) and after school (5,6), although it is ahead of all Level B countries in entrepreneurial education at school. Unfortunately, against the background of Lithuania, Latvia needs even stronger attention to entrepreneurial education both at school (4,0) and after school (4,6).

The GTCI calculation paradigm is an entry-exit model, combining an assessment of the opportunities and means aimed at developing talent in each country (“talent input”) with the quality of human capital available to states for use in labour markets (“talent output”). In each country, analysts assessed six key indicators: market and regulatory conditions in the labour market; chances for career growth; the ability of employers to attract skilled labour force from around the world; the ability to retain highly qualified personnel; production skills of employees and their global knowledge.

Global Talent Competitiveness Index (GTCI) for the Baltic States 2021 shows Estonia with 66.57, Latvia – 60.68, Lithuania – 60.25.
In their study Selivanova et al. identified the statistically significant factors driving the economic viability of countries around the world, the 2 out of 15 factors: the macroeconomic environment and a country’s ability to attract talent. Interestingly, the ability of a country to attract talent, in contrast to the GTCI as a whole, is the most powerful of the 15 factors used in the regression analysis and becomes practically the main incentive for the economic growth of the countries in the modern world. However, the stable and sustainable economic viability of countries in today’s world requires their fuller competitiveness in talent, which includes the ability of countries to adapt to talent, attract it, and grow and retain talent in their territory (i.e. GTCI). (Selivanova et al. 2021).

Thus, both in attracting talents and in growing talents, of the three Baltic countries, Estonia received the highest score (65,68 and 56,39). Lithuania ranks second in terms of attracting talents (59,34), Latvia is in third place (58,04), however, in terms of growing talents, Latvia is in the second (53,01), Lithuania (48,54) is in the third place. While, according to quantitative estimates, for example, higher education, Latvia is the leader (64,92), followed by Lithuania (51,33) and Estonia (48,96), according to qualitative estimates, we see the opposite picture - Estonia leads in terms of spending on higher education (76,29), followed by Latvia (58,53) and Lithuania (52,42). Estonia is noticeably ahead of Latvia and Lithuania in terms of university rankings (respectively 34,72; 24,63; 24,27). We are again convinced that for entrepreneurial talent and its transformation into economic growth and competitiveness of the country, it is important not so much quantitative indicators, as qualitative ones.

Although in general there is a moderately strong and statistically significant correlation between the indicator - people with higher education and real GDP per capita (r=0.090, p=0.630), Latvia and its neighbouring Baltic...
regions are below the correlation curve, which means that an additional percentage of people with higher education contributes less than 1% to real GDP growth.

![Fig. 9. Correlation interaction of individuals with higher education and GDP per capita, Pearson correlation (2020)](image)

Source: elaborated by the authors based on (Eurostat, 2020)

The quality of education must be improved to meet modern requirements and promote the economic growth. In terms of quality of education, according to GEM, Latvia is inferior to Estonia and Lithuania in terms of Tertiary education expenditure, while in terms of Reading, Mathematics and Natural sciences and University rankings, Latvia is second only to Estonia. (The Global.., 2021)

Although the level of education varies, there is a clear correlation between the quality of a country’s educational system and its overall economic position and overall well-being. In general, developed countries tend to offer their citizens a higher quality of education than the least developed countries. Education is certainly a vital factor for overall health condition in any country. According to the Global Partnership for Education, education is considered a human right and plays a critical role in human, social and economic development. (Global Partnership..2020). The annual Top Countries report produced by US News and World Report, BAV Group, and the Wharton School of the University of Pennsylvania, has an entire section dedicated to education. The report polls thousands of people in 78 countries and then ranks those countries based on survey responses. The educational part of the survey collects scores on three equally weighted attributes: a well-developed public education system, the opportunity to enter a university, and the provision of high-quality education. As of 2021, the top ten countries in the ranking of the best educational system are: The United States, The United Kingdom; Germany, Canada, France, Switzerland, Japan, Australia, Sweden, The Netherlands. The Baltic countries in this ranking are in the 42nd place - Lithuania, 44th - Estonia and 50th - Latvia. (Countries, 2021; Konstatntinov, 2019)

Even though the United States has the most popular education system in the world, American students consistently score lower in math and science than students from many other countries. Debates about why the United States’ education rankings have fallen by international standards over the past three decades often point to public spending on education not keeping up with inflation.
Most of the results and rankings regarding education around the world relate to adult literacy rates and levels of education completed. However, some studies consider current students and their knowledge and skills in different subjects.

Higher levels of education are usually associated with higher levels of entrepreneurial activity, perhaps because the educated are more confident in having the skills and abilities to start their own business or because they have a greater ability to spot opportunities. Thus, the GEM APS asked respondents about their level of education, which makes it possible to classify respondents with and without higher education, and the coefficient of entrepreneurial activity. Fig. 10 shows the level of TEA for graduates and non-graduates in each country. Those with higher education as opposed to those with the incomplete education are more likely to start their own businesses in 36 out of 47 countries and four of them are in Europe (Spain, France, Italy and Luxembourg), where graduates start their own business more than twice as much as non-graduates. Therefore, as a rule, graduates are more likely to start new business than those with the incomplete education.

11 economies with higher level of entrepreneurship among non-graduates (as opposed to graduates) include two Level C economies (Morocco and South Africa), three Level B economies (Latvia, Kazakhstan and Turkey) and six Level A economies (Norway, Japan, USA, Saudi Arabia, United States United Arab Emirates and Israel). The latter six are among the most knowledge-based economies in the world, and yet those without a higher education are more likely to start a business than those with a degree.

![Image of Fig. 10: Levels of Total early-stage Entrepreneurial Activity (TEA) for graduates and non-graduates (% TEA graduates and % TEA non-graduates)](image_url)

**Fig. 10.** Levels of Total early-stage Entrepreneurial Activity (TEA) for graduates and non-graduates (% TEA graduates and % TEA non-graduates)

*Source:* elaborated by the authors based on (GEM, 2021)

On the other hand, in many countries educational systems are considered inadequate. This may be due to internal conflict, economic problems or underfunding of programmes.
Table 1. Impact Rankings 2022: quality education

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<th>Rank</th>
<th>Name of university</th>
<th>Quality education</th>
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<tbody>
<tr>
<td>Denmark</td>
<td>1</td>
<td>Aalborg University</td>
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<tr>
<td>Saudi Arabia</td>
<td>2</td>
<td>King Abdulaziz University</td>
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<td>Hong Kong</td>
<td>3</td>
<td>Lingnan University Hong Kong</td>
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<tr>
<td>Italy</td>
<td>4</td>
<td>University of Bologna</td>
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<td>Latvia</td>
<td>301-400</td>
<td>University of Latvia</td>
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<td>401-600</td>
<td>Liepaja University</td>
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<td>801-1000</td>
<td>Latvia University of Life Sciences and Technologies</td>
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<td>Lithuania</td>
<td>601-800</td>
<td>Kaunas University of Technology</td>
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<td>801-1000</td>
<td>Mykolas Romeris University</td>
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Source: elaborated by the authors based on (Countries with the Best..., 2021)

The Times Higher Education Impact Rankings is the only global performance table that ranks universities by the United Nations Sustainable Development Goals (SDGs), where carefully calibrated metrics are used to provide a comprehensive and balanced comparison across four broad areas: research, management, outreach activities and training. The SDG – the quality education measures the contribution of universities to early and lifelong learning, their pedagogical research and their commitment to inclusive education. The list includes 1180 universities from 106 countries/regions.

Having reviewed the methodology of Impact Rankings 2022: Quality Education (see table 1), it has been identified that Aalborg University in Denmark leads the list, while King Abdulaziz University in Saudi Arabia and Lingnan University in Hong Kong close the top three. Spain is the most represented country in the first top 100 with 11 institutions, followed by Chile. The Sustainable Development Goals (SDGs) cannot be achieved without quality education and the cultivation of innovative and international talents (Jiao et.al 2022). Notably, universities play a central role in growing the entrepreneurial talent (Martínez-Martínez & Ventura, 2020).

Entrepreneurial education at the basic level (primary and secondary education) is rated by most European countries as one of the most negative framework conditions. Experts overwhelmingly recommend entrepreneurship as a pedagogical tool, especially in the early years of schooling.

Over the past 10 years, the proportion of young people under the age of 30 (which includes the vast majority of students) among those who founded their own enterprise has significantly decreased - from 47.1% to 37.5%. Although, according to sociological data, 52% in Latvia and 74% in Georgia of the students surveyed want to engage in entrepreneurship. The main reason, according to the authors, is the lack of a system of training students for entrepreneurial competences in universities, which in fact requires of a modern university to significantly and deeply change its mission. Entrepreneurial universities have a huge role to play in the future (Menshikov & Ruza 2021).

It is legitimate to conclude that, taking the number of innate entrepreneurial talents as a given, investment in education should be used to increase the supply of entrepreneurship in the economy and enhance the
entrepreneurial culture, in which entrepreneurial universities should play a huge role (Hessels, 2017; Bianchi, 2010; Lackéus, 2020; Nabi et al., 2017; Yang et al., 2021; Ferrante, 2005; Gold, 2017; Gubbins et al., 2018; Holden, 2019; Mackay, 2017; Dutta, 2022; European..., 2014).

5. Conclusions

Entrepreneurship is a powerful catalyst that can help create a level and efficient playing field for developed and developing countries and regions. Building entrepreneurship into the education system and making it more widely accessible is an important step in building an innovative culture, as well as in the rise of individual entrepreneurs and entrepreneurial organisations, which in turn can generate economic growth and jobs and can help improve the quality of life around the world. Despite the enormous growth in the scale of education, many problems remain unsolved. One of the fundamental challenges is related to the formation and enhancement of the role of entrepreneurial talent. Countries compete on a global scale to grow the best talents; attract the talents that are needed; and retain those workers who contribute to competitiveness, innovation and growth. All indicators of The Global Talent Competitiveness Index of the Baltic States (Pillars) in 2021 increased compared to 2019, but still noticeably lower than in high-income countries. The lowest rates are observed in growing talents. Growing in high-income countries should be equal to such countries as the United States (81,32), Singapore (80,33). Of the Baltic countries, Estonia shows the best indicator (56,39). Latvia and Lithuania have Grow scores of 53,01 and 48,54, respectively. In attracting talents, the leaders in high-income countries are Luxembourg (86,75), Singapore (84,06). Of the Baltic countries, Lithuania shows the best indicator (68,23). For Estonia and Latvia, the difference in indicators is insignificant and amount to 65,68 and 65,54, respectively.

Financial investments in higher education provide a very minimal return on investment in the success of the Baltic regions. The quality of education must be improved to meet modern requirements and promote the economic growth. In terms of the quality of education, according to GEM, Latvia is inferior to Estonia and Lithuania in such an indicator as Tertiary education expenditure, while in terms of Reading, Mathematics and Natural sciences and University ranking, Latvia is second only to Estonia. Higher levels of education are usually associated with higher levels of entrepreneurial activity, perhaps because the educated are more confident in having the skills and abilities to start their own business or because they have a greater ability to spot opportunities. Also, the inability of the economy to match entrepreneurial talent with opportunities will mean that efforts to increase the supply of entrepreneurship will have little impact on development. As a result of the global Covid-19 pandemic, many businesses have faced difficulties or even gone bankrupt. Only companies with flexible operations and the ability to quickly adapt to market changes have survived. Others saw the crisis as an opportunity to meet the new needs of the market and come up with fresh ideas for it. The common aspect of these companies is their team of entrepreneurial people who stay passionate and create a culture of constant innovation. It is legitimate to conclude that, taking the number of innate entrepreneurial talents as a given, investment in education should be used to increase the supply of entrepreneurship in the economy and enhance the entrepreneurial culture, in which entrepreneurial universities should play a huge role.

The novelty of the research findings is to empirically confirm the role of entrepreneurial talent in the economic development of the Baltic countries.

The materials, findings and conclusions of the research can be used by research organisations, government bodies, institutions of higher education, student organisations. Our research may make scientists - entrepreneurs and strategists realise how important it is to modernise Latvian higher education, thereby making a huge contribution to the development of the economy.
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The Global Talent Competitiveness Index. 2019. The GTCI 2019 model


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