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EXPLORING FUTURE SCENARIOS FOR LATVIA'S REGIONAL BUSINESS INCUBATORS

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Abstract. The research demonstrates that since 2007, the business incubator programs administered by the Investment and Development Agency of Latvia (LIAA) have significantly boosted regional entrepreneurship in Latvia. These programs provide essential support to young entrepreneurs, promote employment, stimulate entrepreneurship, and enhance the quality of life in the regions. Additionally, they increase export capacity and tax revenues. In this period, business incubators have been operated by the state, universities and private companies.

The research analyzed future scenarios for the further development of regional business incubators in Latvia. Using the Analytic Hierarchy Process (AHP) and expert assessments, the study considered Latvia's economic and social goals and strategic directions for regional development, underscoring the critical role of business incubators in promoting regional entrepreneurship and societal well-being.

The research explored the possibility of transferring the administration of regional incubators to private companies, universities, or municipalities, which could impact regional economic development. A detailed assessment of previous LIAA programs concluded that various organizations, including private companies and universities, could effectively manage regional business incubators, fostering innovation and new product creation.

Keywords: business incubator, regional development, regional entrepreneurship.

JEL Classification: R11.

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1. Introduction

Business incubators are one of the most effective ways to encourage the growth and expansion of promising new businesses, as evidenced by experiences in several European and other countries. Experienced experts and a well-equipped infrastructure facilitate the rapid development of new enterprises. In countries where entrepreneurial initiative is highly valued, such as Sweden and the USA, incubators not only stimulate economic development but also address social problems like unemployment.

A notable example is Brazil, which ranked as the fourth-largest country in the world in terms of the number of incubators, following the USA, China, and Germany (Chandra, 2007). Business incubators contribute positively to a country's economic development by creating new businesses, increasing competitiveness, boosting exports, raising tax revenues, and reducing unemployment.

Universities play a crucial role in the development of the incubator sector, serving as key sources of human resources and ideas for start-ups and facilitating an innovative business environment. In 2023, two Swedish universities were among the top 20 in Europe for supporting young entrepreneurs. KTH Royal Institute of Technology in Stockholm ranked 10th in Europe for the number of graduates who have raised more than €10 million, while Stockholm University ranked 18th. Overall, Sweden ranks 5th in Europe based on the value of university start-ups created, with Swedish startups raising €4.7 billion in 2023 (Vinnova, 2024).

The first business incubator, the Batavia Industrial Center in Batavia, New York, USA, was established in 1959. However, it was not until the late 1970s that business incubators began to spread widely as a form of support for start-ups (NBIA). Similarly, the first incubator in the UK was established in 1972 (Campbell & Allen, 1987).

Over several decades, business incubators have evolved globally, offering support to young companies and helping them to start and build their businesses. This is a diverse field, with various types and developments of business incubators around the world.

The Business Incubator Support Programme has been implemented in Latvia since 2007. Its aim is to promote the creation and development of new, viable, and competitive businesses in the regions of Latvia by providing the necessary environment for entrepreneurship, including infrastructure and advisory services. Under the first call for proposals for the Ministry of Economics' Innovation Centres and Business Incubators Development Programme, 178 young entrepreneurs received support to develop their business ideas, 460 jobs were created, and 1.22 million lats were paid in taxes to the state (Ministry of Economy of the Republic of Latvia, 2009).

In Latvia, business incubators were designed to work closely with educational institutions to commercialize new ideas. This included helping university students start their own businesses, testing the innovative ideas of existing companies in various laboratories, conducting research using the qualified staff of scientific institutes, and ultimately putting products into production.

To explore the future scenarios of business incubators, the first stage involved a regional analysis of the performance indicators of Latvian business incubators from 2007 to 2021. This analysis primarily examined the data collected by the Investment and Development Agency of Latvia (LIAA) on the monitoring of business incubators from 2009 to 2021.

The previous study analysed the Latvian Investment and Development Agency's business incubator support programmes, which can be divided into two phases:

- The public procurement of the Project Programme "Entrepreneurship and Innovations", Complement to the Operational Programme "Entrepreneurship and Innovations", Complement to the Operational Programme "Entrepreneurship and Innovations", 2007–2013, Priority 2.3 "Improving Entrepreneurial Activity and Competitiveness", Measure 2.3.2 "Improving Entrepreneurship Infrastructure and Equipment", Measure 2.3.2.1 "Business Incubators". Activity 2.3.2.1 was implemented in two phases – Phase 1 from 2009 to summer 2014, and in 2014 a new procurement for transitional business incubator operators was launched, under which incubation services were provided until 31 October 2015.
- The programme continued with the implementation of the project "Regional Business Incubators and Creative Industries Incubator" of the measure "Regional Business Incubators and Creative Industries Incubator" of the Operational Programme "Growth and Employment" for Business Incubators administered by LIAA. Measure 3.1.1.6 was implemented in the 2014–2020 programming period as Measure 3.1.1.6 "Regional Business Incubators and Creative Industries Incubator" of the Specific Support Objective 3.1.1 "Promote the creation and development of SMEs, especially in manufacturing industry and RIS3 priority sectors" (Markus et al., 2023).

Almost 500 companies received support between 2009 and 2013, with the highest activity (awards) in 2010. Five years after receiving State aid, only 17% of the original number of enterprises are still in business. Overall, it can be concluded that almost one fifth (17%) of all supported enterprises are stable and active after five years of development, with increasing turnover and number of employees, while the rest have not been able to compete and have ceased their activity (Ministry of Economy of the Republic of Latvia, 2015).

The overall conclusion from the analysis is that this number of companies that have been able to grow in the business incubator and continue to develop is sufficient to consider the business incubator programme a success.

In the second business incubator programme, the data analysed from 2017 to 2021 showed an interesting distribution of incubators in clusters, with Daugavpils and Ogre in the first cluster with a strong positive economic-financial factor, where the success of Daugavpils was surprising, as in the previous business incubator programme the Latgale cluster had quite low factor scores, including the economic factor. This is due to the fact that in the second business incubator programme incubators were under the responsibility of LIAA and were administered in a unified manner, therefore the second cluster also included incubators from nine cities with similar performance, while the successful indicators have been achieved by incubators with more active managers who have been able to show more positive factor performance. According to the analysis, the most successful business incubators in the second LIAA-led business incubator programme were in Daugavpils, Ogre and Sigulda (Markus et al., 2023).

Other studies have also demonstrated a correlation between incubator services and successful outcomes for companies. The administration practices of business incubators significantly contribute to the success of the companies they support. Furthermore, policymakers who allocate public investments to business incubators must understand the regional economic landscape and develop policies that effectively enhance their region's incubation capacity (Harper-Anderson & Lewis, 2018).

The physical presence in a business incubator aids new businesses with marketing and sales, capitalizes on existing networking experience, and instills discipline in entrepreneurs, thereby enhancing their professional image – benefits that are not as pronounced in other environments (Flavel & Kalendra, 2008).

Business incubators should be actively promoted as support structures for young entrepreneurs. These incubators often motivate young entrepreneurs to start new ventures. Motivation theory suggests that increased motivation improves entrepreneurial performance, as incubators provide access to both financial and non-financial services (Matotola, 2016).

As in other studies, the analysis shows that the two business incubator programmes in Latvia have been

generally successful and provide much-needed support to regional entrepreneurship, which in general helps to develop the country's export performance, boost tax payments and reduce unemployment. Consequently, Latvia should continue to finance business incubators, including the active involvement of entrepreneurs and universities (Markus et al., 2023).

Studies by other authors have already shown that university incubators also ensure similar economic development. University-incubated companies have higher employment and sales than non-incubated companies (Lasrado et al., 2015).

By analyzing the development goals of Latvian regions and the challenges related to their implementation, the study concludes that regional business incubators should focus their activities on the following business promotion and support measures:

- Stimulating the activity of the region's population and entrepreneurs through public education.
- Providing advisory support for attracting business financing.
- Offering business infrastructure for the development of priority types of businesses.
- Supporting the attraction of qualified specialists in key entrepreneurial areas.
- Facilitating the implementation of specialized training projects, including experience exchange programs, in priority business sectors.
- Promoting cooperation between entrepreneurs, higher education institutions, and research centers.

Overall, the performance of young entrepreneurs supported by regional business incubators contributes to reducing unemployment, improving the living standards of both young entrepreneurs and the broader community, and bolstering the regional economy. Therefore, the activities of regional business incubators should be continued, with efforts to seek further opportunities for development and improvement (Markus et al., 2023).

To explore the potential development paths for regional business incubators, the second stage of the study developed and presented four distinct scenarios to experts, examining the roles of LIAA, local governments, entrepreneurs, and universities in the administration of these incubators. These scenarios propose different cooperation models to ensure the efficient development of regional economies and a sustainable business environment.

In the second part of the study, an expert evaluation was conducted using the Analytic Hierarchy Process (AHP) to assess the advantages and disadvantages of each scenario. This method enabled a detailed analysis of various criteria and factors that could impact the future performance of regional business incubators. The expert group evaluated these scenarios to address a critical question: Which proposed scenario for regional business incubators is the most suitable for the coming years?

Based on the analysis and expert judgment, the study recommended the optimal scenario for the future development of regional business incubators, considering Latvia's economic and social objectives. This recommendation serves as a strategic direction for Latvia's regional development, ensuring that business incubators continue to play a vital role in fostering regional entrepreneurship and societal well-being.

2. Materials and methods

The paper presents the results obtained using the Analytic Hierarchy Process (AHP) method to evaluate future governance scenarios for business incubators. The AHP method is widely used in decision-making, priority setting, and solving complex problems, particularly when it is necessary to evaluate and choose between different alternatives or criteria. This method allows for a structured assessment of the importance and weight of various criteria and alternatives in relation to a defined goal or objective.

The results of the hierarchy analysis include:

- Prioritization: Hierarchy analysis identifies and ranks the most and least important criteria and alternatives for a defined goal or objective. This helps focus attention on the most relevant factors and avoids redundant processing of information.
- Decision Support: By analyzing and comparing different alternatives, hierarchy analysis provides a structured and systematic approach to decision-making based on objective assessments and expert opinions. This reduces subjective influences and leads to more informed decisions based on objective information.
- Visualization of Results: Hierarchy analysis enables the visualization and understanding of how different criteria and alternatives are evaluated and compared using a hierarchical structure and matrix. This makes the results clear and accessible to all involved, facilitating understanding and consensus.
- Resource Optimization: Hierarchical analysis optimizes available resources by focusing them on the most relevant factors and alternatives. This ensures that time, money, and other resources are used more efficiently to achieve objectives or solve problems.
- Exploration and Evaluation of Options: Hierarchy analysis helps explore and evaluate different options and solutions, providing a systematic and structured approach to problem-solving and identifying new opportunities.

By employing the AHP method, the paper demonstrates a comprehensive approach to assessing and improving the governance of business incubators, ensuring that decisions are well-informed, resources are effectively utilized, and strategic goals are achieved efficiently.

Overall, hierarchy analysis serves as a valuable tool for decision-making and problem-solving across various domains, offering a systematic and objective approach to data evaluation and decision-making, particularly in determining the most effective scenarios for business incubators in regional contexts.

In this study, five experts were chosen for the Analytic Hierarchy Process method, as outlined by Thomas L. Saaty

(Saaty, 1980), representing diverse sectors: 1. Entrepreneur and business incubator client, financier; 2. Higher education institution representative, university rector; 3. Local government representative, council vice-president; 4. Parliamentary secretary of the Ministry of Economy; 5. LIAA business incubator manager.

Following the experts' assessments, the study authors conducted a thorough and systematic compilation and analysis of their evaluations using the hierarchy analysis method. This approach ensures a transparent evaluation and comparison of the significance of various criteria and alternatives. The AHP methodology, employing a 9-point scale, was utilized for the evaluation process.

The calculations were used to determine the impact of the first level, or groups of criteria, on the defined objective, the importance of the impact of each sub-criterion, the choice of alternatives according to the objective, assessing the importance of criteria and sub-criteria, a set of calculations for data analysis, assessing the opinion of each expert by criteria and their importance, as well as sub-criteria and their importance, and a presentation material including a complex view on the hierarchical distribution of levels and the creation of alternatives.

The study contributed to the understanding of how regional business incubators could further contribute to economic development in Latvian regions, and it provides a valuable contribution to entrepreneurship policy-making and practice, taking into account the interests of both the state and local governments, as well as entrepreneurs and academia.

Following discussions with experts, as well as a compilation of data from previous periods of operation of regional business incubators, a hierarchy diagram was developed (see Figure 1).

Taking into account the problem "Improving the performance of Latvian regional business incubators and assessing future scenarios", the following possible scenarios were assessed:

Scenario 1: The Investment Development Agency of Latvia LIAA (state) continues to operate the Latvian business incubators.

Characteristics of the scenario. The Investment Development Agency of Latvia (LIAA), as a state-run institution, plays an important role in entrepreneurship development and innovation promotion at the national level. LIAA continues to ensure the operation of business incubators in the regions of Latvia, taking an active role in both the administrative and support aspects.

These state-run business incubators are organised to support start-ups and entrepreneurs wishing to develop innovative projects. LIAA uses its resources, including funding, premises, technical infrastructure and manpower, to ensure that the incubators operate efficiently. This approach allows the public authority to play an active role in the development of entrepreneurship and the promotion of innovation, creating a favourable environment for entrepreneurs and start-ups.

LIAA's business incubators not only provide entrepreneurs with physical resources, but also valuable information, training and advice. The public institution makes sure to offer a wide range of support services, from developing a business plan to growing a business and promoting exports.

Business incubators which especially operate by governments, are frequently used as tools to promote the

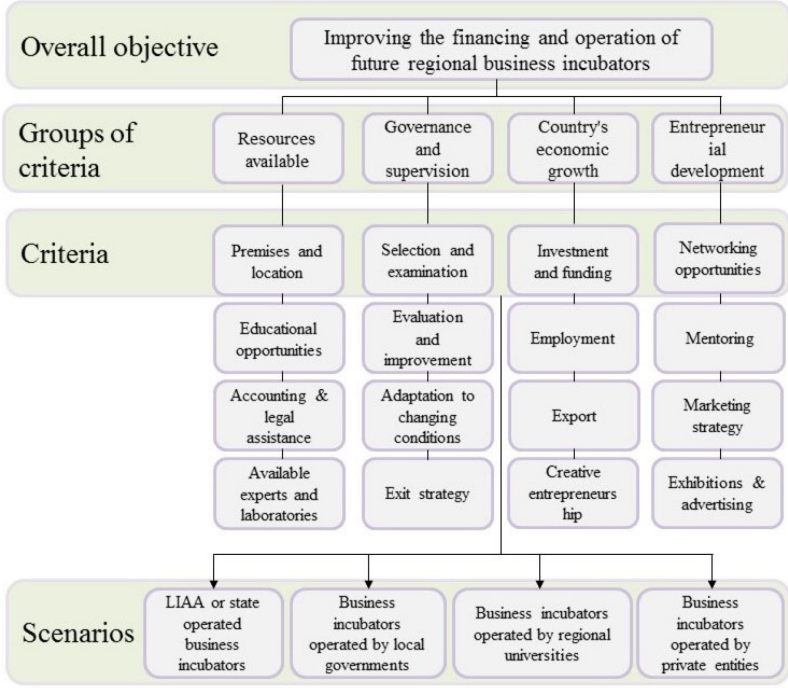

Figure 1. Hierarchy diagram for the problem "Improving the performance of Latvian regional business incubators and assessing future scenarios" (source: own study)

economic development of a community, a region and a country. In particular, this is evident in the United States of America (USA), due to the wide spread use of technology-based business incubators which aims to support local and state-level economic development strategies (Wagner, 2006).

Scenario 2: Business incubators operated by local governments.

Characteristics of the scenario. The Latvian Investment Development Agency (LIAA) transfers the management of business incubators to local governments, providing adequate funding to improve the local business environment.

Local governments are actively involved in the operation of business incubators, providing them with modern premises and administrative support. LIAA provides the necessary funding and municipalities offer additional resources, including office space, conference rooms and equipment, to ensure comfortable and functional workplaces for entrepreneurs.

To increase the efficiency of business incubators, some municipalities may outsource various services such as accounting, IT support or other specialised services. This allows entrepreneurs to concentrate on their business while benefiting from the services provided by professionals.

Municipalities can offer entrepreneurs a range of advice, for example on the use of regional natural resources and on binding regulatory documents. This helps entrepreneurs to better understand the local market, facilitating their adaptation to regional conditions and successful integration into the local business environment.

Scenario 3: Business incubators operated by regional universities.

Characteristics of the scenario. Business incubators managed by regional universities provide an innovative and stimulating environment for entrepreneurship development in the region. These types of business incubators are established in cooperation with the Investment and Development Agency of Latvia (LIAA), which provides funding and support for such incubators. These incubators are strategically located in regions where they are able to make the most of the resources and expertise of local universities.

The regional universities that take on the management of the incubator offer a wide range of services to support young entrepreneurship. They provide entrepreneurs with access to modern premises equipped with the necessary infrastructure and resources, including laboratories and office facilities. Regional universities use their academic and professional networks to provide entrepreneurs with access to experienced mentors and experts.

Business incubators run by regional universities often foster cooperation between entrepreneurs, academia and industry, promoting innovation and knowledge exchange. These incubators organise various events such as seminars, workshops and networking events to foster business development and encourage the generation and development of new ideas.

In addition, business incubators managed by regional universities further promote entrepreneurship among students and graduates by providing them with the opportunity to participate in start-up programmes and projects offered by the incubator. Such synergies between academia and the business sector foster the creation of new businesses and stimulate economic growth in the region.

Scenario 4: Business incubators managed by private organisations.

Characteristics of the scenario. Privately managed business incubators provide entrepreneurs and start-ups with the opportunity to develop and refine their business projects through funding and support provided by LIAA, in addition to which private incubators can offer their private resources and expertise. These incubators often operate on a for-profit basis, offering entrepreneurs a range of services and support to grow their business.

Business incubators run by private organisations work in different sectors and specialise in supporting different areas of entrepreneurship. They can be set up by investment funds, experienced entrepreneurs or other private organisations wishing to promote start-ups and innovation. These incubators offer flexible solutions and adapt to the needs of entrepreneurs, offering a wide range of resources and services.

The main offerings of private business incubators include access to modern office space, conference rooms, technical resources and technology infrastructure. Entrepreneurs can also benefit from the support of experienced mentors and advisors who help them develop business strategies, EU grant applications, solve problems and identify new growth opportunities.

Privately managed business incubators also offer networking and collaboration opportunities through seminars, workshops and other events. In this way, they stimulate innovation and create platforms for the exchange of ideas between entrepreneurs. Private business incubators can also provide access to investment opportunities and finance, helping start-ups to develop and implement their business plans.

3. Results and discussion

In the study, experts were asked to rank the performance of Latvia's regional business incubators in terms of importance in the following groups of criteria: resources available, governance and supervision, country's economic growth, entrepreneurial development.

In general, the experts gave equal importance to the available resources, national economic growth and business development as the main criteria for regional development and promoting entrepreneurship in the regions (see Figure 2). On the other hand, the criterion of management and supervision is indicated as less important, which means that, according to the experts, the administration of regional business incubators does not have as much influence on entrepreneurship development as external factors

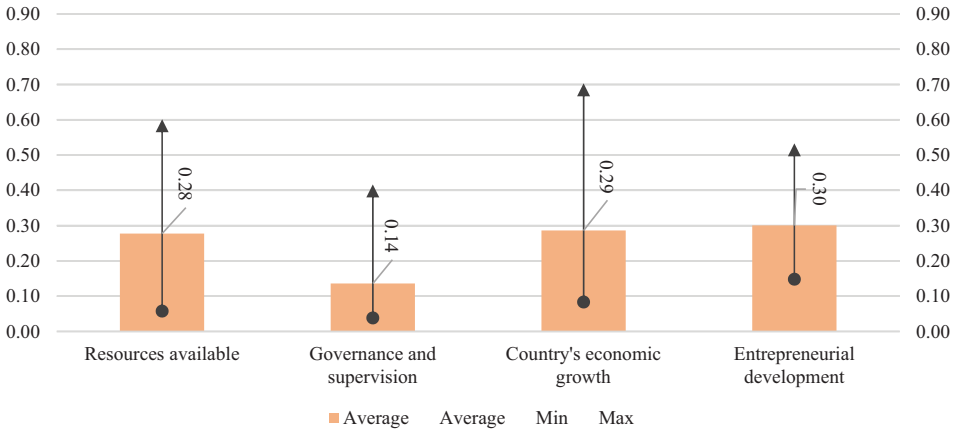

Figure 2. Ratings of the criteria groups (source: authors' survey results)

such as investments, available experts and other resources, mentoring and marketing.

It should be noted that the experts' opinions were not very unambiguous, this can be observed as a rather large difference between the minimum and maximum values, which was most pronounced in the criteria group Country economic growth.

In the following, the experts assessed all four scenarios against each of the 16 criteria. All values are summarised in four groups of criteria, the results of which are presented in the graphs below.

In the group of available resources criteria (see Figure 3), the third scenario "Business incubators operated by universities" (0.137) is very convincingly superior, based on the experts' opinion that universities in the regions have the most extensive resources available for the administration of business incubators. Universities have their own premises, usually in a good location, access to a variety of educational opportunities, as well as experts and laboratories. The lowest ranking in this criterion group according to the experts was "Business incubators operated by municipalities" (0.023), which is explained by the fact that municipalities do not have the direct function of educating entrepreneurs and providing them with experts and laboratories.

On the other hand, the scenarios "LIAA or state operated business incubators" (0.065) and "Privately managed business incubators" (0.053) were fairly similar, with LIAA slightly ahead.

It should be noted that the range of dispersion of the experts' scores in this group of criteria is rather large when evaluating the scenarios, which is explained by the fact that the experts represented the whole group of scenarios or institutions and individual opinions differed sharply.

The "Governance and supervision" criteria group of the expert assessment assessed the selection and examination, evaluation and improvement, adaptation and exit strategy of the business incubator (see Figure 4). In this criterion group, the highest score according to the experts was given to "Privately operated business incubators" (0.081), which according to the experts are the most effective in monitoring young entrepreneurs. However, this opinion was not unanimous, as evidenced by the high range of dispersion. While the other three scenarios in this group of criteria were fairly evenly matched with a sufficiently low spread.

In the very important group of criteria "Country's economic growth", investment and financing, employment, export and creative entrepreneurship were assessed, where quite naturally the highest rated scenario was "Business

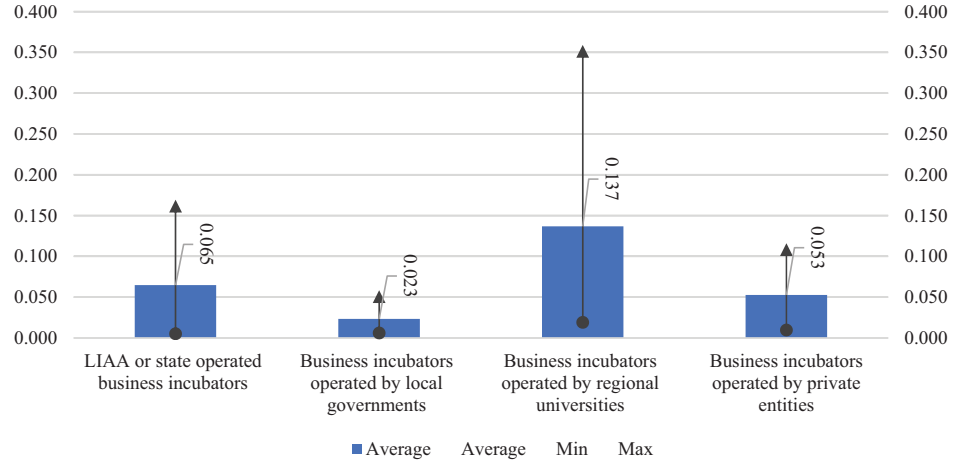

Figure 3. Ratings of the scenarios in terms of criteria group recourses available (source: authors' survey results)

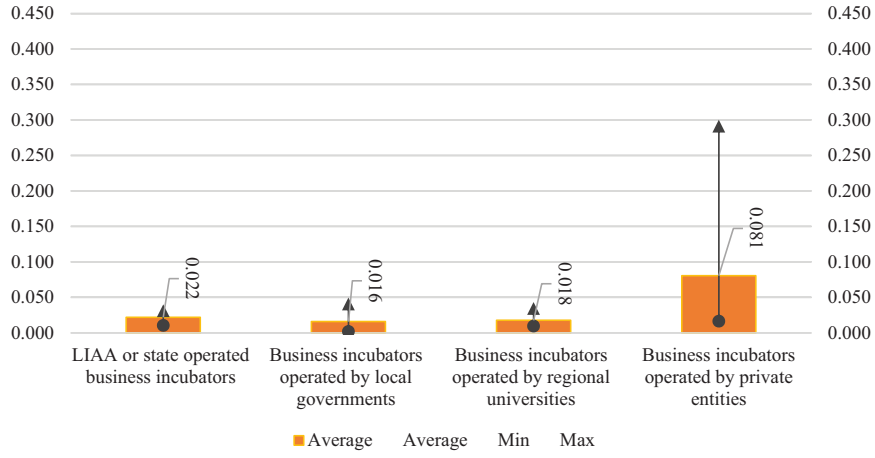

Figure 4. Ratings of the scenarios in terms of criteria group governance and supervision (source: authors' survey results)

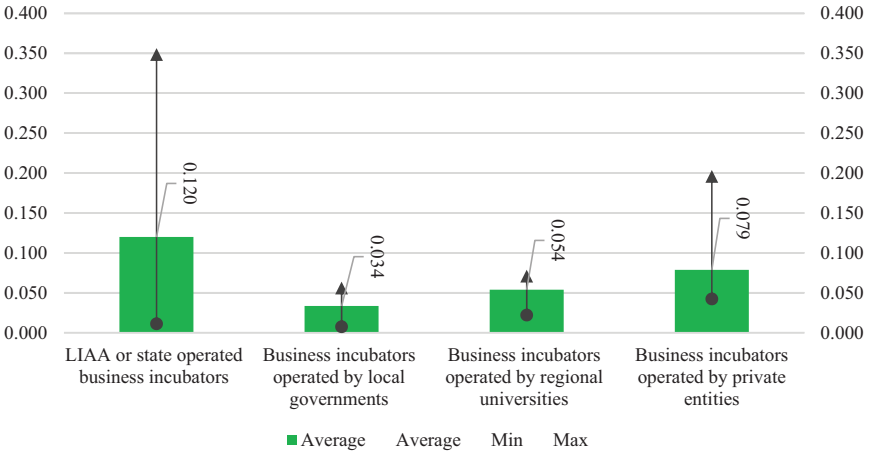

Figure 5. Ratings of the scenarios in terms of criteria group country's economic growth (source: authors' survey results)

incubators operated by LIAA" (0.120), which is explained by the fact that already now LIAA is delegated to perform these nationally important functions, mainly investment attraction, export and commercialisation of innovations (see Figure 5). However, the wide range of dispersion in this scenario also reflects considerable expert disagreement. The second highest scoring scenario in this group of criteria was "Business incubators operated by private entities" (0.079), also with a fairly large range of dispersion. It can be concluded that experts' opinions in this criteria group were divided between the capacity and importance of LIAA and privately operated business incubators. The third most important was "Business incubators operated by regional universities" (0.054) and the last "Business incubators operated by local governments" (0.034).

The scores in the criterion group "Entrepreneurial development" are also similar, with the fourth scenario "Business incubators operated by private entities" (0.119) and "LIAA operated business incubators" (0.098) being the highest scoring scenarios, while "Business incubators operated by regional universities" (0.51) and "Business incubators operated by local governments" (0.033) lag far behind (see Figure 6). As before, there was a wide divergence of opinion among experts on this criterion and a fairly wide range of dispersion in this group of criteria. The criteria assessed in the "Entrepreneurial development" group were networking, mentoring, marketing strategy and exhibitions. These criteria are related to the promotion of a product or service on the market and it is quite natural that privately managed business incubators would be able to provide these functions most efficiently, although LIAA is very successful in providing various support instruments related to marketing and exhibitions, which explains the high scores for these scenarios.

Summarising the scenario scores across all criteria, the fourth scenario "Business incubators operated by private entities" (0.331) is the leader, followed by "LIAA operated business incubators" (0.304), then "Business incubators operated by regional universities" (0.259) and finally "Business incubators operated by local governments" (0.106) (see Figure 7).

Thus, in improving the performance of Latvian regional business incubators and assessing future scenarios, experts believe that privately operated business incubators could have the greatest impact on regional development. Although the current scenario with business incubators managed by LIAA is also highly appreciated.

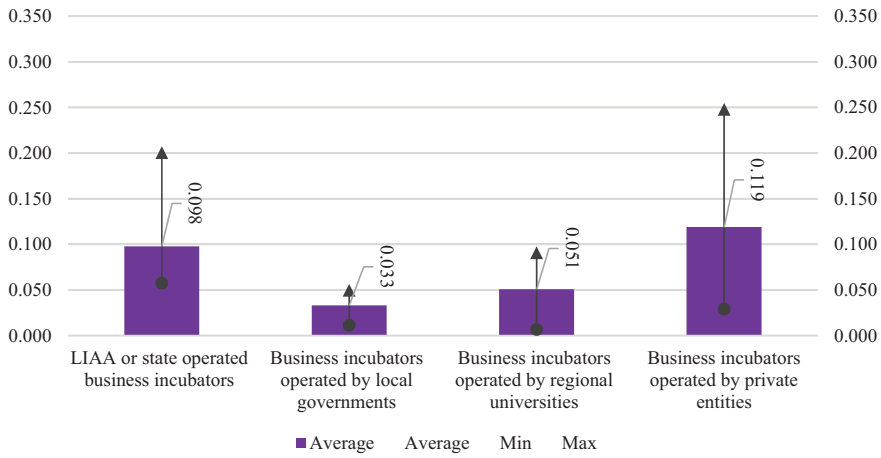

Figure 6. Ratings of the scenarios in terms of criteria group entrepreneurial development (source: authors' survey results)

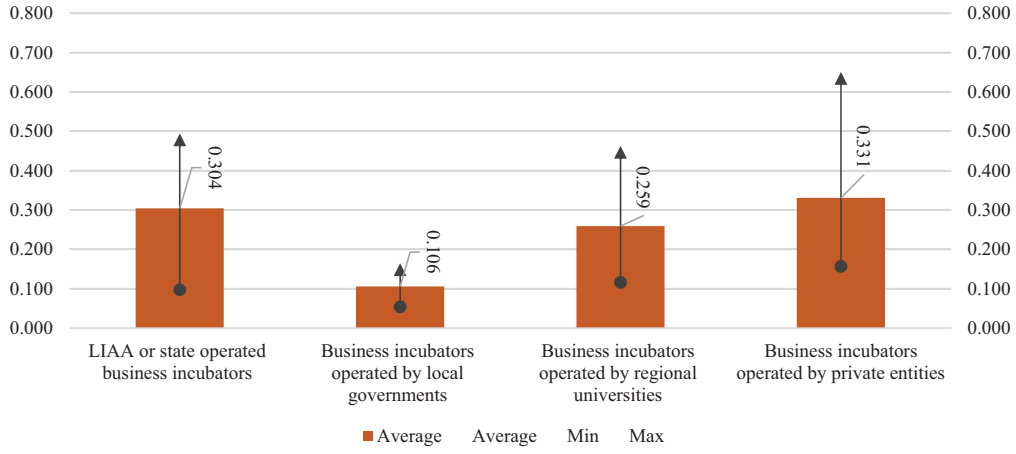

Figure 7. Summary ratings of the scenarios according to all criteria (source: authors' survey results)

4. Discussion

According to the authors of the study, regional universities could also manage business incubators very efficiently, as they scored highly in the "Resources available" criteria. While universities are mainly involved in providing educational functions, they have recently been thinking more and more about developing and improving their entrepreneurial functions. By integrating the management of business incubators into regional universities and transferring their administration to young staff with managerial and entrepreneurial skills, the results in incubator management can be very high.

University business incubators have been interpreted in the past, and are still interpreted now, mainly as helping students and researchers to develop start-ups by providing the necessary business development services to students and researchers (Rogova, 2014). But nowadays we see a lot of new ideas, such as the entrepreneurship university, which naturally includes tools such as business incubators for all business start-ups. The implementation of an entrepreneurship university is focused on the interaction between education and creativity, which will help to raise a generation of creative entrepreneurs. Universities, with their laboratories, scientific infrastructure and expertise, can offer many advantages to potential young entrepreneurs, as even the simple transfer of knowledge and education can be decisive for a potential entrepreneur.

The Entrepreneurship University concept focuses on the transfer of academic knowledge to enterprises, contributing to socio-economic development. This idea first gained popularity in the United States, particularly at pioneering universities such as MIT and Stanford University. These universities set policies on patenting and technology transfer, established partnerships with industry and supported the creation of start-ups (Shane, 2004; Etzkowitz et al., 2000)

The second wave took place in Western Europe, where universities, previously known as "ivory towers", started to change their approach, becoming active support centres for academic entrepreneurs (Rothaermel et al., 2007; Guerrero et al., 2015).

The third wave started in emerging economies, where the promotion of academic entrepreneurship became a key policy issue. Although this process has already started, it is still unclear what specific policies or structures are

needed to ensure effective academic knowledge transfer, start-up incubation and, ultimately, socio-economic development (Etzkowitz & Zhou, 2018). By assessing the different scenarios and their merits, the authors provide valuable recommendations for Latvia's regional development. These conclusions and recommendations can serve as a roadmap to ensure the sustainable operation of regional business incubators, while contributing to the regional economy and business environment.

Many incubators around the world are supported by universities. Others are taking initiatives to build links with universities and higher education institutions to generate revenue and profit from their academic nature. More recently, university incubators have become an evolution of incubators that support entrepreneurs more than other types of incubators (Hassan, 2020).

Overall, it can be concluded that Latvian universities and student business incubators make a significant contribution to sustainable education. In cooperation with business incubators, universities promote the involvement of young entrepreneurs in business, incubated companies create new jobs and develop different types of products, and these in turn play an important role in the development of sustainable higher education. However, according to the survey, young entrepreneurs need help in networking with various institutions, especially local authorities, as support from local authorities is important for young entrepreneurs, who are nowadays the most important prerequisite for economic growth, as well as cooperation with universities, on which knowledge transfer to production, innovation and eco-entrepreneurship depends (Bikse et al., 2016).

5. Conclusions

The next financial perspective period 2021–2027 will see new programmes focusing on knowledge and personal skills development, business competitiveness and material prosperity. Smart specialisation, innovation, technological development and modernisation, as well as investment in human capital and the development of competitive entrepreneurship throughout Latvia are to be developed (Saeima of the Republic of Latvia, 2020). This indicates that the Latvian Government has valued and plans to promote and develop business incubators in the next development period.

The 2027 support period has a specific support objective "Promote sustainable growth, competitiveness and job creation of SMEs, including through productive investments", which provides support for the incubation process in the medium-high and high-tech and creative industries (financial, non-financial support measures), which means providing support and encouraging interest in starting, developing, and creating businesses, i.e. (b) to support and promote entrepreneurship, including for existing enterprises, and the creation of business teams with a focus on or with the aim of strengthening growth in the medium-high and high-tech and creative industries sectors, to promote the creation of products and/or technologies with high added value. This will ensure the linking of the incubation service and the orientation towards R&D&I and high added value products, the implementation of the support instrument being ensured by LIAA in cooperation with Higher Education Institutions, municipalities, as well as with representatives of the creative and technology industries. The support will include training, mentoring, consultancy, support for prototyping, investment attraction, further development and market research, as well as other forms of support tailored to the needs of the client. Support will be provided in the form of non-financial support and grants (LR Finanšu ministrija, 2022).

Business incubator programmes have contributed significantly to regional entrepreneurship since their launch in 2007. They provide support to young entrepreneurs, boosting employment and improving the quality of life in the regions. In addition, these programmes also boost export capacity and tax revenues.

In the light of the authors' analysis of the theories of legislation and creativity, as well as the experience of other countries on the development of business incubators and their impact on the development of entrepreneurship in Latvian regions, the conviction is strengthened that:

- Business Support: Business incubators offer infrastructure, advice, and resources to young entrepreneurs, facilitating their success and reducing start-up risks. The launch of the Innovation Centres and Business Incubators Development Programme in 2007 marked a pivotal step in bolstering regional entrepreneurship in Latvia.
- Favourable Business Environment: Incubators create a conducive business environment in the regions by providing access to premises, technical equipment, advisory services, and other support. This fosters both the survival and sustainable growth of businesses.
- Economic Growth: Business incubators play a crucial role in promoting regional economic growth by creating new jobs and enhancing the local economy. They also encourage collaboration between entrepreneurs, educational institutions, and research centers, stimulating innovation and technology transfer.
- Innovation Support: Incubators support innovation and high-value entrepreneurship, promoting the development of new ideas and the creation of creative industries and knowledge-intensive products.
- National Objectives: Business incubators are integral to achieving national goals such as stimulating innovation, promoting employment, and supporting regional entrepreneurship, as highlighted in Latvia's strategic documents like the Lisbon Strategy and the National Development Plan.
- Public Support: Public support for business incubators provides a financial safety net for new businesses during their start-up phase, making entrepreneur-

ship more attractive and reducing risks for investors. This support also helps attract private investment.
- Long-term Impact: Successful business incubators foster business growth and innovation, creating a long-term positive impact on the regional economy. They contribute to regional development and help reduce disparities between different regions.
- Networking and Collaboration: Experience shows that business incubators create networks between entrepreneurs, educational institutions, and research centers. This promotes knowledge exchange and strengthens links between different sectors.

The four different regional business incubator development scenarios developed in the study, involving LIAA, municipalities, entrepreneurs and universities, offer different approaches to regional economic development. Based on the expert analysis, it is concluded that the optimal scenario for the further development of regional business incubators is incubators managed by private organisations, which shows potentially greater efficiency and flexibility in supporting entrepreneurship, focusing on innovative approaches and solutions.

Business incubators managed by LIAA also remain highly rated, indicating stability and continued support at national level.

Similarly, regional universities could be effective managers of business incubators, especially in terms of available resources. Such an approach would foster closer cooperation between academia and business, creating a favourable environment for innovation and business development.

Business incubators of regional universities can have a significant impact on the economic development of the regions by providing creative and innovative ideas and fostering commercialisation potential. The study highlights the role of these incubators as an important support instrument for regional development.

The study confirms the importance of business incubators for regional development and provides an insight into their future potential, outlining a potential development path with the involvement of the state, universities and the private sector.

In conclusion, the business incubation process is continuously evolving, necessitating further research in several key areas:
- Sector-Specific Impact: More in-depth assessments are needed to understand the impact of business incubators across different sectors. Investigating the nuanced effects of incubation on start-ups in various fields will help refine support strategies and tailor them to specific industry needs.
- Global Cooperation: Encouraging global cooperation and cross-border incubation initiatives is vital. Researching this area can shed light on the challenges and successes of start-ups engaging in international ecosystems, providing insights that can enhance global incubation practices.
- Long-Term Success Indicators: Further research should focus on identifying and measuring long-term success indicators for incubated start-ups. Understanding these indicators will provide a clearer picture of the sustained impact of incubation programs and inform strategies for ongoing support and development.

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