6. The local dimension of SME and entrepreneurship policy in the Slovak Republic

This chapter assesses differences in regional conditions for entrepreneurship and SME development within the Slovak Republic and the regional-level policies aimed at supporting development in the whole country. It assesses regional conditions for SME and entrepreneurship development and considers current arrangements for the tailoring of SME and entrepreneurship policies to different regional needs. A number of policy recommendations are proposed.

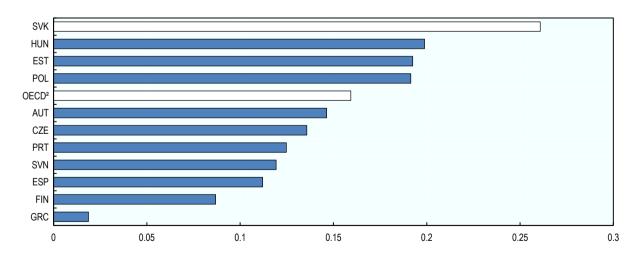
Spatial variations in SME and entrepreneurship development conditions

There is a strong west-east divide in the amount and quality of SME and entrepreneurship activity, as shown in chapter 2 of this report, with better SME and entrepreneurship performance in the more prosperous and urbanised parts of the country. This section reviews the regional variations in the business environment for SME and entrepreneurship development in the Slovak Republic that underpin these differences, providing insights into how policy can strengthen SME and entrepreneurship performance across the country. Important regional differences are identified in business environment conditions for SMEs and entrepreneurship in terms of regional inequalities, regional competitiveness, regional regulations, regional FDI levels, the presence and strength of business clusters, and the role of higher education institutions (HEIs) in supporting regional development.

Regional inequality

The Slovak Republic has some of the most significant regional economic disparities among the OECD countries, as indicated by Figure 6.1. These disparities have deepened in the last 20 years. There are sharp differences between high levels of per capita GDP in Bratislava and neighbouring Trnava region, the intermediate performance of the rest of the western part of the country, and the lagging central and eastern regions (Figure 6.2). Labour market performance also exhibits sharp regional imbalances in the Slovak Republic (OECD, 2017). To address skill shortages, regions in the Western Slovak Republic have sought to recruit workers from abroad in significant numbers in order to maintain and further expand production. Unemployment has also decreased significantly in the regions of Central and Eastern Slovak Republic but the Banská Bystrica, Košice and Prešov regions still have three times the registered unemployment rate of the Bratislava region. The favourable macroeconomic development of the last two decades has brought high growth in economic activity and household income to all regions of the Slovak Republic, but this has not reversed the regional disparities.

Figure 6.1. Regional Economic Inequalities – A Gini Index of Inequality of GDP per Capita across Regions



Source: OECD (2017), OECD Economic Surveys: Slovak Republic 2017, Paris: OECD

StatLink https://doi.org/10.1787/888934247875

Higher than 15,000 €

Between 11,000 and 15,000 €

Lower than 11,000 €

Trencin

Banská Bystrica

Trava

Nitra

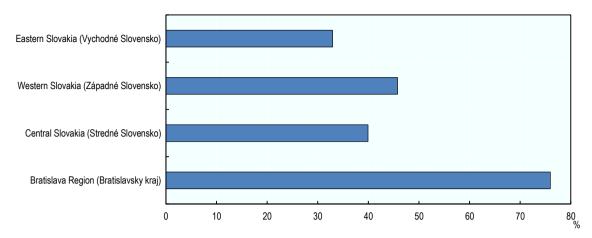
Figure 6.2. GDP per Capita, 2014, current prices

Source: OECD (2017), OECD Economic Surveys: Slovak Republic 2017, Paris: OECD

Regional competitiveness

There are also important underlying differences in the competitiveness of each region which affect SME and entrepreneurship performance and regional inequalities more broadly. Figure 6.3 shows the relative competitiveness of each NUTS 2 region based on the EU Regional Competitiveness Index, which includes more than 70 indicators at the NUTS-2 level across the EU covering the following competitiveness pillars: macroeconomic stability; infrastructure; basic education; higher education; labour market efficiency; business sophistication; and innovation (Annoni and Dijkstra, 2019). The Bratislava region is significantly more competitive than the other three regions, with Western Slovak Republic (the region surrounding and adjacent to Bratislava) being the next most competitive followed by Central Slovak Republic, with Eastern Slovak Republic by far the least competitive.

Figure 6.3. Competitiveness of Slovak Regions 2019



Source: Annoni and Dijkstra (2019), EU Regional Competitiveness Index 2019.

StatLink https://doi.org/10.1787/888934247894

The weak competitiveness of the regions in the east of the country is rooted in three key constraints.

First, changes in regional production. These involve:

- A large decline in production and employment in heavy industry (coal mining, metallurgy, mechanical engineering and chemicals), which was the dominant industry, and remains a major part of the economic structure in specific regions (Košice, Žilina and Trenčín Regions).
- The slowdown of production in the textile and electronics industries, seriously impacting upon the economy and employment (Prešov, Košice and Trenčín Regions).
- The decrease in the number of people working in agriculture, which had a relatively high share of economic output in rural regions (Nitra, Banská Bystrica and Košice Regions).
- The concentration of tertiary sector economic activity in large cities, especially Bratislava (Rievajova and Klimko, 2018).

These challenges suggest a requirement for regional strategies and systems that can activate entrepreneurship and new forms of economic activity. These regional strategies and systems could formally integrate current and new cluster initiatives to ensure they have clear support platforms that will allow them to the opportunity to grow further. Weaknesses will need to be addressed in capacities for strategic planning at regional level.

Second, weakness in human capital and labour market operation. These involve:

- Poor labour force mobility between regions, which is connected with limitations on finding housing near work and poor access to public transport, leading to negative effects in areas with low population density.
- Lack of development of suitable skills for new economic conditions in the east, due to educational and cultural traditions.
- Weak SME workforce and management skills in economically weak regions.

One important policy response to these issues should be the increased availability of education attuned to entrepreneurship, especially at the school level.

Third, infrastructure deficiencies and derelict environment: These involve:

- Competitiveness in the east is held back by distance from important EU trading partners and European transport corridors.
- This is exacerbated by an incomplete network of motorways and dual carriageways slowing transport and forming barriers to access to central and eastern regions (SBA, 2018). The investment focus since the early 1990s on expanding the motorway network and upgrading the rail network around the capital and northwest of the country have increased these disparities (OECD, 2019).
- Poor local transport infrastructure and the absence of a comprehensive approach to the revitalisation of peripheral settlements in terms of suitable buildings and business facilities.
- The poor state of the environment due to the historical legacy of old and now defunct industries, some of which is the result of the extraction of mineral resources, and the fragmentation of the landscape itself, resulting in transport problems in terms of accessibility and the economic efficiency regions (Rievajova and Klimko, 2018).

Regional entrepreneurial ecosystem quality

Specific conditions for entrepreneurship can be picked up by an assessment of the quality of regional entrepreneurial ecosystems. The Regional Entrepreneurship and Development Index (REDI) seeks to provide a measure of entrepreneurial ecosystems at the regional level. It focuses on entrepreneurial attitudes, abilities, and aspirations, and combines measures of individual perceptions and data on regional institutional conditions (Szerb et al., 2017). Figure 6.4 summarises the disparities in entrepreneurship development conditions across Slovak regions on this measure. It clearly shows the relatively advanced level of development in the Bratislava Region compared to other parts of the nation, as well as indicating a broad west-east divide.

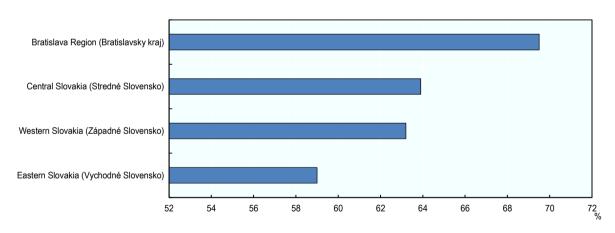


Figure 6.4. Regional Entrepreneurship Development Index

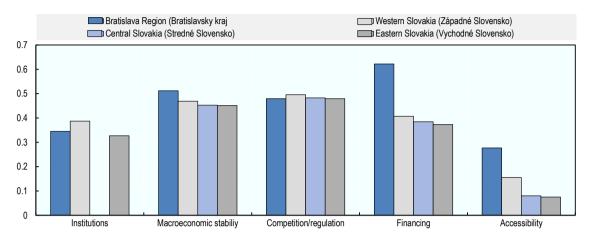
Source: Szerb et al. (2017), Regional Entrepreneurship Development Index

StatLink https://doi.org/10.1787/888934247894

There are some important similarities across the regions in terms of the quality and nature of institutions, competition and regulation. However, accessibility and finance are much more developed in Bratislava (Figure 6.5). Bratislava also tends to be significantly stronger than other regions on measures of business and technological environment (Figure 6.6). From an international perspective, with the

exception of Bratislava, the Slovak regions lag behind regions in other EU countries, with REDI scores toward the bottom of regional rankings. Another notable constraint for the three lagging regions is start-up skills (Szerb et al., 2017), which should represent a high-level regional policy priority.

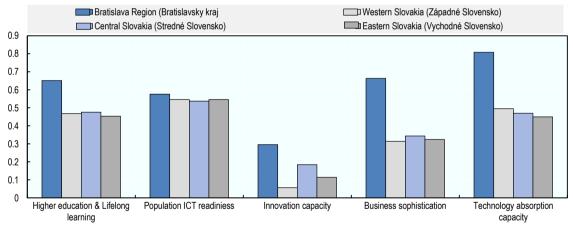
Figure 6.5. Regional Differences in the Institutional Business Environment in the Slovak Republic



Source: Szerb et al. (2017), Regional Entrepreneurship Development Index.

StatLink https://doi.org/10.1787/888934247932

Figure 6.6. Regional Differences in the Business and Technological Environment in the Slovak Republic



Source: Regional Entrepreneurship Development Index

StatLink https://doi.org/10.1787/888934247951

Regulations and the capability to 'do business'

An important measure of regional conditions for SME and entrepreneurship development concerns the ease with which firms are able to 'do business' in terms of both starting a new business and efficiently operating an existing business. The World Bank's (2018) report on Doing Business in the European Union 2018: Croatia, the Czech Republic, Portugal and the Slovak Republic has found significant differences in regulatory hurdles across the cities of the Slovak Republic. Interestingly, it is found that

due to demand issues, entrepreneurs located in Bratislava are often at a disadvantage compared with their counterparts in other regions, due to the far higher level of demand for public business administration services rather than the underlying quality of services. Notable findings from the survey are:

- Bratislava receives more new business licensing applications than the other assessed Slovak cities combined. Starting a business is easier in Presov or Zilina, where dealings with the tax authority to obtain a tax arrears form and register for VAT take eight days - one week less than in Bratislava.
- Trnava stands out for its performance in registering property, a process completed there in less than a week - three times as fast as in Bratislava or Presov, and the district court in Košice outperforms its peers through faster trial and judgment times.
- The largest variations in regulatory performance among Slovak cities are in the areas of accessing electricity and dealing with construction permits. This is no surprise given that different utility companies are operating in different parts of the country and many construction permit requirements are under municipal control.
- Construction permits are dealt with more efficiently in Presov, which is mainly due to a more streamlined process for obtaining location and building permits and a shorter wait for water and sewerage connection.
- Zilina leads for accessing electricity, with a faster and less costly connection process. In Košice, Presov and Zilina, a warehouse is likely to connect to the low-voltage network, and wait times are shorter and the process is less costly. In Bratislava and Trnava, by contrast, the warehouse is likely to get a medium-voltage connection, which requires the installation of a private substation at a cost of around EUR 28,000. So while getting electricity takes 56 days and costs 55% of income per capita in Zilina, it takes a month longer and costs more than four times as much in Bratislava and Trnava (World Bank, 2018).

Regional unevenness and foreign direct investment

One of the strong drivers of recent economic growth in the Slovak Republic has been the attraction of a large wave of Foreign Direct Investment (FDI), especially investment related to the automotive sector. This FDI has concentrated in the already relatively strong regions and localities, therefore contributing to regional economic disparities and differences in regional opportunities for SME and entrepreneurship development, including for FDI supply chain participation and spillover effects (Rievajova and Klimko, 2018).

Differences in FDI inflows across the regions are quite pronounced, with western regions receiving approximately three-quarters of the total FDI. Such investment is dominated by the Bratislava region, which accounted for 65% of total FDI over the period 2009-2015. This is comparable to the period 1993-2007 when Bratislava region attracted 68% of total FDI. The western regions of the Slovak Republic now benefit from self-reinforcing agglomeration effects of development in the automotive sector in Trnava (PSA) and Žilina (Kia) and supplier networks and electronics in Trnava (Sony) and Galanta and Nitra (Samsung) (Fabuš and Csabay, 2018).

Since 2017, there has been some growth in FDI in the more eastern and central regions, and investment incentives are structured so that they should mainly support weaker regions. Historically aid was directed to more developed regions, largely due to the location decisions of investors themselves rather than national policies (Fabuš and Csabay, 2018). Historically, most incentives have gone to the Trenčín region, followed by Žilina, which along with Trnava has received the most significant investment from the automotive industry. Regions such as Banska Bystrica have received significantly less FDI. Despite

amendments to the Investment Assistance Act, regions such as Prešov have failed to secure any significant investment.

At sector level, FDI has been focused on automotive and mechanical engineering industries; consumer electronics and electrical equipment; ICT and services; and the production and processing of iron and steel. Alongside these, areas are emerging that may become more specialised, in particular: automation, robotics and digital technology; processing and increasing the value of light metals and their alloys; the production and processing of plastics; creative industries; and higher value domestic raw material (Dvouletý et al., 2019). There are opportunities for SME development in these industries as they develop in the Slovak Republic, particularly where there are regional concentrations.

The emergence of business clusters

There has been a growing clustering of industries at regional and local level in the Slovak Republic, catalysed by both FDI and SME development. Key business sectors such as engineering and the automotive industry are concentrated mainly in Bratislava, Trnava, Nitra, Žilina and Košice. In many cases these industry clusters are supported by formal regional cluster organisations, which may have emerged with or without public support. The cluster management organisations include for example:

- Košice IT Valley Košice, Eastern Slovak Republic (see Pástor et al., 2013 for information on innovation patterns in the cluster).
- Slovak Automotive Cluster Trnava, Western Slovak Republic.
- Electrotechnical Cluster Galanta, Western Slovak Republic.
- Slovak Plastic Cluster Nitra, Western Slovak Republic.

As another example, an aluminium processing cluster is developing in the Banská Bystrica region in central Slovak Republic, although a formalised cluster organisation has not yet been established. The cluster was triggered by an aluminium producer and the Slovak Academy of Sciences founding a research and development (R&D) centre. This has enabled R&D cooperation with local firms and the commercial application of innovative solutions. As a result, the cluster now involves a number of innovative, export-oriented companies.

Furthermore, the Bratislava region is one of the most prominent regions in the EU from the point of view of the concentration of employment in the creative sector. Approximately 5% of the labour force works in these sectors in the region, indicating a significant specialisation. Also, 46 % of Slovak firms in the creative sectors in the nation are located in the Bratislava region.

In general, there has been a lack of systemic public support for the development of the clusters, which have often appeared through a "bottom-up" approach. However, more recently the public sector has begun to help establish and nurture local and regional clusters, particularly for technological cluster organisations. Six cluster initiatives received a Bronze Label from the European Cluster Excellence Initiative (ECEI) in 2013, issued by the European Secretariat for Cluster Analysis. The label was assigned to the following cluster organisations: (1) The Automobile Cluster – Western Slovak Republic, (2) Slovak Plastics Cluster, (3) The First Slovak Machinery Cluster, (4) Košice IT Valley z.p.o., (5) Cluster AT+R, and (6) NEK. A European Bronze Label was also assigned to two tourism clusters – Klaster LIPTOV and Klaster ORAVA. Also, the Electrotechnic Cluster in Western Slovak Republic, which involves the foreign investor Samsung, has increased its activity (Dvouletý et al., 2019).

There appears to be significant potential for policy to enhance and harness these cluster initiatives in the future in support of SME and entrepreneurship development. The case study summarised in Box 6.1 provides some useful pointers in how to develop such a policy, especially the establishment of centres of expertise, encouraging collaboration between centres of expertise and local businesses and local/regional government, and brand building for clusters. In particular, in the Slovak Republic there is

a need to forge new public-private sector relationships at the local level. This could be achieve for example by the establishment of local enterprise partnerships, which provide a means for the public and private sectors to collaboratively formulate and deliver local entrepreneurship strategies.

Box 6.1. Cluster Building – The Emerging Compound Semiconductor Cluster in South Wales, United Kingdom

The compound semiconductor industry in the South Wales region is emerging as an identifiable business cluster that possesses an ecosystem of interdependent companies and organisations (Huggins et al., 2019). Compound semiconductors are a Key Enabling Technology (KET) for the economic growth drivers identified in the European Commission's Horizon 2020 economic growth and reindustrialisation strategy for Europe. Compound semiconductors are at the heart of the high-tech devices used today, from smartphones and tablets to satellite communications and GPS, and the advent of the internet, fibre-optic communication and the smartphone revolution have been fundamentally dependent on compound semiconductor technologies.

In the last 5 years or so, the regional activities in compound semiconductors have rapidly expanded to form an emergent regional cluster with significant interdependencies across a range of organisations across the private sector, public sector, and academic and research organisations. The most notable features of the cluster's recent development involve investments in human capital and innovation. Such a clustered ecosystem business environment is providing benefits to participants and wider economic development benefits for the region.

A significant policy effort has been pursued by regional actors to establish the cluster. Key features of the policy effort are as follows:

Developing New Centres of Expertise – A three-way agreement was made between the private firm IQE PLC (a leading global supplier of advanced compound semiconductor wafer products covering a diverse range of applications), Cardiff University and the Welsh Government to found the Compound Semiconductor Centre in 2015. It is a prototyping facility allowing businesses and academics to demonstrate new technologies based on compound semiconductor materials. It is beginning to position itself as a new European home for product, services and skills development in compound semiconductor technologies. The Welsh Government also set up the Institute for Compound Semiconductors, which is a translational facility to help researchers and industry work together.

Engaging with Local and Regional Government – The local government authority partners in the Cardiff Capital Region (CCR) have also acted as a champion for the development of the cluster through both financial support and international exposure. The CCR City Deal is a programme of activity agreed in 2016 between the UK Government, Welsh Government and ten local authorities in South East Wales to bring significant new economic growth opportunities. The local authorities that comprise the CCR have a stake in the recently established Compound Semiconductor Foundry Limited, with the investment not being a grant or a loan but a commercial investment. The business plan is for the original investment plus interest to be returned to the councils over the lifetime of the project. Specifically, the Regional Cabinet agreed to contribute GBP 38.5 million from the CCR City Deal's Wider Investment Fund towards the establishment by IQE of a major, cutting-edge facility, acting as an anchor in the region for the high-end production of compound semiconductors

Building the Cluster Brand – The cluster represents a relatively bounded group of actors that have jointly branded themselves as 'CS Connected' representing organisations largely located in South Wales that are directly associated with research, development, innovation and manufacturing of compound semiconductor related technologies, as well as organisations along the supply chains that have products and services enabled by compound semiconductors. The CS Connected ecosystem has been

a major catalyst of relationship building both within South Wales and more widely, and it has successfully acted as a brand for the cluster.

Entrepreneurship and new business formation is a central feature of the cluster's strategy, and through the activities of the universities – with a focus on spinout generation – the necessary components are successfully being put in place. By 2019 the principal cluster firms and organisations accounted for around 1 480 jobs, and private sector members accounted for GBP 464 million sales, much of this (over 90%) relating to overseas exports, mostly destined for markets outside of the EU.

Source: Huggins et al. (2019)

Universities and entrepreneurial ecosystems

Universities often play key roles in the development of entrepreneurial ecosystems in the regions in which they are located. Since 1989 the number of universities across the Slovak Republic has increased threefold and they are present across the country. As in other countries, universities therefore offer potential for playing a role in entrepreneurship promotion in the Slovak Republic. Universities in the regions can help support entrepreneurship and SME development locally by introducing more entrepreneurship education, outreach activities that engage with their local communities, and entrepreneurship support infrastructure, notably business incubators. There are, however, a number of ongoing challenges, especially in areas outside of the capital region.

Firstly, university activities are not evenly distributed across the regions. Approximately 38% of students are studying in Bratislava Region, 13% in Košice (13%) and 11% in Nitra, with lower shares in other regions, while Bratislava Region hosts more than one-third of all R&D employees within universities in the Slovak Republic (5 404 employees), with Košice in second place (2 394 employees) and Žilina in third (2 182 employees) (Moravčíková et al., 2017). More broadly, the number and the quality of incubation centres, counselling centres, enterprises with venture capital, and technological centres and parks is relatively limited particularly outside of the Bratislava Region (Rehák and Sokol, 2007).

A second issue concerns funding for entrepreneurship promotion activities in universities. For example, in the area of business incubation:

- Many university-based business incubators struggle with attracting the necessary funding and qualified staff and can offer only a limited set of incubation services. Also, a lack of sufficient success- or revenue-/profit-based earning models means that these operations rely on government funding or local public sector sponsorship.
- Links to investor, entrepreneur and company networks are often limited, and whilst the
 incubators are university based or affiliated, the support they receive from their institution is
 often limited.
- Furthermore, other public incubators established and supported by regional governments and municipalities face similar challenges (Andrez et al., 2017).

Third, knowledge spillovers between universities and SMEs are underdeveloped. There is a broad requirement to further develop networks combining universities with entrepreneurs and SME owner-managers. Box 6.2 provides an example of how this institutional thickness can be fostered within regions by closely integrating universities into emerging ecosystems of innovation and entrepreneurship.

Box 6.2. Entrepreneurial Universities and Innovation Ecosystems – The Espoo Innovation Ecosystem, Finland

Espoo is the second largest city in Finland. It is the home of several major companies including computer gaming firm Rovio (which includes the Angry Birds and Slush products), research infrastructure that includes Aalto University, and numerous start-ups and organises the largest start-up event in Eurasia. The University plays a key role in promoting local entrepreneurship and innovation.

As set out by Rissola et al. (2017), the Espoo innovation ecosystem is rooted in an entrepreneurial spirit that has been actively supported and facilitated by the University and the regional and city governments. Espoo is a highly digitalised area, which hosts a society with an open entrepreneurial mind-set, a collaborative culture and a prototyping mentality. The entrepreneurial spirit and participation of all actors is seen as crucial by leading organisations in the local context, something that was not a given in the Finnish context, in which the national culture was long considered to be unsupportive of risk taking and entrepreneurship.

Aalto University was created in 2010 by merging the Helsinki University of Technology, the University of Art and Design, and the Helsinki School of Economics. The objective is to create a single multidisciplinary institution capable of benefiting from the synergies generated by the combination of diverse disciplines and approaches. Since 2010, Aalto University has substantially improved its cooperation with the cities of the region and the business sectors. It has focused on inter-disciplinarity (science, art and business), excellence in research, tight industrial collaboration, start-up driven innovation ecosystem development, and student participation (student-centric model). This in-depth change is taking place top-down through changes in the organisation of the different departments, and bottom-up with the active contribution by a Design Factory, a Start-up Sauna and privately-run innovation and start-up actors such as the Urban Mill. The Aalto Centre for Entrepreneurship (ACE) is another part of Aalto University, which connects the university's entrepreneurship activities with the surrounding ecosystem of incubators, accelerators, and investors.

In terms of strategic choices and vision, the orchestrating of the Espoo innovation ecosystem involves the interplay of the different actors in the ecosystem. This does not necessarily involve top-down planning, rather it helps to create the bottom-up dynamics that are central to the evolution of the innovation ecosystem. Such orchestrating actors are also important for the governance of the different types of public-private partnership initiatives. In the development of the Espoo innovation ecosystem there are (at least) three such actors. The first and central actor is Aalto University and its leadership. The second is the local government (Helsinki-Uusimaa Regional Council and Espoo City). Third, the national innovation funding agency Tekes is considered by some to have also played an important role, though perhaps less as an orchestrating actor in the system but as a facilitating source of funding.

The role of Aalto University as a leader in the development of the Espoo innovation ecosystem has been underpinned by a number of success factors:

- (1) *Investment in hard and soft infrastructure* the development of high-skilled human capital and research infrastructure in the region.
- (2) Vision and political commitment the vision, political commitment and culture of collaboration of Helsinki-Uusimaa Regional Council and Espoo City, which created the conditions for the ecosystem to flourish.
- (3) Orchestration the emergence of Aalto University as a strong orchestrating actor that helps generate a shared strategic vision and stimate the synergistic activities of the various actors.

- (4) *Bottom-up approach* a local culture of innovation and entrepreneurship cultivated through active support to the bottom-up drive for innovation in the University and the wider ecosystem.
- (5) Government investment financial and policy support from the central government.
- (6) Serial entrepreneurship the successful involvement of serial entrepreneurs in financing and mentoring further start-up activities.

In conclusion, the combination of a good balance and interaction between top-down and bottom-up initiatives, based on an open innovation and entrepreneurial model for the University, has been vital for the development of the ecosystem (Rissola et al., 2017).

Source: (Rissola et al., 2017)

More positively, several new initiatives are emerging especially with regard to the development of coworking spaces, such as those attached to universities. Recent evidence also finds that privately-operated incubators are gaining momentum. As their track record develops a number are developing good local entrepreneur, investor and company networks, coupled with relevant international connections (Andrez et al., 2017).

The local tailoring and co-ordination of SME and entrepreneurship policies

This section seeks to assess the extent to which SME and entrepreneurship policy interventions are designed and delivered at regional level. To begin with, it is useful to summarise some of the relevant and historic policy background and changes that have occurred over time:

- In 1993, the former Ministry for Economic Strategy Planning pioneered the establishment of Regional Advisory and Information Centres (RPICs) in all 38 districts of the Slovak Republic, focusing on SMEs. Many of these centres were subsequently transformed into private businesses or incorporated into a network co-ordinated by the National Agency for Small and Medium-Sized Enterprises (NADSME).
- In 1996, the existence of eight counties as territorial and administrative divisions of the Slovak Republic was adopted by the National Council of the Slovak Republic. These replaced the former territorial division from 1960 recognising only 3 regions (Western, Central, and Eastern Slovak Republic). In 2001, Parliament passed the law of self-government of higher territorial units, which laid the foundations for the creation of the present eight self-governing regions.
- In the past, the involvement of regional authorities in active innovation policy was generally
 weak, but between 2002 and 2008 regional innovation strategies were launched. These were
 usually co-ordinated by regional self governments or leading regional universities. However,
 due to insufficient strategic direction and the scarcity of financial resources for implementation,
 regions struggled to increase rates of innovation.
- The Slovak Innovation policy was based on the programme declaration of the Slovak Government, on the National Reform Program for the years 2006-08 and the National Strategic Reference Framework 2007-2013, coupled with EU operating programmes. These programmes declared the necessity for innovation support, and presented the support initiatives, projects and schemes and plans for creation of a network of regional innovation centres (RICs).
- Prior to the RICs concept, the Slovak self-governing regions had no institutional structures for the management of state and regional innovation policy, nor the institutional framework for linking the development of industry with the results of research and innovations. However, due

- to a lack of evidence supporting the sustainability of the concept, the Slovak Government stopped the creation of RICs in 2011.
- The first regional innovation policies began to emerge after 2007, but mostly they were largely plans rather concrete actions to engage regions into EU operating programmes in the period 2007-13 (Rehák and Sokol, 2007; Jasińska–Biliczak and Buleca, 2014; Klement, 2017).

In recent years, the Research and Innovation Strategy for Smart Specialisation of the Slovak Republic for 2014-20 (RIS 3) was declared by the Slovak Government in 2013 as a key policy for supporting research and innovation. The main objective concerns the sustainable growth of the economy and employment in the Slovak Republic through targeted support for research and innovation by respecting regional specialisations (Klement, 2017).

A key actor in implementing this strategy is the Slovak Investment and Trade Development Agency (SARIO), which is an agency receiving contribution from the state budget and is under the auspices of the Ministry of Economy of the Slovak Republic. SARIO is focused on supporting the inflow of investments and supporting the export activities of Slovak companies, and provides services to SMEs from the Slovak Republic and abroad interested in investments or internationalisation. As well as the state budget funds, SARIO has access to EU resources for the National Project "Support for the Internationalization of SMEs", with the national SARIO project exclusively supporting Slovak SMEs based outside of the Bratislava region (SBA, 2018). Part of this strategic approach involves the development of clusters, with the aim being to enhance the competitiveness of members of industrial clusters. It aims to increase the efficiency of their cooperation and to strengthen industrial clusters internationally. In 2018, the national government announced a call for applications for subsidies to support industrial cluster organisations, and approved five applications with a total subsidy volume of some EUR 155 580 (SBA, 2018).

Box 6.3. Regional Smart Specialisation Strategies – Innovative Transformation in North East Romania

Research and Innovation Strategies for Smart Specialisation (RIS3) are intended to promote the economic transformation of EU regions, particularly those that are lagging in development. This example, elaborated by Healy (2016), explores the introduction of the RIS3 approach in North East Romania, one of the EU's least developed regions. Whilst Romania launched a national RIS3, the Regional Development Agency for North East Romania also voluntarily embarked upon a process of developing a regional RIS3 for the North East region.

The concept of smart specialisation was first elaborated in 2008, and emphasises the need for policy makers to make choices as to which technologies or sectors should be supported through public policies. Recognising that the public sector is insufficiently informed to identify those areas of comparative strength, the approach advocates an entrepreneurial focus, building on the knowledge of businesses and other actors. Smart specialisation is built on an entrepreneurial discovery process undertaken by firms and other organisations operating in the economy. That is, a process of self-discovery whereby firms identify what can, and cannot, be produced competitively at a particular time or place.

For many years the region of North East Romania has faced numerous economic challenges resulting from the closure of local industries and the fragmentation of land-holdings in the agricultural sector, providing a substantial requirement for economic development in the region, exacerbated by its peripheral location. As part of the process of transformation, the region independently began to develop its own regional RIS3, led by the Regional Development Agency.

Strong national-regional strategy links - The priorities for the RIS3 were arrived at through both a quantitative and a qualitative approach, building on the heritage of analysis that has helped to develop an understanding of the regional innovation system over the past decade. The RIS3 for North East Romania identified six fields for potential specialisation based on the presence: of human resources; business infrastructure; research & development; innovation; and entrepreneurship. The strategy first raised the profile of the interests of North East Romania. The North East RDA contends that by participating in the national strategy process, and using the knowledge that it had of the region, it was able to develop a RIS3 that is well-correlated with the National Strategy for Research, Development and Innovation, as well as the National Strategy for Competitiveness.

Universities as agents of innovation - The strategy has strengthened collaboration in the regional ecosystem especially at a time when the privatisation and liberalisation of both the national and the regional economy has resulted in a hollowing-out of the economic structure, where the applied research functions of large state enterprises have been lost and foreign investments tend not to be in research and innovation functions. The strategy has helped place an emphasis on the ability of the university sector and research institutes to move beyond their traditional role as educators and sources of basic research and to act as key agents of innovation within the region (Marinelli et al., 2017).

Strategy development as a signalling device - Overall, the case of North East Romania demonstrates how a RIS3 exercise can form part of an ongoing learning exercise, whereby knowledgeable parties seek to forge new paths for their organisations and support the transformation of the local economy. The regional RIS3 process, building on earlier activities undertaken in North East Romania, provides a positive learning-by-doing environment. It strengthens an understanding of the regional economy, not only developing an understanding of the role of innovation in economic development but also new combinations of innovation potential. Furthermore, an important function of the exercise in North East Romania has been to act as a signalling device to indicate where the region believes that its strengths lie.

Key lessons from the case

North East Romania has enthusiastically grasped the opportunity to develop a regional RIS3, which has raised the profile of smart specialisation in the region and promoted entrepreneurship and cluster development in a less developed region (Healy, 2016). Similar regional strategies could be developed in the Slovak regions.

The case also illustrates some key success factors for regional strategy development for entrepreneurship and innovation: (1) the need to have strong links between national level and regional level policies and policymakers; (2) the 'new' role of universities as agents of innovation; and (3) the way in which regional strategy and policy development can be used as a device to signal to a wide group of stakeholders the path the region is seeking to follow.

Source: Marinelli et al. (2017); Healy (2016)

With respect to SMEs and entrepreneurship more specifically, between 2017 and 2018 the Slovak Business Authority (SBA), created a National Business Centre (NBC) in each Slovak region. The aim of the NBCs is to provide comprehensive and systemic support and professional advisory services to SMEs, as well as to persons interested in starting their own business (including disadvantaged social groups such as women, the elderly/generation 50+, socially and the physically disabled, etc.). They offer regional one-stop-shops that allow entrepreneurially oriented individuals to acquire information and services.

Furthermore, local and regional authorities prepare medium-term strategic documents, which are municipal and urban development programmes in accordance with relevant laws. The most relevant policies for the promotion of SMEs are those that aim to create partnerships between the public, private

and non-governmental sectors in the field of business development. The aim is to establish a favourable environment for the development of SMEs in cities and municipalities. As part of this policy process, local and regional authorities can potentially invoke variable rates with regard to local taxes and fees, land and space prices, information and counselling.

Through these local financial instruments covering tax incentives, tax relief, the deferral of local taxes and fees, subsidies and loans, municipalities have the possibility to support specific groups of enterprises that are strategically important for a city. In particular, the authorities are able to look favourably upon start-up entrepreneurs, as well as those businesses operating in key sectors with high job creation potential and businesses seeking to innovate. Local government can also lease premises to businesses for reduced rents within the framework of its assets, and provide advisory and information services provided by the RPICs. Complementing these levers, serious policy consideration should be given to the provision of further financial support through grants, interest free loans and tax incentives to encourage entrepreneurship in the weakest regions. Box 6.4 provides information about the approach adopted in Turkey, which may be a potential model for the Slovak Republic to follow.

Box 6.4. KOBIGEL – The SME Development Support Programme in Turkey

Description of the approach

KOBIGEL is operated by KOSGEB, the Small and Medium Enterprises Development Organization of Turkey. Based in the capital, KOSGEB has offices throughout the country and is a key actor for regional development.

The purpose of KOBIGEL is to increase the capabilities of selected SMEs in line with national priorities, which in turn allows them to expand their activities. Beneficiaries of the SME Development Support Programme receive up to TRY 300 000 in grant support and up to TRY 700 000 as interest-free loans.

The selection of beneficiaries happens in three steps. First, the annual "theme" of the support is determined by a Council consisting of KOSGEB's main departments that are responsible for support design to identify the main issue that the programme is meant to address. Second, the project topics, target sectors, eligibility criteria and budget is determined by the Council. This then leads to a call for proposal. SMEs can prepare and apply online for support. As a third step, proposed projects are assessed by committees, which rank the projects and select the best.

Factors of success

The establishment of overall policy objectives and specific themes for the programme plays an important role in determining which projects to select for funding. As an example, the 2017 objective was to identify and support micro-enterprises with growth potential throughout the country. More than 3 000 companies were supported in that year.

The formation of Committees from relevant backgrounds and experience is essential for the success of the programme. KOSGEB is working on the creation of a large country-wide pool of experts and academics.

Obstacles and responses

SMEs may sometimes lack the capabilities to successfully apply. Since the application process for KOBIGEL is open and competitive, this may rule out some beneficiaries and calls for potential support to SMEs to enable them to prepare strong project documentation that better reflect their capabilities.

In addition, both the determination of the "theme" of the support and the implementation takes some time. In particular, the testing of software and software processes more generally are often time-consuming. Finally, the regulation may need regular updates during the planning stage to make the programme run smoothly.

Relevance for the Slovak Republic

A broadly similar programme could be adopted by the Slovak Republic and would serve a dual purpose:

First, such a support measure would boost scale-ups among SMEs, thereby addressing, to some extent, the underrepresentation of larger SMEs in the country. Turkish policy makers consider KOBIGEL as a successful tool to allow the beneficiaries to scale up.

Second, it offers a mechanism to foster economic and industrial objectives, both at the national and regional level. By directing funds to underdeveloped regions, the Slovak Republic could boost regional value chains and smart specialisation strategies. As this chapter argues, grant or direct lending programmes are currently missing in the Slovak Republic as a tool to address regional imbalances, and the adoption of a programme in the same spirit as KOBIGEL could remedy this.

In some districts, support for SMEs has also come in the form of the construction of industrial parks and villages and business incubators. Adequate resources should made available to ensure the further provision of entrepreneurial spaces for co-working, incubation and scale-up activities.

In terms of regional access to finance, the EU National Project on Support of the Internationalisation of SMEs seeks to address regional disparities by providing support for enterprises headquartered outside of the Bratislava region. As part of this approach, the Slovak Business Agency supports Regional Start-up Facilities, which act as a form of public sector venture capital investment, with investments approved to date amounting to approximately EUR 3.7 million and actual investments amounting to EUR 2.6 million.

In order to accelerate the development of lagging regions, the Slovak Government has passed the Law on Support of Lagging Regions (Act No. 336/2015 Coll.), which is partly focused on non-governmental organisations (NGOs), municipalities and SMEs. It operates through a programme of support for the least developed districts with the primary objective being to reduce unemployment in districts with the weakest local economies. The support is currently provided to 18 districts of the Slovak Republic where the unemployment rate is 1.4 times above the national average. The main type of support provided concerns investment in regional infrastructure and in 2018 the amount of expenditure was EUR 15.37 million, which funded 142 projects. Approximately 10% of the beneficiaries were SMEs (alongside enterprises founded by the local government; NGOs; cities and villages; and educational institutions).

Finally, the EU LEADER initiative has provided locally tailored support for the development of SMEs in rural areas in the Slovak Republic in the programming periods 2007–2013 and 2014–2020 (Bumbalová, 2017).

Conclusions and policy recommendations

There are important regional variations in conditions for SME and entrepreneurship development in the Slovak Republic, including attitudes toward entrepreneurship, the quality of regulations, FDI presence, the emergence of clusters, and university and innovation infrastructures, which impact on start-up rates and business growth rates. Generally, there is a west-east divide, which is compounded by the movement of people across regions from the poorer to richer regions. Also, the more recent evolution of the national economy has led to there being an over dependence in some regions on the automotive sector as the primary source of employment and economic activity.

At the same time, it is necessary to support SME and entrepreneurship development in the core region of Bratislava as well as in the less developed regions of the country. To date, Bratislava has developed into a secondary European hub for the technology sector, but whilst some advances have been made, as a whole the ecosystem across the region is not as advanced as leading European counterparts — which is not unexpected given the historic context. Access to talent remains a problem for Bratislava, which is coupled with an on-going brain drain from the nation as whole and is an indication of a perceived lack of opportunity. Košice is also developing as a second national entrepreneurial hub alongside Bratislava, with new co-working spaces opening up and new market developments, suggesting that the roots of an ecosystem are beginning to flourish.

More generally, there is a lack of innovation-driven SMEs and entrepreneurship, which is accentuated in economically weaker regions. A key barrier in these weaker regions is relatively under-developed entrepreneurial ecosystems, including anchor organisations, networks, finance, skills and so on. A further issue with regards to innovation is that there is a lack of absorptive capacity within many SMEs across the regions. Regulations can also be more of a burden for individuals and businesses in weaker regions.

From the policy perspective, the national-regional policy interface is often problematic. This is partly due to the unevenness of power and the fact that there has been a lack of policy patience, with policy changes made before existing initiatives have had the opportunity to bear fruit. In particular, high levels of bureaucracy and policy complexity makes it difficult to foster regional policy approaches. There is also fragmented policymaking across ministries and this has had a negative impact on policies such as Smart Specialisation efforts, as well as making the formulation and implementation of regional and local level policies complex and difficult. In practical terms, there is a lack of funding at the local level, which constrains the effectiveness of implementing local and regional strategies. There is relatively strong and effective political leadership in Bratislava, but in weaker regions there are more issues and challenges.

Some policy initiatives have been introduced to address regional inequalities, such as the programme of action plans for least developed districts. However, the focus of these plans is more on welfare and educational issues rather than directly on entrepreneurship and SME development. Also, the SBA has introduced satellite national centres across the regions providing access to business development support. However, this does not represent regionally-tailored strategies to strengthen regional entrepreneurial ecosystems, which is what is really required to kick start the regional small business economies.

Within the weakest regions there is often a lack of joint commitment across the public and private sectors for the development of regional entrepreneurial ecosystems. In other words, the public and private sectors are not working together effectively. This coupled with a lack of political engagement with the micro and small firm sectors, with policy tending to prioritise larger businesses. However, there are some green shoots, and local authorities are increasingly seeking to become more empowered and embedded in policy formulation frameworks. This may address some of the current challenges.

Perhaps the most promising area for regional entrepreneurship and SME development is the role that industry cluster initiatives are playing in promoting new forms of economic and industrial growth. There are currently 16 certified cluster initiatives that could become a platform for regional entrepreneurial ecosystems, and examples such as IT Valley in Košice give an indication of their potential. Similarly, there is the interesting example of the Trencin region within which there has been an evolution of the regional ecosystem away from textiles to the automotive sector, as well as more service-based sectors such as the creative industries. If these emergent cluster initiatives are to grow and flourish they need to be better organised, and more local autonomy is required, and the capacity and capability of local authorities needs to advance significantly. Furthermore, these authorities themselves need to become entrepreneurially minded with regard to their own policy formulation.

There is also the potential for local universities to play a stronger role in promoting entrepreneurship and SME development through entrepreneurship education and knowledge exchange with regional industry. Again, there are regional and spatial dimensions to such an approach; for example, within the university sector, there is a perception that students studying in Bratislava-based universities are more willing to consider entrepreneurship as a career choice. This suggests that there is a requirement to provide more entrepreneurial education across the nation, but this need is heightened in weaker regions. Also, universities and other educational institutions could increasingly foster entrepreneurship by improving the provision of facilities and infrastructure such as incubators and co-working spaces.

Policy recommendations based on this assessment are set out below.

Box 6.5. Key policy recommendations on the local dimension of SME and entrepreneurship policies

Strengthen business support across the regions

- Ensure the availability of adequate financial, training, mentoring and other business support for entrepreneurs and SMEs in each region, especially with regard to establishing start-ups with growth potential and introducing innovative products and processes.
- Increase the provision of co-working spaces, business incubators and scale-up office space across the regions.

Strengthen cluster organisations

- Support existing and new cluster initiatives by the provision of resources for cluster management organisations, strategy development processes and operational activities.
- Bolster networking activities both within and across cluster initiatives through the organisation of purpose-driven and goal-oriented events and meet-ups.
- Ensure that cluster initiatives are fully integrated into policy support for SMEs and entrepreneurship, and are not considered as standalone activities.

Strengthen the role of universities as regional entrepreneurial ecosystem anchors

- Stimulate universities in lagging regions to provide entrepreneurship education, entrepreneurial spaces and start-up support for graduates.
- Increase the emphasis of universities in lagging regions on providing innovation consultancy and support to regional SMEs.

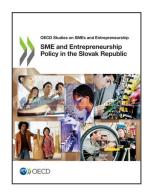
Involve local actors in regional entrepreneurial ecosystem development strategies

- Establish regional entrepreneurial ecosystem assessments and development strategies for each of the eight regions, and integrate the assessments and strategies with the regional smart specialisation process.
- Support the creation of local partnerships involving local authorities, strategically important
 enterprises, universities and business support providers to provide local intelligence and
 consultation for the formation of regional entrepreneurial ecosystem strategies and support the
 implementation of the strategies.

References

- Andrez, P., Hannes, L., Johannisse, S. and Romanainen, J. (2017), *Boosting the Slovak Startup Ecosystem: Progress Assessment*, Luxembourg: Directorate-Generale for Research and Innovation, European Commission.
- Annoni. P. and Dijkstra, L. (2019), *The EU Regional Competitiveness Index*, Luxembourg: Publications Office of the European Union.
- Bumbalová, M. (2017), Institutional Framework for Support of Local Entrepreneurship Within Leader Approach in Slovakia. *EU Agrarian Law*, 6(2), 48-55.
- Dvouletý, O., Pilková, A., Mikuš, J. and Rimská, M. (2019), Entrepreneurial Activity in Slovakia: Selected Regional Aspects and the Role of Governmental Environment, Proceedings of the 7th International Conference on 'Innovation Management, Entrepreneurship and Sustainability, May 30-31, Prague.
- Fabuš, M., and Csabay, M. (2018), State Aid and Investment: Case of Slovakia, *International Journal Entrepreneurship and Sustainability*, 6(2), 480-488.
- Healy, A. (2016), Smart specialization in a centralized state: Strengthening the regional contribution in North East Romania. *European Planning Studies*, 24(8), 1527-1543.
- Huggins, R., Munday, M. and Roberts, A. (2019), CS Connected: Accelerating the Growth and Persistence of Europe's Fifth Semiconductor Cluster, Cardiff: Cardiff University.
- Jasińska-Biliczak, A. and Buleca, J. (2014), Participation of Economic Self-Government in the Process of the Promotion of Entrepreneurship: Case Study of Poland, Germany and Slovakia. Research Papers of the Wroclaw University of Economics/Prace Naukowe Uniwersytetu Ekonomicznego we Wroclawiu, (334).
- Klement, L. (2017), State Support System of Innovations in Slovakia. Proceedings of the 5th International Conference on 'Innovation Management, Entrepreneurship and Sustainability', 25-26 May, Prague.
- Lazíková Pástor, R., Šipikal, M., & Rehák, Š. (2013), "Knowledge creation and knowledge acquisition in the software industry in S lovakia: the case study of Košice region", *Regional Science Policy & Practice*, 5(4), 401-415.
- Marinelli, E., Edwards, J. and Mironov, C. (2017), *Higher Education for Smart Specialisation: The Case of North East Romania*, JRC Technical Reports, Luxembourg: Joint Research Centre, European Commission.
- Moravčíková, D., Rehák,S., Hanová, M. and Vozár, L. (2017), Technology and Knowledge Transfer as Third Mission Activities at the Slovak Universities. Proceedings of the 5th International Conference on 'Innovation Management, Entrepreneurship and Sustainability', 25-26 May, Prague.
- OECD (2019), *OECD Economic Surveys: Slovak Republic 2019*. Paris: OECD, https://doi.org/10.1787/eco-surveys-svk-2019-en.
- OECD (2017), *OECD Economic Surveys: Slovak Republic 2017*. Paris: OECD, https://doi.org/10.1787/eco-surveys-svk-2017-en.
- Pástor, R., Šipikal, M., & Rehák, Š. (2013), Knowledge creation and knowledge acquisition in the software industry in S lovakia: the case study of Košice region. *Regional Science Policy & Practice*, 5(4), 401-415.
- Rehák, Š and Sokol, M. (2007), Regional pathways towards the knowledge economy: experiences from Slovakia, in Piech (ed.), *Knowledge and Innovation Processes in Central and Eastern European Economies*, Warsaw: The Knowledge and Innovation Institute, pp. 228–246.
- Rievajova, E. and Klimko, R. (2018), Regional Disparities in the Slovak Republic. 31st International Scientific Conference on Economic and Social Development "Legal Challenges of Modern

- World" Split, 7-8 June.
- Rissola, G., Hervás, F., Slavcheva, M. and Jonkers, K. (2017), *Place-Based Innovation Ecosystems: Espoo Innovation Garden and Aalto University (Finland)*, JRC Science for Policy Report: Luxembourg: Joint Research Centre, European Commission.
- SBA (2018), Report on the State of Small and Medium-Sized Enterprises in the Slovak Republic in 2018, Bratislava: Slovak Business Agency (SBA).
- Szerb, L., Vörös, Z., Komlósi, É., Acs, Z. J., Páger, B., and Rappai, G. (2017), *The Regional Entrepreneurship and Development Index: Structure, Data, Methodology and Policy Applications*. Pecs, Hungary (FIRES project).
- World Bank (2018), Doing Business in the European Union 2018: Croatia, the Czech Republic, Portugal and Slovakia Comparing Business Regulation for Domestic Firms in 25 Cities in Croatia, the Czech Republic, Portugal and Slovakia with 186 Other Economies. Washington DC: International Bank for Reconstruction and Development/The World Bank.



From:

SME and Entrepreneurship Policy in the Slovak Republic

Access the complete publication at:

https://doi.org/10.1787/9097a251-en

Please cite this chapter as:

OECD (2021), "The local dimension of SME and entrepreneurship policy in the Slovak Republic", in *SME* and Entrepreneurship Policy in the Slovak Republic, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/e054677f-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at http://www.oecd.org/termsandconditions.

