UNECE supports closer cooperation among its 56 member States in the pursuit of the UN Sustainable Development Goals (SDGs) and the 2030 Agenda. Its Economic Cooperation and Trade Division (ECTD) assists member States with economic integration and in promoting and enabling a better policy, financial and regulatory environment. To foster sustainable development, including progressing towards an increasingly circular economy and building resilience to events such as the COVID-19 pandemic, experimentation with ideas and technologies must become systematic across UNECE economies and societies.

The Innovative Policies Development Section within ECTD focuses on promoting a supportive environment for innovative development and knowledge-based competitiveness. Activities include policy dialogue, recommendations and good practices, analytical reviews, and capacity-building.

The United Nations Special Programme for the Economies of Central Asia (SPECA) was launched in 1998 to strengthen subregional cooperation in Central Asia and its integration into the world economy. The countries of SPECA are Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The United Nations Economic Commission for Europe (UNECE) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) jointly provide overall support to the Programme.

The project “Strengthening innovation policies for SPECA countries in support of the 2030 Agenda for Sustainable Development” is implemented with the financial support of the United Nations Development Account (UNDA). This project follows a request from the SPECA countries to develop a SPECA Innovation Strategy for Sustainable Development to foster cooperation between the SPECA countries on efforts to promote innovation for sustainable development in the sub-region.

For further information please contact Mr. Christopher Athey at: christopher.athey@un.org or Elif Kizildeli: elif.kizildeli@un.org

For the latest news on our activities, please visit the following websites:
http://www.unece.org/ceci0.html
https://www.unece.org/ceci/ic.html
The UNECE region, including the countries of the United Nations Special Programme for the Economies of Central Asia (SPECA), have recently faced a number of challenges, including the COVID-19 pandemic and resulting economic downturn, followed by the war in Ukraine with pervasive negative effects on SPECA economies and societies. These crises have also negatively impacted progress to reach the Sustainable Development Goals (SDGs), exacerbated a challenging pre-COVID-19 environment and made the search for effective policy solutions a priority.

Innovation, or the systematic experimentation with new ideas across the economy, is crucial to tackle these challenges and make our economies more resilient, sustainable, circular and green. Private companies are the principal agents for innovation and the business sector will therefore have a major role to play in this process. Innovative high growth enterprises (IHGEs) only make up a small part of any economy’s overall enterprise population and small and medium-sized enterprise (SMEs) population, but often lead business sector experimentation. They can be pioneers that try out new ideas and create new economic sectors with significant and beneficial social and environmental spillovers, including demonstration effects for other entrepreneurs.

Distinct from other SMEs, IHGEs require different, more specialized and tailor-made support measures to reach their full potential. Governments in the SPECA sub-region have a considerable array of policy tools to promote the scaling up of innovative enterprises, whilst complementing existing innovative entrepreneurship support measures. This handbook outlines the most pertinent and impactful policy tools available to SPECA countries to exploit these opportunities. It also portrays international experiences in supporting IHGEs, which SPECA countries can learn from.

I hope that this handbook will be instrumental in driving the transition to a circular economy, as well as the green and digital transformations of the SPECA sub-region – themes addressed at the 69th and 70th sessions of the Economic Commission for Europe (ECE), respectively. IHGEs hold much potential to enable this transition and support delivery of the objectives of the SPECA Innovation Strategy for Sustainable Development, with the joint support of UNECE and UN ESCAP.

I am confident that this handbook will enhance cooperation on innovative entrepreneurship in the SPECA sub-region, and contribute to its circular, green and digital transformation and sustainable development. UNECE stands ready to further support SPECA countries in the implementation of these policy tools for the increased competitiveness and well-being.

Olga Algayerova
Under-Secretary-General of the United Nations
Executive Secretary of the United Nations Economic Commission for Europe
PREFACE

The United Nations Economic Commission for Europe (UNECE) supports the countries of the SPECA sub-region in promoting innovation and sustainable development. This handbook was developed within the framework of the UNECE project “Enhancing the capacity of the SPECA countries to design, implement and monitor effective policies to support innovative high-growth enterprises to drive post-COVID-19 recovery and progress towards the circular economy.” It aims to help officials from SPECA countries to develop a better understanding of the innovation as well as of the policies and tools that enable and promote innovative, high-growth entrepreneurship to accelerate their COVID-19 recovery and progress towards sustainable development.

The project contributes to wider UNECE efforts to promote innovation for sustainable development in the SPECA sub-region, notably through the dedicated SPECA Working Group on Innovation and Technology for Sustainable Development2 and associated activities under the SPECA Innovation Strategy for Sustainable Development3 and its Action Plan4, adopted by the SPECA Governing Council in 2019 and 2021, respectively. Furthermore, the handbook supports policy discussions organized by UNECE jointly with other six UN agencies in the framework of the “SME surge project”5.

Building on the experience of a previous capacity-building exercise for Eastern Europe and South Caucasus (EESC) countries6, this handbook has been adapted to the specific institutional and socio-economic context of SPECA countries (Figure 0.1). The content and focus of this handbook were, in part, determined by a series of fact-finding interviews that were conducted from October to December 2021 with national stakeholders. These interviews served to identify the main drivers and barriers for IHGEs and provide insight on the state of play of policy measures relevant for IHGEs in the SPECA sub-region. A webinar was also organized on 23 December 2021 as an opportunity to exchange views on priority needs and opportunities for supporting IHGEs in the sub-region7. This was followed by an online training session for SPECA countries policymakers on 15 and 17 February 2022 that was designed to provide a better understanding of IHGEs and to help the attendees put into practice the main concepts presented in this handbook8.
ACKNOWLEDGEMENTS

This handbook was developed within the framework of the UNECE Special Programme for the Economies of Central Asia (SPECA). The programme was launched in 1998 to strengthen subregional cooperation among Central Asian countries and their integration into the world economy. The SPECA countries are Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

This publication was produced under the leadership of Elisabeth Tuerk, Director of the UNECE Economic Cooperation and Trade Division, and the overall supervision of Anders Jönsson, Chief of the UNECE Innovative Policies Development Section. The main authors of the publication were Kris Boschmans, Senior Researcher, and Alasdair Reid, Policy Director, both at the European Future Innovation Systems Centre in Belgium. The publication benefited from the guidance and contributions of Christopher Athey as project manager in the UNECE Innovative Policies Development Section as well as Lyudmyla Tautiyeva and Tokhir Pallaev, UNECE consultants. Lyudmyla Tautiyeva supported the coordination of the project while Mijidgombo Oyunjargal provided administrative assistance. Ian Silver copy edited the manuscript and Marie-Christine De Sa created the graphic designs for this publication.

The engagement of national partners in the SPECA countries has been essential throughout the project with valuable contributions from Alim Khamitov, CEO of the MOST Business Incubator (Kazakhstan); Yelena Shevchenko, Head of the Innovation and Technology Development Center, QazInnovations (Kazakhstan); Aygul Nurmatova, Vice-rector of Extracurricular and Social Works, Head of Business Incubator, and Venera Isakul Kyzy, Director of Marketing and Youth Policy, both at the Kyrgyz Economic University (Kyrgyzstan); Iskender Sharsheev, Director of the PEAK Business Innovation Centre (Kyrgyzstan); Chubak Temirov, Director of the High-Technology Park (Kyrgyzstan); Farrukh Maksumov, Manager of the Start-up Ecosystem Development Department at the IT Park (Uzbekistan); Vladimir Tsoy, Director of the C.A.T. Science Accelerator (Uzbekistan); Dilshod Zufarov, CEO of the Venture Capital Association (Uzbekistan). The feedback received from Eurasia Division, OECD, including Gregory Lecomte, Senior Policy Analyst, Peline Atamer and Amelie Schurich, Policy Analysts, as well as from Jose Palacio Lucia, Economic Cooperation and Trade Division, UNECE has been instrumental in the finalisation of this publication. Special thanks also go to the representatives of the UNDP Accelerator Lab in Kyrgyzstan, notably Ensi Tszie, Head of Experimentation, and her team for their support in the organization of the online capacity-building events on IHGEs in SPECA countries in May 2022. Finally, the authors would like to thank all the participants of the capacity-building webinars in December 2021 and February 2022 for sharing their experiences and providing useful contributions that added to the robustness of the final text.
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<td>AI</td>
<td>Artificial intelligence</td>
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<tr>
<td>AM</td>
<td>Account manager</td>
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<tr>
<td>BDS</td>
<td>Business development service</td>
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<td>BPO</td>
<td>Business process outsourcing</td>
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<tr>
<td>CIT</td>
<td>Corporate income tax</td>
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<tr>
<td>CRW</td>
<td>Company Review Workbook</td>
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<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<td>ECE</td>
<td>Economic Commission for Europe</td>
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<td>EU</td>
<td>European Union</td>
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<td>EAEU</td>
<td>Eurasian Economic Union</td>
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<tr>
<td>FCD0</td>
<td>Foreign, Commonwealth and Development Office (UK)</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>GITA</td>
<td>Georgia’s Innovation and Technology Agency</td>
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<td>HTP</td>
<td>High Technologies Park</td>
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<td>ICT</td>
<td>Information communication technology</td>
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<td>International financial institutions</td>
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<td>IHGE</td>
<td>Innovative high-growth enterprise</td>
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<td>OECO</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>PCP</td>
<td>Pre-Commercial Procurement</td>
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<tr>
<td>PPI</td>
<td>Public Procurement of Innovative</td>
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<tr>
<td>R&amp;D</td>
<td>Research and development</td>
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<tr>
<td>R&amp;I</td>
<td>Research and innovation</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>SE</td>
<td>Scottish Enterprise</td>
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<td>SIDA</td>
<td>Swedish International Development Agency</td>
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<td>SMEs</td>
<td>Small and medium-sized enterprises</td>
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<tr>
<td>STEM</td>
<td>Science, technology, engineering and mathematics</td>
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<tr>
<td>UNECE</td>
<td>United Nations Economic Commission for Europe</td>
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<tr>
<td>VC</td>
<td>Venture capital/capitalist</td>
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<tr>
<td>WB EDIF</td>
<td>Western Balkans Enterprise Development and Innovation Facility</td>
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EXECUTIVE SUMMARY

This handbook aims to support government officials and experts responsible for designing, putting into practice, and evaluating private sector support measures in the SPECA sub-region to design effective policies, institutions, processes and measures that enable and play a catalytic role in emerging IHGEs.

- Part one sets the scene and provides information on how IHGEs can contribute to the economic and societal agendas being pursued by the SPECA countries.
- Part two provides the rationale for public intervention, highlights the main policy domains of particular importance to IHGEs and identifies areas for possible improvement, including policy instruments, across the SPECA sub-region.
- Part three sets out the main findings and concrete recommendations for the way forward.

Economies in the SPECA sub-region are at a crossroads

Countries in the SPECA sub-region are heavily reliant on natural resources, commodities, exports, and remittances and face significant challenges to close the gap with high-income countries. The dissolution of the Soviet Union triggered a prolonged slump and significant deindustrialization, with the partial exception of Uzbekistan, across the region. The subsequent recovery was steady but remained driven by domestic market demand and a limited set of commodity exports. Diversifying into other, export-oriented areas will be essential to maintain growth and poverty reduction – a process that requires broad experimentation with ideas.

Despite public investment into research and, more recently, a boom in setting up incubators, accelerators, technology parks, and similar institutions, innovation systems in SPECA countries are nascent and often do not work well to systematically encourage experimentation. When it comes to achieving the SDGs, progress in the SPECA countries has slowed down with the COVID-19 crisis having caused substantial economic pain, aggravating existing economic, social, and environmental challenges.

At the same time, recovery from the pandemic could be used as a catalyst to accelerate a comprehensive reform of policies and measures to use funds more efficiently in general, and target innovative companies with high growth potential, specifically. These IHGEs could bring widespread economic and social benefits. The policies would ideally form part of wider efforts by the SPECA countries to diversify their economies and transition to a knowledge-based development model, including making their economies more sustainable, circular and inclusive.

IHGEs are instrumental to realizing these ambitions

IHGEs can help to address structural economic challenges, create new market niches, and yield positive social spillovers to enhance the quality of life of citizens in the
SPECA countries. Worldwide, these firms account for only a small share of enterprises, while their contribution to employment and value-added growth is substantial. Moreover, IHGEs often have disruptive business models that turn challenges into entrepreneurial opportunities, especially in areas such as the circular economy, poverty alleviation, improved water resource management, and climate change.

At the international level, there are several statistical parameters used to define innovative high growth enterprises, based on their rates of growth of employment or turnover. In this handbook, the focus is on the transformational effect of enterprises that innovate to grow. Hence, IHGEs are defined as firms that:

- Have at least 10 employees at the beginning of their high-growth stage;
- Have an average annualized growth in the number of employees and/or turnover greater than 10 per cent over three years;
- Engage in innovation, defined in a broad sense as any activity that involves new or significantly improved products or business processes, business models, etc.

A common misconception in this respect is the association of innovation with high-technology start-ups and the commercialization of cutting-edge scientific research results. In fact, the greatest potential for IHGEs in the SPECA economies lies in their ability to absorb ideas employed by various types of firms elsewhere, ideas that have proven their value in a wide range of economic sectors, and then customize these ideas for successful local application. For example, the best performant IHGEs were found in the construction sector in the USA and in childcare in Singapore – sectors that go beyond the conventional understanding of where innovation opportunities lie.

IHGEs differ greatly from the rest of the business sector, with vulnerability to certain market and system failures, as well as regulation. Due to their inherently innovative and therefore high-risk nature, IHGEs experience to a heightened degree the existing market and system failures. Gaps and constraints in the broader innovation system and business environment, including labour regulation often constraining high growth, frequent changes in business regulations adding to the risk of IHGEs’ activity – have a more significant negative impact on IHGEs than on the rest of businesses (Figure 0.2). Some of these elements are represented in the figure below, and more details can be found in Table 2.1.

Therefore, policies related to ensuring the overall effectiveness of entrepreneurial ecosystems and framework conditions for businesses in the SPECA countries are an important first step for the promotion of IHGEs (Figure 0.3).
One of the main policy challenges for effective IHGE support is identifying these enterprises before they start growing, with the main aim of the policy intervention not to support existing high-growth firms, but those for which policy interventions will make a difference. The key question driving IHGE policy then becomes "which are the firms with high-growth potential that do not grow because of the existence of market or system failures that policy could correct?".

Despite the fact that identifying IHGEs before they experience a high growth rate is difficult, it is still possible. There are a number of trigger-points that policymaker may consider (Figure 0.4: with more details found in Table 2.2).
Targeted support for IHGEs includes five main types of public sector intervention

Since IHGEs differ from the rest of SMEs, targeted policy support is critical for IHGEs to realise their potential (see Table 2.3 for the difference in SME and IHGE policies). In particular, the needs of IHGEs can be broken down into five categories (Figure 0.5).

In addition, five main routes for fostering IHGEs can complement this effort:

1. Support to the acceleration/scaling of (high-tech) start-ups;
2. Support to the growth of established manufacturing or service firms through product development and market penetration;
3. Foster corporate spin-offs from large national or multinational firms;
4. Attract ambitious entrepreneurs and/or scalable companies from abroad to establish locally and grow globally;
5. Promote research-based spin-offs emerging from public research institutes and higher education institutions (HEIs).

Figure 0.4 • Trigger points to identify potential IHGEs

<table>
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<th>Organizational changes</th>
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<td>Business model changes</td>
<td>New markets, production methods, the introduction of concerted customer relationship management; new channels, such as e-commerce; internationalization, etc</td>
</tr>
<tr>
<td>Investments</td>
<td>Investment in new technology; introduction of enterprise resource planning (ERP) or other core business process software.</td>
</tr>
<tr>
<td>Product changes</td>
<td>Introduction of products (services) new to the market; substantial upgrading of existing products (services).</td>
</tr>
<tr>
<td>Changes in domestic and/or international markets</td>
<td>Uptake of certain global trends in market demand, business processes, etc. (e.g. increased use of platforms) that shape demand and offer domestic opportunities, creating new market niches with high growth potential.</td>
</tr>
<tr>
<td>Attitudes</td>
<td>A clear desire and ambition for double-digit growth, innovation and a willingness to try out new ideas. This is a somewhat subjective criterion but can be validated via assessments conducted by qualified business advisors (e.g. from high-growth support initiatives).</td>
</tr>
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Source: UN/CE, based on (OECD, 2018).
SPECA countries should improve framework conditions for businesses, adding a focus on IHGEs through targeted support measures in the form of pilot activities.

Countries in the sub-region have made significant progress in recent years to develop their innovation support infrastructure, for example by establishing incubators, accelerators, technology parks and similar institutions. The number of relevant programmes has seen a large increase, and the overall business environment has generally improved, albeit with considerable variation between countries over recent decades.

Despite this progress, IHGEs in the SPECA sub-region are faced with a difficult operating environment compared to those in high-income countries, including gaps in framework conditions for entrepreneurship, demonstrate weak innovation performance, exemplified by low levels of R&D expenditure, and suffer from weak linkages between innovation actors within the countries’ innovation systems.

These shortcomings are compounded by governance issues in public policy and weak institutional capacities across the SPECA sub-region for policy implementation (e.g., coordination of innovation and entrepreneurship policies across different public and private sector bodies, monitoring, and evaluation). Building the capacity of civil servants, enhancing transparency and accountability of public administration and holding regular public-private dialogue would be important to foster vibrant entrepreneurship ecosystems and make innovation more systematic in the SPECA sub-region.

As initial steps towards effective IHGE policy, this handbook suggests the following four steps to strengthen and refocus entrepreneurship ecosystems throughout the SPECA sub-region and introduce some targeted IHGE support:
1. **Identify enterprises with potential for growth** (e.g. using relevant data to identify trigger points, such as recent investment or change of ownership) as well as mapping existing high-growth firms and scale-ups that serve as role models of successful growth strategies across diverse companies and sectors.

2. **Map the existing support that is available to potential IHGEs and identify gaps in the ecosystem** in terms of the main challenges faced by such firms (e.g., through business surveys, information gathered in cooperation with chambers of commerce, clusters, associations, and accelerators).

3. **Internationally promote and network the group of potential IHGEs** through public-private collaborative initiatives (e.g., using a task force established for this purpose) between government agencies (e.g., inward investment and export services) and high-growth business support organizations and investors.

4. **Monitor and evaluate the performance of enterprises that have been supported** (e.g., compared to the performance of a control group to measure additionality) and assess how to improve performance and fill gaps in the ecosystem over time.

A more ambitious next stage in support to IHGEs suggests developing a dedicated IHGE policy framework based on six recommended steps (Figure 0.6 and see more details in conclusion).

**Policy action on supporting IHGEs could be strengthened through sub-regional cooperation under SPECA**

Countries in the SPECA sub-region would benefit from closer collaboration in designing and implementing policies for IHGEs. This is especially true in light of their geographic proximity, relatively small individual markets, the similarity of the challenges they face as well as the close economic and cultural ties they already have.

This collaboration could take various forms, such as:

1. **Setting up a sub-regional support hub with qualified trainers or mentors for potential IHGEs.** This support hub could be instrumental in assisting national SME agencies and related bodies on moving to a portfolio (account management) approach to support IHGEs as well as contributing to establishing pilot IHGE programmes across the region.

2. **Launching a pilot growth/scale-up programme** (e.g., with support from an international donor) with a group of 4-5 IHGEs selected from each SPECA country for mentoring and support. This would help to address the gaps in managerial skills of IHGEs as they would have the opportunity to build international partnerships to grow their businesses both within the sub-region and beyond.

3. **Expanding the cross-border early-stage finance ecosystem to the sub-region through establishment of a dedicated programme** (such as Western Balkans Enterprise Development and Innovation Facility (WB EDIF)). This would help addressing the structural issues in equity markets in the sub-region (i.e., fragmentation, lack of liquidity and limited scale).
Figure 0.6 • Six steps for developing an IHGE policy

**step 1** Develop an evidence base

A data collection exercise based on international practices in the field and drawing on existing available data, incl. from other sources (e.g. start-up platforms, etc); collaboration among SPECA national statistical offices;

**step 2** Establish a governmental IHGE policy unit

A small unit with competent personnel, e.g., within an existing SME agency or responsible agency or ministry, to focus on indentifying potential IHGEs and providing targeted support (incl. through a client management approach);

**step 3** Adopt a strategy and policy priorities for IHGEs

A Task Force to be set up coordinated by the IHGE policy unit and including private and public sector actors with the goal to clarify policy priorities, lay the foundations for an action plan and then coordinate efforts by different stakeholders in the implementation phase;

**step 4** Design an action plan for IHGE policy

An action plan elaborated by the Task Force covering a period of 4-6 years to allow the necessary time for testing and evaluation of both current and additional actions;

**step 5** Set up pilot schemes for IHGEs to be scaled up if successful

Enabling policy experimentation in the context of limited institutional capacities; small-scale pilot schemes designed at the regional level or for a specific industry as a first step and to be scaled up if successful;

**step 6** Monitor and evaluate policy initiatives

Setting up a transparent, accountable and flexible mechanism to implement and evaluate support measures to provide further feedback for policy design.

Source: UNECE.

4. **Establishing a sub-regional fund-of-funds to invest in national co-investment funds** (with business angels or VC investors) with a focus on supporting companies that can expand sub-regionally and then globally fund. This would help address the issue of insufficient scale of available equity investments across the SPECA countries to support IHGEs at each growth stage.

5. **Strengthening the sub-regional business angel network** to encourage cross-border investment through facilitation of relevant networks and adoption of relevant legislation and policy mechanisms. It will help to promote investor ecosystem development across borders in the SPECA sub-region. A proposed SPECA Working Group on Investments could be instrumental in providing a platform for discussion in this area and building policy consensus among the SPECA countries, while a pilot SPECA Network of Business Incubators and Accelerators for Sustainable Development under the SPECA Working Group on Innovation and Technology for Sustainable Development could be leveraged for pilot activities.
6. **Coordinating efforts on export and trade promotion activities across several SPECA countries**, including the organization of joint exhibitions and fairs and potential establishment of jointly organized and run SPECA trade offices around the world (e.g., the Caribbean Export Promotion Agency under the auspices of the Forum of Caribbean States (CARIFORUM)). The SPECA Working Group on Trade is an existing platform for policy dialogue in this area and building consensus among the SPECA countries.

7. **Sub-regional cooperation on various aspects of IHGE policy**, institutions, and processes, including improving statistical data on IHGEs, reviewing regulatory barriers and harmonizing rules and regulations to facilitate sub-regional initiatives. A pilot SPECA Network of Business Incubators and Accelerators for Sustainable Development under the SPECA Working Group on Innovation and Technology for Sustainable Development could help to drive these policy efforts forward, bringing together key national stakeholders, and offering a platform for dialogue on how best to provide IHGE support. The discussions should also cover putting those policies into practice, using existing institutions, habits, and incentives, such as done through the UN ECE Transformative Innovation Network.

UNECE stands ready to support the efforts of the SPECA countries to strengthen their national innovation systems, promoting cooperation on innovation for sustainable development, as well as fostering innovative entrepreneurship, including on IHGE policy, to enable a sustainable and resilient post-COVID recovery and the transition to a more circular, green, and digital economy.
A READERS’ GUIDE TO THE HANDBOOK

This handbook seeks to inspire policymakers and stakeholders working to foster IHGEs. It is structured to be read as a coherent text from beginning to end, although it also provides detailed insight in discrete sections that can serve as points of reference when working on designing and reforming policies and institutions to enable and incentivize innovative initiatives in the private sector.

After introducing the central concepts (Part 1), this handbook explores the rationale for public support (Part 2.1) and proposes a toolkit of measures, institutions and processes to effectively support IHGEs (Part 2.2). The final portion of the text proposes a roadmap for rolling out such support in the SPECA sub-region (Part 3.1), recommendations for designing and implementing IHGE policies at the national level (Part 3.2); as well as avenues for cooperation among the six SPECA countries (Part 3.3).

Figure 0.7 • Structure of the Handbook

Throughout the handbook, we point readers interested in more details to additional sources (publications, websites, etc.) and illustrate central points with case studies and examples.
Notes

1 At the 69th Commission, member States flagged the importance they attach to the Circular Economy transition in the ECE region, in connection with the 2030 Agenda and as part of the efforts to “Build Back Better” post COVID-19. The UNECE Team of Specialists on Innovation and Competitiveness Policies has been working to promote circular economy in the region through its activities, as reported during its 13 session on 1–2 November 2021.

2 More information could be found here https://unece.org/wg-on-itsd


5 https://unece.org/info/events/event/367332

6 The handbook for the EESC countries is available at https://unece.org/info/publications/pub/359322

7 https://unece.org/info/SPECA/events/363971

8 https://unece.org/media/SPECA/news/365368

9 More information on the Network available here https://unece.org/eci/rcp/ETIN.
Part I

IHGES AS DRIVERS OF ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT IN THE SPECA SUB-REGION
1.1 Shifting to innovation-led development: the challenge for the SPECA sub-region

While countries in the SPECA sub-region differ in many respects, they face a number of common, long-standing challenges. In particular, their economies are highly dependent on natural resources and commodities and, to varying degrees, on remittances from migrant workers, especially those in Russia. As a case in point, rents from natural resources made up 24.1 per cent of Turkmenistan’s GDP and 17.6 per cent of Kazakhstan’s according to World Bank data, ranking these proportions among the highest in the world (World Bank, 2022). In Kyrgyzstan and Tajikistan, remittances accounted for around 30 per cent of GDP, which is relatively high compared to other countries in the sub-region (World Bank, 2022).

This dependence leads, in turn, to an economy that is not well-diversified, with State-owned enterprises (SOEs) playing an overly central role, uncompetitive markets and limited productivity growth. A related long-term weakness is the poor integration of SPECA countries into global value chains and the very low share of manufacturing in GDP and exports (with the notable exception, in some cases, of natural resources) (Dobrinsky, 2021). Finally, and as explained in more detail below, countries in the sub-region underperform in their efforts to promote STI.

Moreover, growth of both GDP and productivity were decelerating for at least five years before the COVID-19 crisis erupted (OECD, 2021). The convergence process between countries in the sub-region and the OECD average has largely stalled since 2013 with this declining growth trend (OECD, 2018). This has flow effects in other areas as, for example, even without a slowdown in growth, all SPECA countries would find it challenging to comply with their Sustainable Development Goals (SDGs) by 2030 (Dobrinsky, 2021).

The COVID-19 crisis has significantly degraded the economic outlook of the countries in the sub-region through a combination of disruptions in trade and global value chains and the containment measures implemented to halt the spread of the disease. GDP in the SPECA sub-region declined by almost 5 per cent in 2020, much more than in preceding economic crises. The recovery since has been relatively sluggish with growth forecasts well below the historical average and with considerable downside risk remaining (OECD, 2020), (World Bank, 2021). Not surprisingly, small and young firms were hit disproportionally by the crisis and typically experience the greatest difficulties to recover and adapt (World Bank, 2021). Put differently, there is a considerable risk that the crisis will exert a lingering negative effect on the creation and performance of IHGEs in the years to come.

It is against this background that economies in the sub-region need to improve their overall business and innovation framework as well as their targeted support measures for indigenous enterprises, especially for firms with high-growth potential. As the following section in this handbook highlights in more detail, IHGEs will play a key role in endeavours to diversify the economies of SPECA countries, boost productivity and allow the economies to recover robustly from the crisis. In addition, IHGEs are instrumental in ensuring that the recovery will be sustainable and circular (see Box 1.1).
Box 1.1 IHGEs as a crucial driver for a circular economy

The United Nations Environmental Assembly defines a circular economy as "one of the current sustainable economic models, in which products and materials are designed in such a way that they can be reused, remanufactured, recycled or recovered and thus maintained in the economy for as long as possible, along with the resources of which they are made, and the generation of waste, especially hazardous waste, is avoided or minimized, and greenhouse gas emissions are prevented or reduced" (UNECE, 2021).

A circular economy represents a powerful tool to advance many of the SDGs. The below figure illustrates the 10 SDGs closely related to a circular economy (OECD, 2020).

In April 2021, the United Nations Economic Commission for Europe (UNECE) dedicated its 69th session to the promotion of a circular economy and sustainable use of natural resources in the UNECE region. As a result, Decision B(69.) saw the Member States commit to stepping up efforts to promote a circular economy and the sustainable use of natural resources. National governments in the pan-European region, including those in the SPECA-subregion, are increasingly pursuing circular economy goals with the support and guidance of the UNECE (UNECE, 2021). The issue is also moving up the policy agenda at the subnational level. As an illustration, Almaty, the capital of Kazakhstan conducted a metabolic analysis to identify circular economic opportunities in 2019.

The circular economy transition is impossible without innovation. As highlighted at the UNECE Team of Specialists on Innovation and Competitiveness Policies in November 2021, fully realizing the potential of innovation to aid this transition requires dedicated and sustained policy efforts to create enabling frameworks and incentives for private innovation in fields critical to a circular economy and to encourage consumers to rapidly and broadly adopt innovative and sustainable consumption patterns. This will also require innovative approaches to regulation, to provide incentives and eliminate barriers systematically – trying out which approach works best and then scaling up and diffusing those that are successful across other sectors.
The data indicate that there is ample scope to improve the innovation performance in the region. In particular, R&D expenditure ranges between 0.10 per cent and 0.20 per cent of GDP for the five SPECA countries for which data are available (i.e., Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan) which is much lower than in the OECD countries (countries typically spend around 2 per cent of GDP), or those of similar income (with an average value of around 0.7 per cent in Latin America and the Caribbean and around 1 per cent in Malaysia and Thailand). In addition, few firms in the SPECA sub-region are active in high-tech industries and there are notable weaknesses in the diffusion of digital tools, state-of-the-art technologies and managerial practices in the broader business communities and societies throughout (Dobrinsky, 2021).

Comparative data from the European Bank for Reconstruction and Development (EBRD) indicate that the SPECA countries trail behind the average for the knowledge economy compared to other countries covered by the Bank (i.e. countries in Central and Eastern Europe, the Middle East and North Africa (MENA) region and the South Caucasus), and even more so when compared to the OECD area in the four assessed dimensions (see Figure below).

**Figure 1.1 · SPECA countries’ performance on the EBRD Knowledge Economy Index, 2019**

Source: (EBRD, 2019).
Note: Higher scores represent a better result. Comparable data for Afghanistan are not available.
Other sources of information confirm how SPECA countries are underperforming in terms of STI in global rankings. According to the data from the World Intellectual Property Organization, countries in the sub-region tend to score badly when it comes to business sophistication (subdivided into innovation linkages, knowledge absorption and knowledge workers with innovation linkages standing out as especially weak in the comparative context), knowledge diffusion and creative output (subdivided into intangible assets, creative goods and services and online creativity).

The figure below highlights the ranking on selected STI performance indicators using 132 economies in various stages of development around the world for which comparable data are available. In many instances, the scores for SPECA countries are among the 30 worst performers globally, indicating there is ample scope for improvement. The ranking also reveals that Azerbaijan and, to a lesser extent, Kazakhstan, are currently performing better than the other four SPECA countries.

International evidence supports the view that, as a whole, the SPECA countries are not sufficiently aligned with best practices when it comes to targeted support mechanisms and the framework conditions in which firms in general, and IHGEs in particular, thrive. A 2018 OECD study identified the need to improve the business environment as one of three policy priorities for economic diversification in Central Asia (OECD, 2019). The decline in R&D expenditures observed in recent years across the SPECA region, further eroding an already relatively low base, contributes to low innovation and R&D activity throughout the sub-region (Dobrinsky, 2021). One positive here is that recent policy efforts by Kazakhstan, Kyrgyzstan and Uzbekistan have been directed at private sector development, including putting in place special support mechanisms, however, these have failed to produce a catalytic effect to date (UNECE, 2022). One factor contributing to this lack of effect is that the main beneficiaries of the majority of these support mechanisms in Kazakhstan are large enterprises and SOEs, not small and young companies, for which specialized

**Figure 1.2 · Global ranking of SPECA countries on selected innovation performance indicators, 2021**

Source: (WIPO, 2021).
Note: The ranking is based on 132 national economies and where a high ranking indicates a poor performance. Data for Afghanistan and Turkmenistan are missing. The horizontal bars indicate the 100 and 50 thresholds. Values above the 100 threshold indicate that fewer than 32 countries perform worse.
government support is arguably more important (OECD, 2018). The interviews conducted with SPECA stakeholders suggested that such situations are a common feature in the policy landscape throughout the sub-region. Accordingly, this handbook identifies areas where governments can do more to support the creation and expansion of IHGEs and highlight avenues where policy action is more likely to have catalytic effects.
1.2 Innovative high-growth enterprises – drivers of economic transformation

This handbook examines the policy tools available to support the emergence and development of IHGEs in the specific context of the economies of the SPECA sub-region. As indicated in the previous section, these firms operate in a challenging environment characterized by low R&D expenditure and significant weaknesses in the diffusion of innovation and the policy environment. At the same time, countries in the sub-region stand to benefit greatly from the adoption of good policy practices that have proven their worth in stimulating IHGEs in other parts of the world. By fostering these firms and closing the gap in policy performance with their benchmarks, countries in the SPECA sub-region are likely to make solid progress in diversifying their economies and transitioning them into ‘knowledge economies.’ IHGEs can also be instrumental in driving the digital transformation by experimenting with new ways of using digital technologies to solve economic, societal and environmental challenges in a more sustainable fashion, thus contributing to the implementation of the United Nations 2020 Roadmap for Digital Cooperation and the work of the 70th UNECE session on digital and green transformations in the region.

At the international level, there are several statistical parameters used to define innovative high growth enterprises based on the growth rates of the jobs created or their turnover. In this handbook, the focus is on the transformational effect of enterprises that innovate to grow. Hence, IHGEs are defined as firms that:

- Have at least 10 employees at the beginning of their high-growth stage;
- Have an average annualized growth in the number of employees and/or turnover greater than 10 per cent over three-years;
- Engage in innovation, defined in a broad sense as any activity that involves new or significantly improved products or business processes, business models, etc.

Rather than attempting to generically describe the firms that fall into the IHGE category and that need specialized support, this definition should be used to track the success of a policy intervention by monitoring the number of small and medium-sized enterprises (SMEs) that fall into this category after a policy intervention.

IHGE policies are complementary to other policy domains, such as private-sector development, entrepreneurship and start-up policies, as well as regional development. While IHGEs are a subset of SMEs in an economy, most micro- and small enterprises do not experience high-growth rates or engage in innovation, as defined above. For example, the propensity to innovate or to seek out opportunities to scale up will vary depending on the number of SMEs in an economy that are necessity-driven compared to those that are opportunity-driven. It is by now well established that high-growth firms, while representing only a small minority within an enterprise population, account for a sizeable proportion of an economy’s growth and employment (see Audretch, 2012 for a seminal literature overview). For example, a 2019 study by the World Bank covering 11 emerging economies showed that while high-growth firms (according to their definition which does not fully correspond with the definition employed in this study) comprise approximately one-fifth of all firms on average, they create as much as 80 per cent of all new sales and jobs. Moreover, these numbers are broadly similar in high-income countries as well, indicating no
clear link between the level of economic development and the incidence or importance of high-growth enterprises (Grover Goswani, Medveded, & Olafson, 2019). Evidence suggests that an economy with a larger share of high-growth enterprises is associated with greater future economic growth and that there is a positive relationship between productivity growth in an economy and the dynamism of firms’ growth rates (Monteiro, 2019).

At this juncture, it is important to emphasize the role of SOEs in the economies of the SPECA sub-region. Being transition economies that are still hampered by relatively low degrees of economic complexity and an ongoing reliance on hydrocarbons, SOEs often still dominate key economic sectors, such as oil and gas, mining, transportation, telecommunication as well as managing important infrastructure services. In Kazakhstan, as of 2018, there were 6,708 SOEs operating commercially with their gross value-added amounting to US$28.1 billion (17.3 per cent of GDP) in 2017. While the SOEs’ share of Kazakhstan’s GDP has been declining gradually (from 21.1 per cent in 2014) they still dominate the economy. Similarly, Azerbaijan also heavily relies on hydrocarbons its SOEs’ share of GDP amounted to 16.2 per cent in 2016. All the above-mentioned SOEs also receive broad financial and legal preferences from their respective governments, even though research indicates that their financial performance is below that of comparable private companies. For example, in Kazakhstan, around 30 percent of SOEs were operating at a loss in 2019 (IMF, 2021).

There is evidence that SOEs, especially if they suffer from low productivity, represent a drag on economic growth and impede both private-sector development and entrepreneurship. Markets and sectors that are skewed to benefit poorly-performing SOEs create a business environment that is detrimental to smaller, private-sector competitors even if the latter are, or would be, better performers. For example, if SOEs have privileged access to bank loans, such as through State-owned banks, this makes accessing available financial resources more difficult for private
enterprises, including IHGEs (Taghizadeh-Hesary, Yoshino, Kim, & Mortha, 2019). One means of at least partial redress for this is privatization programmes involving SOEs which, when carefully managed and executed, may create opportunities for private firms, including IHGEs, to flourish. As one example, Kazakhstan has adopted an ambitious plan over the 2021-2025 period to privatize 736 SOEs, thereby significantly lowering their presence in and share of the economy.

The potential sources for innovation-driven growth are broad and varied

To support effectively the emergence of IHGEs in the SPECA sub-region, policymakers should adopt a broad view of innovation, going beyond a focus on high-tech start-ups, tangible scientific outcomes and intellectual property rights. As stated above, most of the sub-region’s innovative potential lies in its enterprises being able to absorb and adapt ideas that have proven their worth elsewhere, either abroad or domestically but in different economic sectors.

This is especially relevant for policymakers in the SPECA sub-region given the aforementioned issues with knowledge and innovation diffusion across their economies. In other words, while policies should aim to encourage the creation and expansion of companies at the knowledge frontier, these should be complemented by initiatives to boost innovation among firms that are falling behind.

In addition, it is worth noting that policies should not be restricted to companies in specific high-tech sectors, given the international experience that IHGEs can be active in all sectors of an economy (Grover Goswami, Medveded, & Olafson, 2019). Experimenting with ideas may lead to innovation in sectors that are often perceived as not particularly innovative, such as childcare, construction and light industry. This process is at the core of the rationale behind State support for innovation, i.e. while it is hard to predict in which sector innovation will happen, establishing an enabling environment for innovation through effective government policies and institutions increases its probability of happening.

Growth spurts are uncommon and hard to predict

As previously mentioned, high-growth firms represent a minority in any economy’s total enterprise population but they have an outsized economic impact.

Excluding growth through mergers and acquisitions, a firm grows when it exploits a new technological, market opportunity or adopts new business models, operational structures or production methods. These trigger points may provide the catalyst for a business to undertake a period of rapid, transformative growth (Brown & Mawson, 2013). These bursts of rapid growth are typically temporary and episodic. Indeed, high growth is something that relatively few firms experience and often represents a transitory period in their life cycle rather than a permanent feature (Grover Goswami & Olafsen, 2019).

Rather than “picking winners” policy should focus on a conducive environment for growth

Given the episodic nature of growth and the variety of possible trigger points, especially when coupled with the diversity and the number of sectors in which firms with high-growth potential operate, policymakers typically find it very challenging to identify these areas with potential
in advance. It is, therefore, important for policy not to focus on ‘picking winners’ but rather to develop a conducive ‘business ecosystem’ in which firms with significant growth potential and ambitions are able and encouraged to innovate and scale up their activities. This is of particular importance for innovative high-growth enterprises that not only grow rapidly but also foster positive disruptive economic change in the way that businesses produce and market a product or service through the emergence of higher-value activities and networks or new ways of making products or services more accessible to more people.

There is evidence that barriers to entrepreneurship and business expansion affect IHGEs disproportionately for various reasons. First, small and young companies typically lack the capacity and skills to deal with regulatory burdens and institutional failures (Calvino, 2016). Empirical research indicates that corruption, barriers to obtaining credit and red tape related to starting, operating and/or closing a business all weigh more on the profitability of small firms than on large ones (Galanis, Pasiouras, & Voulgari, 2019). A similar study, specifically for high-growth start-ups and with data from Eastern and South-Eastern European countries, confirms the critical role of affordable sources of finance and banking sector characteristics (Anton, 2021).

Second, regulations tend to reflect established technological and business paradigms, which may create barriers to the entry or growth of new disruptive innovations that challenge the status quo. As one example, innovation in financial services (usually referred to as Fintech) may be hampered by regulatory requirements that favour incumbents such as large banks (Restoy, 2021). In other words, regulatory shortcomings may especially impede the creation and growth of firms with the most potential for innovation and disruption. Third, skills shortages may affect high-growth enterprises, especially those in high-tech sectors in need of specialized workers, such as IT specialists or science, technology, engineering and mathematics (STEM) graduates, more than other companies.

Innovative high-growth enterprises would also benefit from specific policy tools

While IHGEs clearly benefit to a degree from governments getting their business framework conditions right, many of the targeted business support programmes that are currently in place are not well suited to the specific needs and characteristics of IHGEs and, in some instances, are out of their reach. As one example, start-ups and firms operating at a loss (often the case
with high-growth enterprises), could often not access the emergency relief programmes that many countries worldwide established during and in the aftermath of the COVID-19 crisis as governments attempted to stem support flowing to unviable companies or firms that do not have an established business model (OECD, 2021). More fundamentally, high-growth firms (or, more precisely, firms with high growth potential) may require a more complex mix of financial (grants, equity) and non-financial support (advice and mentoring) to design, develop and test new products and services than other companies. Indeed, addressing this requirement is the rationale behind incubators, accelerators and similar institutions.

Therefore, the sustained development of IHGEs relies on a set of interdependent factors that are not only dependent on the capacities that need to be built at the firm level but also on creating favourable framework conditions to promote high growth.

Figure 1.3 · Framework conditions for IHGEs

Source: UNECE, adapted from (Ratinckx & Raspoet, 2018).
In terms of more targeted policy interventions, there are different growth paths for high-growth enterprises as these do not operate using only a single business model. At the level of an individual business, a growth path can take several directions as illustrated below.

From a policy perspective, five main routes for fostering IHGEs can be identified:

1. Support for the acceleration/scaling of (high-tech) start-ups;
2. Support for the growth of established manufacturing or service firms through product development and market penetration;
3. Corporate spin-offs from large national or multinational firms;
4. Attract ambitious entrepreneurs and/or scalable companies from abroad to establish locally and grow globally;
5. Research-based spin-offs emerging from public research institutes and higher education institutions (HEIs).
1.3 Innovative high-growth enterprises in the SPECA sub-region – the state of play

Data on high-growth enterprises in the SPECA countries is very limited as none of the countries have official statistics on such enterprises related to:

- their prevalence in the economy;
- their employment figures and what share of total employment this represents;
- sets of panel data tracking firm growth rates over time.

In the SPECA sub-region, the share of high-growth enterprises and their sectoral distribution is likely to be influenced by factors such as the existing economic structure, societal trends, priorities and so forth in each country. It is unclear how many such firms exist and in what sectors they operate given the above-cited absence of reliable data.

As an illustration of the potential of such firms in the region, however, the Innovation Agency in Azerbaijan has identified approximately 200 companies at various stages of their development cycle (from the start-up phase to maturity) as having considerable growth potential. They operate in a variety of sectors, however, those engaged in digital solutions are the most dominant group.

Box 1.3. provides more information about the Global Export Company, a company based in Uzbekistan’s capital Tashkent, as an illustration of an IHGE in the region. Important to note here is that this company is mainly active in the agricultural sector, confirming that IHGEs can operate outside of what are typically considered as high-tech sectors. Another take-away is that the Global Export Company’s innovation relates to process, marketing and organizational innovation rather than product innovation. Much of the innovation the company is active in relates to finding new markets for existing products and setting up novel partnerships with local farmers and producers. A final point to bear in mind is that the Global Export Company has identified the lack of expertise in certification procedures as a major challenge for its continued growth, which is not a problem common to IHGEs that find themselves less active in foreign markets or that seek to export IT or other services. This underlines the importance of a tailored policy approach to support these ventures.

Given the importance of agriculture for the economies in the SPECA sub-region, policies should also facilitate trade and investment in the sector in line with the SDGs. In this regard, UNECE has been working to develop internationally agreed agricultural quality standards through the UNECE Working Party on Agricultural Quality Standards and is also carrying out initiative on enhancing traceability and transparency for sustainable value chains in the garment and footwear sector. With the uprise of new technologies, UNECE has been exploring the enabling role of blockchain technology in implementing a traceability framework to advance due diligence and sustainable and circular value chains in the cotton and leather industries – also of importance for the SPECA sub-region and in support of the potential IHGEs in the sector.
Box 1.4 The Global Export Company in Uzbekistan

The Global Export Company, founded in 2017, is the largest exporter of agricultural and finished textile products in Uzbekistan. The company exports pulses (mung beans, kidney beans, nuts, etc.), as well as varieties of dried fruits and textiles to more than 30 countries around the world. The company is one of the biggest producers and suppliers of pulses in Uzbekistan and also provides comprehensive support to local farmers and producers of both dried fruits and textiles to help them export these products to foreign countries, all of which serves to build up the country’s exports and export potential.

The company has been growing rapidly in recent years as exports increased from a value of US$ 500,000 in 2017 to US$ 30 million in 2021 (corresponding to a weight of 31,000 tonnes of agricultural produce). The number of export markets also increased rapidly to more than 30 countries around the world, including many EU Member States and the United Kingdom. It was the first company in the country to actively pursue win-win relationships with foreign partners on this scale.

While the company benefits from the rich agricultural tradition of Uzbekistan, the country’s geographical location is far away from many of the export markets, without direct access to the sea and where high transportation costs represent major challenges. In addition, the company sometimes experiences difficulties to meet certification standards, especially when supplying agricultural products to EU countries, and additional support from laboratories and certification organizations would be helpful in this respect.

The Ministry of Foreign Affairs and Ministry of Investment and Foreign Trade of the Republic of Uzbekistan has supported the company by organizing showrooms of Uzbek goods in the embassies of the Republic of Uzbekistan around the world and by establishing a system of sending product samples to potential buyers. Furthermore, the State provides compensation to cover the transport costs of exporting the produce which, in turn, significantly reduces the financial burden for exporters.

Source: UNECE, based on written exchanges with the head of the export department, Global Export Company.

Notes

1 In line with the Global Entrepreneurship Monitor distinction of whether an entrepreneur starts a business to take advantage of a business opportunity or because they have no other options to secure work or an income.
3 Ibid.
5 Disruptive innovations do not necessarily involve breakthrough technologies, rather, they are innovations that make products and services more accessible and/or affordable, thereby making them available to a larger market. See, for example, https://hbr.org/2015/12/what-is-disruptive-innovation
Part II
POLICIES TO PROMOTE IHGES
2.1 The rationale for policy intervention: why IHGEs need targeted policies

Box 2.1 Innovative high-growth enterprises

IHGEs are inherently different from other SMEs, making many support measures broadly aimed at SMEs relatively ineffective. A first step to address this is to integrate IHGE-related concerns into the overall effort to improve the business climate as well as the improving access to soft (e.g. training for skills) and hard (e.g. technology and innovation centres) infrastructure. This needs to be done in concert with efforts to introduce and scale-up measures and mechanisms that provide targeted support for businesses. These measures and mechanisms need to be carefully tailored toward mitigating both the constraints and risks that hold back innovation with high-potential spill-over effects so as to ensure companies with high growth potential realise this potential. Such initiatives should consider:

- **Who to support?** Analysis of a set of trigger points may help identify potential IHGEs before they start growing and help with the design of successful policies.
- **What policy?** Addressing barriers to growth at each step of firms’ development is a crucial element.
- **How to support?** Government should play a coordinating role, enhancing links between the potential IHGEs and resources critical for their growth in terms of scale-up expertise, talented employees and growth capital.

The questions to keep in mind when designing IHGE policies are summarized below.

**Figure 2.1 • Why, who, what, how of IHGE policy**

<table>
<thead>
<tr>
<th>Why?</th>
<th>Optimising the economy wide transformative effects of innovative firms with growth potential.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who?</td>
<td>Selectivity by applying objective criteria for targeting innovative firms with growth potential.</td>
</tr>
<tr>
<td>What?</td>
<td>The mix of support measures tailored to the growth stages and specific needs of targeted firms.</td>
</tr>
<tr>
<td>How?</td>
<td>The delivery of the policy intervention by one or more organisations.</td>
</tr>
</tbody>
</table>

Source: UNECE

2.1.1 Why (should Government support IHGEs)?

As discussed in Part 1, a policy based on identifying companies that have high-growth potential and that seeks to intervene promptly to ensure their growth occurs is a complex and risky (as venture capitalists can confirm) undertaking that requires strong institutional capacities within the organizations that will be providing this support. A focus that
includes generating a social return of investment and positive effects on broader parts of
the economy rather than a narrowly defined or more tangible immediate outcome will be
essential when providing public support to IHGEs (OECD, 2018).

Adopting an ‘economic transformation’ perspective to the why question also helps
broaden the classic market failure argument for public intervention. Three main types of
market failure are commonly used to justify State intervention.

- **Externalities.** The main reason for the existence of negative externalities is the
difficulty to exclusively own the outcome of one’s (knowledge) investment, i.e.
innovation is easily copied once proven commercially viable.

- **Uncertainty.** A lack of certainty is a natural part of any innovation process and can
result in a market failure because it produces information asymmetries.

- **Indivisibility.** Economies of scale are often needed to justify investments. However,
questions as to the required scale of production for breaking even on an innovation
arise (e.g. the firm having the appropriate financial capacity to sufficiently scale up to
at least the break-even point).

IHGEs are particularly vulnerable to market failures and this may discourage entrepreneurs
from engaging in an innovative venture given the risks and uncertainty about achieving
a profitable outcome. However, beyond the standard market failures, system failures
(involving coordination (institutional), capabilities, networks and infrastructure) and
transformational failures (that impede the transformation of systems of production and
consumption, e.g. energy systems) can further constrain both innovation and business
growth (Arnold, 2014). Table 2.1 summarizes these types of potential failures and their
relevance for the SPECA sub-region.

In particular, the capacity to absorb new knowledge is crucial to any firm’s success and
participation in a network of relationships with other organizations increases the chance
that they will find or develop capacities to achieve growth. Failures due to the lack of an
effective institutional (regulatory) environment or the required ‘infrastructure’, notably in
the areas of education, training and investment in basic science, all of which enable firms
to develop, can also impede the potential of IHGEs in a country.

In this context, the relevant question for a policymaker is not ‘which are the high-growth
firms in my economy’, but rather ‘which are the firms with high-growth potential that do
not grow because of the existence of market or system failures that policy could correct’.
The firms to target are not those that would grow in any case but those for which
policy intervention will make a difference.

### 2.1.2 Who (which firms)?

**Identifying potential IHGEs**

IHGE policy is not about ‘picking winners’ but about going a step beyond standard
entrepreneurship and SME development policies. The aim is to target a group of firms that
have one or more characteristics that suggest they may grow rapidly and contribute to
the economic dynamism and transformation of the given regional and national economy.
Concrete examples in this respect include the introduction of a revised legal framework in Kazakhstan in 2018, which aims to provide more transparency and flexibility to investors, including foreign ones. For example, it allows and protect its intellectual property (https://www.asiaiplaw.com/article/amendments-to-trademark-law-provide-enhanced-protection). As another example, Azerbaijan amended its law on trademark and geographical destinations in 2019, making it easier for innovative companies to register, transfer and protect intellectual property also represent a barrier to innovation.

Table 2.1 Responding to market and system failures to unlock the potential of IHGEs

<table>
<thead>
<tr>
<th>Type of failure</th>
<th>Description</th>
<th>Relevance to the SPECA sub-region and policy responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externalities</td>
<td>It is too difficult to appropriate enough of the results of innovation to make private investments worthwhile. Innovation is easy for competitors to copy and there are limited opportunities to protect new ideas.</td>
<td>Grant financing and other financial support measures for IHGEs are becoming more common, however, early-stage financing remains problematic for many companies in the sub-region. Difficulties to manage and protect intellectual property also represent a barrier to innovation.</td>
</tr>
<tr>
<td>Barriers to competition</td>
<td>Market power (for example, through the first supplier building an insurmountable advantage) may lead to consumer lock-in. High cost of market entry/exit due to, for example, large incumbent firms (including SOEs). Uncertainty about, or lack of, a market for products/services. Investment does not occur because there is no established market with predictable returns for the products/services in question.</td>
<td>Large companies, often State-owned, play an overly important role in the economy. There are worries about an uneven playing field between these incumbents and entrants. The role of the public sector as a source of demand (innovative public procurement) for new innovative solutions can help create new markets, but this appears to be in its infancy in the sub-region.</td>
</tr>
<tr>
<td>Information (knowledge) asymmetries</td>
<td>High levels of specialized technical, financial and/or market knowledge mean that not all economic actors involved in a given process have a sound basis for making informed decisions. Actors optimize locally, based on what they currently know rather than all the available information.</td>
<td>Access to specialized know-how is not always readily available in all SPECA countries. Interviewees underlined the need for improved knowledge of international markets and tech trends. Publicly supported access to market and technology advice can be critical for decision-making at different stages of growth.</td>
</tr>
<tr>
<td>Institutional failures</td>
<td>Institutions (both in the sense of ‘organizations’ and ‘rules and conventions’) can operate in ways that impede innovation. Rules and regulations may not be conducive to innovation and business development. Government policy may have the same effect.</td>
<td>Interviewees stressed that the current institutional framework in the sub-region did not favour the creation and growth of IHGEs. Further improvements in regulatory frameworks, and especially in how they are implemented in practice, could help boost the potential for sustained growth.</td>
</tr>
<tr>
<td>Capability failures</td>
<td>These failures result from the difference between the capabilities of real firms and those of an idealized economic model, meaning that firms lack the needed skills, resources and abilities to learn as well as the absorptive and analytic capacity to exploit innovation opportunities.</td>
<td>Skills shortages among the labor force seem common in the sub-region. In addition, locally-based potential IHGEs are unlikely to have ‘in-house’ all the capabilities required to help them grow. BDSs are becoming more widely used policy tools, however, they sometimes lack input from people with the prerequisite business experience.</td>
</tr>
<tr>
<td>Network failures</td>
<td>IHGEs may be in networks that are fragmented or within which communication and cooperation may be poor. Networks may be locked into technological regimes and markets or products that make it difficult to transition to new technologies or business models.</td>
<td>The economies in the sub-region are relatively disconnected from global value chains and trade activities are concentrated on a few goods, primarily commodities.</td>
</tr>
<tr>
<td>Infrastructural failures</td>
<td>Insufficient investment by the State in human capital and knowledge infrastructure that are both critical to innovation performance, for example, regarding education and skills, basic research, etc. This failure varies by business sector (e.g. emerging sectors may face more of a challenge) with the severity of the failure depending on past investments in each country.</td>
<td>Transport costs are high, partly because of insufficient investments in physical infrastructure, while improvements in digital infrastructure would benefit IHGEs, especially in ICT.</td>
</tr>
</tbody>
</table>

Source: UNECE, based on (Arnold, 2014).

As an example, Amendments to the trademark and geographical indications in 2018, making it easier for innovative companies to register, transfer and protect intellectual property (https://www.asiaiplaw.com/article/amendments-to-trademark-law-provide-enhanced-protection).
The public intervention required is thus more akin to the logic of a venture capitalist who invests in a portfolio knowing that not all the businesses will grow and generate high returns. Hence, a key issue would be identifying firms with the potential for high growth given that the potential for high growth is neither visible nor measurable at the moment of identification (OECD, 2013).

A clear understanding of what defines potential IHGEs is important to track the success of policies via robust statistical data severely lacking in SPECA countries. Better statistics, ideally through high-quality and representative longitudinal data sets, would allow for more evidence-based policymaking and represents the foundation for evaluations of the effectiveness of policy interventions. Interviews with key stakeholders in the region identified some potential shortcomings in policy support, such as the relatively low take-up of provided support by potential beneficiaries and its ineffectiveness, often due to insufficient involvement of private-sector specialists with business experience in the provision of BDSs. Without reliable data, these barriers cannot be substantiated and progress over time cannot be tracked.

A recent World Bank report compiles relevant data collection exercises in a dozen emerging economies that can serve as templates for countries in the SPECA sub-region. As one example, the Turkish Statistical Office (TurkStat) conducts two representative censuses of all firms each year, one involving all firms with at least 20 employees and the other a representative sample of firms with fewer than 20. In addition, the General Directorate of Productivity at the Ministry of Science, Industry and Technology in Turkey collects balance-sheet data from companies active in the country, complemented with income statements and information from the business register database (Grover Goswani, Medveded, & Olafson, 2019).

Understanding how to identify a potential IHGE serves as the foundation to design appropriate policies to support these entrepreneurs and thereby help drive national structural transformation and long-term sustainable development. The characteristics to be used when identifying potential IHGEs may be derived from a range of trigger points (OECD, 2018) and employed to design successful IHGEs support programmes (Table 2.2 Examples of trigger points to identify potential IHGEs).

While the above table represents the typical indicators of firms striving to be IHGEs, identifying possible trigger points within firms before they experience a growth spurt and tailoring the public support accordingly requires solid data collection and strong managerial capabilities on the side of policymakers. As this may take some time to develop in the SPECA sub-region, governments could immediately begin using a simplified approach, for example, through proxies. Reasonable firm growth in the recent past or improvements in firm productivity may constitute such proxies, allowing governments in the sub-region to distinguish firms with (further) growth potential from those companies with relatively static productivity and low-growth rates.

Developing a targeted approach for support

In line with the information presented above, enterprise and innovation agencies in OECD countries tend to adopt a segmentation strategy to tailor support packages to the needs of companies based on the individual company’s characteristics. Segmentation implies
that an agency looks at a portfolio of companies it wishes to assist and breaks them down according to a set of characteristics. This process then leads to differentiated offers per target segment, each offer being tailored to maximize the impact and be optimally suited to each set of clients. Segmentation also enables an agency to tailor its support to specific targeted needs within a segment which, in turn, should further increase the efficiency of the support provided.

### Table 2.2 Examples of trigger points to identify potential IHGEs

<table>
<thead>
<tr>
<th>Kinds of triggers</th>
<th>Examples</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational changes</strong></td>
<td>Changes in ownership, buy-outs, new investors.</td>
<td>Top management or ownership changes normally go along with substantial changes to the way business is conducted, this may have high-growth potential and need targeted support to take off.</td>
</tr>
<tr>
<td><strong>Business model changes</strong></td>
<td>New markets, production methods, the introduction of concerted customer relationship management; new channels, such as e-commerce; internationalization, etc.</td>
<td>High growth comes from a clear commitment to trying new things. Often, these are new products, however, innovation can also come from new channels, new markets or closer interaction with existing customers.</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td>Investment in new technology; introduction of enterprise resource planning (ERP) or other core business process software.</td>
<td>Substantial new investments can be a clear signal of growth ambitions.</td>
</tr>
<tr>
<td><strong>Product changes</strong></td>
<td>Introduction of products (services) new to the market; substantial upgrading of existing products (services).</td>
<td>Potential IHGEs should be investing in product development (and ongoing tailoring of their products to evolving customer needs) as well as in in-house innovation or partnerships with external R&amp;D or technology suppliers.</td>
</tr>
<tr>
<td><strong>Changes in domestic and/or international markets</strong></td>
<td>Uptake of certain global trends in market demand, business processes, etc. (e.g. increased use of platforms) that shape demand and offer domestic opportunities, creating new market niches with high growth potential.</td>
<td>The high-growth rates of innovative ventures can happen in response to global market trends and the development of such in domestic economies (such as with the uptake of new platforms that has seen, for example, Uber being locally challenged by an Estonian competitor Bolt and rising demand from the German automotive industry contributing to high growth in the automotive sector in Moldova).</td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td>A clear desire and ambition for double-digit growth, innovation and a willingness to try out new ideas. This is a somewhat subjective criterion but can be validated via assessments conducted by qualified business advisors (e.g. from high-growth support initiatives).</td>
<td>Potential IHGEs need entrepreneurs leading them who have a clear, ambitious vision and a desire to try out new activities.</td>
</tr>
</tbody>
</table>

Source: UNECE, based on (OECD, 2018).
Targeting does not mean excluding certain sectors as IHGEs can be operating anywhere

Targeting firms according to defined ‘growth potential’ characteristics does not imply a focus, or at least not an over-emphasis, on specific sectors or start-up firms. While high-growth status is typically associated with certain firm characteristics and economic activities, for example, ICT and biotech start-ups, established enterprises and firms operating in more traditional sectors, such as food manufacturers or equipment suppliers can also qualify (as box 1.4 illustrates). The question of which firms are likely to grow fast is not simply determined by their age and sector as the key deciding factor is the innovative nature of the products and services offered or being developed and how they are produced, delivered and marketed.

In practice, it is hard to identify, ex-ante, which firms will grow fast and which firms will not, meaning the policy approach should be sufficiently flexible to cater to the needs of a broad variety of enterprises (OECD, 2010). Policy should therefore seek to assist both start-ups and existing firms to scale up and exploit their potential. At the same time, there is good reason to add as a characteristic for identifying potential IHGEs the expected growth potential of certain sectors, products or services due to forecast trends in regional or global markets. The combination of targeted support for potential IHGEs and for priority sectors or emerging niches in an economy that offer the most potential for economic transformation can ensure cost-effective policy interventions that return meaningful results (e.g. in the Scottish case, support for potential high-growth firms is aligned with seven priority national programmes in areas such as zero emissions, a hydrogen economy and future medicines).
2.1.3 What (sort of support is required)?

Policy support for IHGEs and potential IHGEs should be viewed as part of a larger effort of related measures taken to support and encourage firms to innovate, grow, export and so forth. In this regard though, a useful distinction can be made between four ‘levels’ of policy intervention, as detailed in Figure 2.3 below.

SMEs, entrepreneurship and effective IHGE support measures differ substantially

Measures designed to support IHGEs fall into the fourth category cited above, namely targeted measures. Very often, however, governments overlook IHGEs when designing SME and entrepreneurship policies with the expectation that the policy tools used to support SMEs and/or start-ups will be suitable for IHGEs. As the body of literature demonstrates, IHGEs are different from other SMEs in many ways and need targeted support to provide for their needs and enable growth, meaning that most SME policies fall short of providing that kind of support. Table 2.3 presents the key stylized differences among typical SMEs, entrepreneurship and IHGE support measures that are the drivers behind the need for tailored IHGE support measures.
### Table 2.3: Stylized differences among typical SME, entrepreneurship and IHGE support measures

<table>
<thead>
<tr>
<th>Type</th>
<th>SME policies</th>
<th>Entrepreneurship</th>
<th>IHGE policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target of measure</strong></td>
<td>Existing SMEs, including micro-enterprises and sole traders</td>
<td>Potential entrepreneurs and start-ups</td>
<td>SMEs with the potential and ambition to grow fast</td>
</tr>
<tr>
<td><strong>Rationale</strong></td>
<td>Sustain jobs, reduce poverty, support underdeveloped regions and the employment of women, young people or disadvantaged groups</td>
<td>Focus on exploiting entrepreneurial capacity, in a gender-balanced way, facilitating start-ups that help maintain a vibrant SME base.</td>
<td>Contributing to structural transformation by shifting the economy towards higher-productivity activities and growth in the share of skilled jobs in the labor force.</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>Create a level playing field and ensure SME survival or mitigate the social consequences of structural changes</td>
<td>More start-ups in the economy</td>
<td>More high-growth firms in the economy</td>
</tr>
<tr>
<td><strong>Nature of support</strong></td>
<td>Financial incentives; regulatory simplification</td>
<td>Training, match-making, and facilities for incubation</td>
<td>Advisory and peer support to management teams; policy advocacy to remove constraints to growth</td>
</tr>
<tr>
<td><strong>Eligibility</strong></td>
<td>All or most SMEs; sometimes limited to women or underrepresented groups</td>
<td>All entrepreneurs; sometimes limited to women or the ICT sector</td>
<td>Limited eligibility, decided on a case-by-case basis with criteria strongly correlated with subsequent high growth</td>
</tr>
<tr>
<td><strong>Examples: Access to finance</strong></td>
<td>Credit guarantees; direct soft loans</td>
<td>Subsidies for seed funding</td>
<td>Matching IHGEs with sources of finance, enabling environment and limited direct investment into risk finance</td>
</tr>
<tr>
<td><strong>Examples: Building capacities</strong></td>
<td>Generic training on business planning, accounting, HR management, and process automation</td>
<td>Entrepreneurship training; mentoring mechanisms</td>
<td>Targeted training and interventions depending on the business life cycle and subject to strict performance requirements</td>
</tr>
<tr>
<td><strong>Examples: Business climate</strong></td>
<td>A comprehensive view of business climate reform, e.g. the issues monitored in the World Bank’s Doing Business report</td>
<td>Focus on business start-up regulations</td>
<td>Very targeted to specific constraints that, as a result of analysis and consultation, appear to hold back potential IHGEs</td>
</tr>
<tr>
<td><strong>Limitations and risks</strong></td>
<td>Deadweight losses and displacement effects; may slow down efficient resource reallocation by keeping less productive enterprises running</td>
<td>Most start-ups fail or stagnate; e.g. venture capitalists calculate that 90 per cent of investments will not perform</td>
<td>Predicting high growth is difficult. Effective targeted support can be costly and the effects hard to measure. Risk of creating entrenched privileges (but can be offset by monitoring if firms reach growth targets</td>
</tr>
<tr>
<td><strong>Institutions</strong></td>
<td>Standard SME agencies, with divisions for business climate reform, BDS and access to finance</td>
<td>Separate agencies, mostly with a specific purpose such as incubation</td>
<td>Autonomous agencies employing a key account logic and officials getting to know entrepreneurs as well as their activities while assisting them throughout a business’ life cycle.</td>
</tr>
<tr>
<td><strong>Processes</strong></td>
<td>Standard processes, with long-term and yearly work plans and indicators such as the number of SMEs supported</td>
<td>Advisory and mentoring support, generally for a short period (several months to a year) aimed at supporting would-be entrepreneurs to launch start-ups</td>
<td>Focus on key account logic. The need for continuous internal and external monitoring and evaluation with performance criteria that, if not reached, lead to the discontinuation of support</td>
</tr>
</tbody>
</table>

Source: UNECE, based on (OECD, 2018).
Market validation as a central indicator for ensuring the impact of support measures

The market validation of the business model (or innovative product or service) is a central criterion that helps both private investors and government-backed services target potential IHGEs. Most start-ups will either not manage to validate the scalable nature of the business model or not achieve the growth they initially expected (Calvino, 2016). This handbook addresses policy-related issues for enterprises that have ambitions to scale up and a scalable business model that can be employed irrespective of whether such businesses are start-ups or established firms.

Figure 2.4 · Start-ups and scale-ups — the importance of validating the business model

Growth is facilitated by a strong ecosystem for scaling up

As it is difficult to identify, ex-ante, the firms that will scale up and achieve high growth, policy interventions may focus on addressing barriers to growth at different stages in the development of IHGEs. It is important to emphasize that a conducive business ecosystem for scaling up should readily support the transition from one growth stage to the next and to do so, the ecosystem needs to facilitate the inevitable changes that will occur in company management and on the investor side (IRIS Group, 2019). These stages are presented below, albeit in an illustrative manner as real-world scenarios do not always follow such a linear trajectory (e.g., capturing talent when it shows up, building networks early to accompany the expansion phase).
At each stage, the type of support will need to evolve and change in line with the evolving needs of the given IHGE. As growth may be rapid, this requires a flexible and tailored approach that often is best coordinated by an ‘account (or client) manager’ in the agency mandated to provide support. This individual will ideally apply a portfolio approach and provide support measures on a needs basis throughout the firm’s life cycle (support instruments available from different sources and enjoying varying levels of subsidy being drawn together to cover different strategic priorities at different stages of an IHGE’s development) (OECD, 2018).

2.1.4 How (channels can deliver the support)?

IHGEs require a differentiated and tailored portfolio of investment advice and mentoring. From a government budget perspective, this need does not entail large financial outlays as the key support resource for IHGEs is often of an advisory, peer-to-peer or mentoring nature and the number of (potential) IHGEs is relatively small. When finance is required, the focus should be on leveraging private investment by creating the right framework for investors to step in and help IHGEs grow.
Ensuring IHGEs can access resources critical for their growth

Recent reviews of IHGE policy concur that the **primary focus needs to be on building stronger ecosystems by enhancing the links between potential IHGEs and the critical resources they need to scale up successfully** – primarily access to scale-up expertise, talented employees and growth capital (IRIS Group, 2019).

**Figure 2.6 • Three entry points for effective IHGE support policies**

Delivering effective public support to IHGEs

This section examines in more detail the ‘how’ question by exploring different policy interventions that can be mobilized to support IHGEs. However, for the effective use of public funds, it is critical to ensure that IHGE policy is designed and implemented within a **robust institutional environment, adapted to the national context and respects the principles of additionality** (support should leverage rather than replace or crowd out private investment) as well as **neutrality** (firms supported are selected based on their potential for growth and in line with clear and transparent criteria).

In most countries, the organizations responsible for coordinating the delivery of public support to IHGEs are either departments (units) of national (and/or in larger countries, regional) enterprises and innovation agencies; State-owned financial intermediaries (such as investment banks or export credit agencies) or a range of accredited organizations that may receive some public funding to provide mentoring and advisory services to IHGEs.

In addition to the public agencies involved, many private organizations should be present in a business environment to support IHGEs. These private organizations would ideally include equity investors, business incubators and accelerators, business schools offering executive education and tailored training, scale-up initiatives, universities and other HEIs, chambers of commerce and business associations (including international networks) that provide growth mentoring programmes and peer networks, non-governmental organizations (NGOs), international doners and so forth. In the three countries highlighted in the table above, the **government agency in charge plays the role of coordinator**, etc.
allowing IHGEs to seamlessly access support from different ministries, public bodies, private sector organizations as well as providers of funding and any potential that may coexist with other organizations. What is of high importance to note here is that the government agency does not see its role as the sole provider of expertise. The main part of the above-cited agencies’ remit is to ensure that policy support is streamlined, there is minimal wasteful duplication of efforts and no gaps in the provision of support. Examples of their initiatives are provided in the subsequent sections to help illustrate the types of services and support these agencies provide as well as how such efforts can be best organized and delivered to IHGEs.

### Table 2.4 Examples of delivery agencies for IHGE-focused initiatives in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Agency</th>
<th>Dedicated programme or department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>Enterprise Estonia (EAS) is a national foundation that aims to develop the Estonian economy through three principal areas of activity: developing Estonian enterprises and boosting export capacity; increasing tourism revenue; bringing in high value-added foreign investments.</td>
<td>Enterprise Development Programme supports ambitious enterprises with a readiness to invest and a desire to grow, develop and launch new products and services. It provides both funding and advisory services.</td>
</tr>
<tr>
<td>Georgia</td>
<td>Georgian Innovation and Technology Agency (GiTA) supports innovation and technology development, as well as its commercialization across businesses in the country.</td>
<td>GiTA runs several programmes specifically for innovative companies. This includes two grant programmes, one for the commercialization of R&amp;D as well as a technology transfer programme, a portal to connect innovative ventures with providers of business development and other matchmaking services. This is complemented by programmes offered by Enterprise Georgia, another public body that promotes entrepreneurial activity and is responsible for business support, export promotion and investment for companies active in the country, including firms with high growth potential.</td>
</tr>
<tr>
<td>Singapore</td>
<td>Enterprise Singapore is a government agency championing enterprise development. They work with committed companies to build capabilities, innovate and internationalize. They also support the growth of Singapore as a hub for global trade and a location to establish start-ups.</td>
<td>Scale-up SG provides peer learning and collaboration along with advice from a network of public and private sector partners to help companies scale up.</td>
</tr>
</tbody>
</table>

Source: Author’s analysis for UNECE.

*https://www.eas.ee/eas/?lang=en*

*https://www.scottish-enterprise.com/*
2.2 A policy toolkit to foster IHGEs

Box 2.2 A policy toolkit for innovative high growth enterprises

The policy mix for IHGEs should aim to improve a range of framework conditions and provide a set of initiatives that support the creation and growth of such enterprises and help drive transformational change across an economy. The five types of policy intervention are:

- Reforms in business environment that enables and promotes experimentation and growth;
- A portfolio of services tailored to the specific needs of IHGEs;
- Policies that increase the availability and affordability of various types of finance for each growth stage of an IHGE;
- Initiatives to foster firms’ ‘absorptive’ capacities by ensuring they can recruit and train people with the skills required to drive and manage rapid growth;
- Access to services and networks that support internationalization.

This section presents the forms of intervention that, when taken together, constitute a toolkit for public-policy stakeholders. The policy options are illustrated by examples from both highly developed economies as well as countries, such as the Baltic States and Georgia, which have gone through an economic transition process similar to that which SPECA countries are currently going through.

The five main elements of the policy toolkit are:

1. **Measures to foster a pro-growth business environment.** This first set of policy levers concern targeted improvements to the business environment that **tackle productivity and growth limiting distortions**, in particular by addressing disincentives to growth present in legislation or regulations. These measures include:
   - Encouraging entrepreneurial attitudes to stimulate more growth-oriented ambitions in new and existing businesses;
   - Optimizing the legal and regulatory framework, including a measure of flexibility to experiment and allow for innovative solutions;
   - Ensuring level playing field conditions, especially with regard to the rule of law, competition policy, labor markets, corporate law and regulations, the tax system and so forth.

2. **Delivering tailored services to IHGEs.** A targeted policy requires a dedicated set of BDSs tailored to the needs and specificities of IHGEs (such as mentoring and advisory services) complemented by an accompanying set of instruments to support innovation (R&D, product development, piloting and testing new products). It also requires a certain quality of infrastructure and services to be available to enterprises conducting R&D and innovation.
3. **Access to finance adapted to each growth stage**, namely measures on:
   
   a. Improving access to debt and equity finance for new and small firms to fund investment in R&D and the acquisition of intangible assets;
   
   b. Promoting the valuation of intellectual property and intangibles and their use as collateral for loans;
   
   c. Fostering an investor-friendly ecosystem with access to finance for IHGEs as one of its pillars, including a role for incubators, accelerators, business networks and so forth;
   
   d. Improving the regulatory environment for investors (crowdfunding, angel investors, private equity funds) and finance tailored to scaling up IHGEs.

4. **Reinforcing the internal capabilities of a firm to grow**. This entails supporting the provision of training in start-ups and growing enterprises, both in terms of their workforce as well as their having the necessary management skills related to human, technical and financial resources. Promoting a culture of looking for and accepting change is a key element in the management of a growth process in a business of any age and size.

5. **Internationalization and business-to-business networks**. These measures include developing tailored advisory services for IHGEs such as trade facilitation, intellectual property rights advice (e.g. protecting trademarks in foreign markets), market analysis to support internationalization in regional and global markets and matchmaking services to put firms with international ambitions in contact with potential partners abroad.

The overall policy mix should seek to address a broad range of framework conditions that support the emergence and growth of innovative enterprises and help drive transformational change across an economy.

When developing policies to foster the development of IHGEs, two broad sets of factors should be kept in mind (IRIS Group, 2019):

- **External (business environment) factors**: institutions and regulations, access to finance, (international) business networks, availability of innovation infrastructures.

- **Internal (company-level) factors**: notably the ‘absorptive capacity’ (in terms of the availability of people with skills to engage in design, production, finance, management and marketing) to support innovation and technological upgrading.

Furthermore, policies for IHGEs should be co-designed, monitored and evaluated in partnership with relevant stakeholders, most crucially the business community, through a process of consultation to prioritize interventions and be adapted according to evaluation outcomes as well as changing circumstances and market environments. Governments should put in place the necessary capacity to design, deliver and evaluate IHGE policies, including a robust evidence base (data on IHGEs, etc.), transparent and inclusive processes for designing and implementing these policies as well as the procedures for evaluating their impacts.
Figure 2.7 • Five types of support measures for IHGEs

| Pro-growth business environment | • Regulatory framework for innovation and growth  
| | • Taxation - incentivizing R&D and innovation and investors  
| | • Demand side measures - Government as the first mover  
| Tailored services for IHGEs | • High-growth programmes - client management approach  
| | • Developing business ecosystems and peer-to-peer networks  
| | • Access to innovation services and infrastructure  
| Finance adapted to each growth stage | • Grant and loan instruments  
| | • Crowdfunding, business angel investors, incubators and accelerators  
| | • Venture capital: co-investment and fund of funds models  
| Reinforcing firms’ internal capabilities to grow | • Leadership skills  
| | • Availability of employees with technical and creative skills  
| | • Talent attraction and retention  
| Internationalization & business networks that support scaling | • Advice on market trends and entry  
| | • International networks - structuring diaspora links  


2.2.1 Measures to foster a pro-growth business environment

The business environment varies significantly across SPECA countries. According to the World Bank “Doing Business 2020” report, the most favourable overall business regulations in the sub-region are in Azerbaijan and Kazakhstan. Kazakhstan is the leading light for SPECA countries, ranking 25th among the 190 national economies assessed by the World Bank (with Azerbaijan ranked 34th (although ranked 9th for starting a business).

It is more challenging to start, operate and scale up a business in Uzbekistan, Kyrgyzstan and Tajikistan which are respectively ranked 69th, 80th and 106th in the overall rankings. Some progress has been made in these countries regarding certain indicators compared to previous years, such as Kyrgyzstan’s efforts to improve access to electricity and getting credit. In Tajikistan, the Government has improved business access to credit by launching a unified, modern and notice-based collateral registry while also broadening the scope of assets that can be used as collateral. Uzbekistan returned mixed performance, being scored high in some respects, for example, 8th for the ease of starting a business but demonstrating a more modest performance when dealing with construction permits.
Part II
Policies to promote IHGEs

While all SPECA economies show varied results in various aspects of business environment regulations, they all score poorly in trading across borders where their ranks ranged between 83rd (Azerbaijan) and 152nd (Uzbekistan).

Despite the varying rankings, interviews with stakeholders in the entrepreneurship and start-up ecosystem revealed that complaints about red tape are common throughout the region. A recurring observation is that both the business community and external stakeholders are often not consulted or involved in legislative efforts by governments. This top-down approach may lead to unnecessary bureaucratic hurdles and a disconnect between what the public sector does and what the private sector needs, especially given the fast-moving world of start-ups and high-tech ventures.

This is compounded by the poor governance and accountability of many public-sector agencies, opening the door for corruption more generally. This perception is also echoed in the Corruption Perception Index 2020 of Transparency International (Transparency International, 2022). In 2020, Kazakhstan was ranked 94th out of 180 countries - the best performance among its SPECA peers. Kyrgyzstan's ranked 124th, Azerbaijan 129th, Uzbekistan 146th, Tajikistan 149th, Turkmenistan 164th and Afghanistan 165th all showing concerning levels of corruption. This poor performance has consequences for businesses operating throughout the sub-region, especially for firms with high-growth potential that may disrupt the status quo and challenge incumbent (and well-connected) enterprises. Large enterprises, and the people who run them, often benefit from close connections with the political establishment, leading to an uneven level playing field. Challengers lacking such political backing may encounter legal uncertainty, the selective enforcement of rules and regulations as well as inadequate legal protection (OECD, 2020).

It is critical to ensure that firms with high-growth potential, whether established nationally or incorporated abroad but operating locally, in sectors characterized by higher uncertainty and which potentially exhibit higher aggregate growth, do not face additional regulatory or administrative barriers. Such barriers reduce the allocative efficiency (Grover Goswami & Olafsen, 2019) of scarce resources (e.g. ensuring that skilled labor is being hired and capital is being invested into the potentially most productive firms in an economy). Allocative efficiency can be improved by three broad policy measures, namely, improving the ease of entry for new and potentially more productive firms, facilitating the exit of less productive non-innovative firms and improving access to resources for existing firms looking to innovate through more flexible capital, labor and product market policies.

Making such alterations to labor, investor and product market regulations does not equate to deregulation but rather to better regulation. Four main types of policy measures can be applied to improve the legislative and regulatory environment for business growth and encourage innovation.

**Regulatory impact assessment (RIA) – taking account of the needs of IHGEs.**

The first measure that can be taken is to review the current legislative and regulatory environment concerning the specific difficulties it may pose for firms that are seeking to grow rapidly or that generate disincentives within the existing environment that hinder scaling up or investing in IHGEs (for more information on this, please see (UNECE, 2021)).
In the case of IHGEs in the SPECA sub-region, three regulatory aspects appear particularly important:

- The application of the ‘innovation principle’, which means that whenever a policy is developed, its impact on innovation is fully assessed;
- When the legislative process does not match the pace of innovation then the existing rules risk slowing down and disrupting innovation (the so-called ‘pacing problem’);
- Regulatory issues, including taxation, may provide a disincentive to scale up or encourage already growing firms to create subsidiaries rather than consolidate (e.g. more complex reporting obligations or higher taxation rates above a certain threshold).

Timely, independent and comparable data on the adoption and implementation of RIA practices in emerging economies, including in the SPECA sub-region, are rarely available. A 2019 study by the World Bank investigated compliance with good practices in a large number of countries and measured this using a composite index ranging from zero to six, with six indicating full compliance. Scores in the SPECA sub-region ranged from 1 in Turkmenistan to 4.5 in Uzbekistan with Azerbaijan (3), Kazakhstan (4), Kyrgyzstan (3) and Tajikistan (3.5) taking intermediate positions, with no data from Afghanistan being available (Kamkhaji, Ladegaard, & Lundqvist, 2019).

Generalisations about regulation in this regard are fraught as less regulation does not necessarily mean more innovation and the ultimate impacts of regulation on innovation need to be carefully assessed on a case-by-case basis. In fact, firms with an innovative business model likely prefer to operate within a (conducive) regulatory framework rather than in a ‘grey zone’ full of uncertainties. Regulation, besides promoting innovation and its diffusion, can also provide direction to innovation, steering it towards specific societal needs. Good examples of this are environmental and data protection rules which have significantly affected the pace and direction of innovation in several domains.

Figure 2.8 • Four key regulatory-type measures

![Figure 2.8](image-url)
As an example, the EU’s Better Regulation Toolkit, which includes a Research and Innovation Tool \(^5\) used for analysing the interactions between new and revised legislation (including spending programmes) and innovation, could be considered.

Countries in the SPECA sub-region would benefit from continuing to strive for improvements in their adoption and implementation of RIA-related good practices, both for existing laws and regulations, as well as for newly proposed legislation. The World Bank data cited above, while somewhat outdated now, nevertheless illustrate the potential that could be realized by making improvements in adherence. The box below provides tailored recommendations for Uzbekistan in this regard, based on the dedicated World Bank study. These recommendations are of relevance to several countries in the SPECA sub-region and are applicable by extension.

### Promoting innovation through regulatory sandboxes\(^6\)

The increasing pace of technological change and the emergence of new business models (platform economy, Fintech, etc.) requires new tools that strengthen policymakers’ ability to anticipate change (e.g. foresight studies and horizon scanning) that enable innovators to propose changes to legislation and explore alternative

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Box 2.3 Fostering innovation in financial services through effective regulation

The financial services sector is a compelling example of a vitally important part of every economy that benefits greatly from bespoke regulations. It is an industry with great potential for innovation (with fintech companies upending established business models in both high-income and emerging markets alike). At the same time, financial sector activities are typically subject to an extensive and demanding regulatory and supervisory framework, reflecting wider policy objectives around financial stability, consumer protection and compliance with international guidelines and rules.

Worldwide, there is increasing recognition that the existing regulatory and supervisory framework for financial activities does not fit certain emerging business models. Crowdfunding platforms, for example, differ fundamentally from banks (among other things, the former do not engage in a transformation of maturities and risks, nor in the creation of money) (Havrylchyk, 2018). Therefore, it makes sense for these platforms to be subject to a different regulatory approach than the one that is in place for banks. As a concrete illustration, such platforms could potentially operate without the need to acquire a banking licence as they do not threaten financial sector stability if they fail. This may be the case, for example, when a crowdfunding platform only holds funds for a strictly limited time before forwarding them to a project developer or the funds raised remain below a certain de minimus limit as specified by the regulator. This may be an approach particularly well suited for crowdfunding efforts of certain microfinance development projects, for example.

Many jurisdictions have, therefore, adopted their regulatory frameworks to better accommodate fintech activities in recent years, or are in the process of doing so. Emerging markets are no exception.

In 2021, the majority of surveyed regulators in the Asia-Pacific (APAC) region had a framework in place to regulate peer-to-peer lending and equity crowdfunding (72 per cent and 78 per cent respectively). In the MENA region, the respective figures were 58 per cent and 77 per cent, with a lower level of adoption in Sub-Saharan Africa (35 per cent and 34 per cent respectively) (Cambridge Centre for Alternative Finance, 2021).

Source: UNECE, based on (Cambridge Centre for Alternative Finance, 2021) and (Havrylchyk, 2018).
modes of compliance. This also allows the development of experimental approaches to regulation to test new solutions and alternative business models before admitting them to the market (Simonelli & Renda, 2019).

Governments across the UNECE region have increasingly taken steps to create environments in which innovators can not only test the market viability of new products and services but also test the regulatory innovation required to introduce such innovation. Regulatory sandboxes have been prominently used in the Fintech field (banking, insurance, securities) but also in other areas such as healthcare, mobility and energy.

Countries such as Singapore have experimented with regulatory sandboxes in the healthcare field for early entrants into the telemedicine and mobile medicine space while Portugal has established ‘Technological Free Zones’ to foster cross-sector innovation. The Russian Federation adopted a federal law in early 2021 “On Experimental Legal Regimes in the Sphere of Digital Innovations in the Russian Federation,” introducing a sandbox for the digital economy (Mamina & Kobzeva, 2021). Similar approaches could be adopted (more widely) by regulatory authorities across the SPECA sub-region, potentially at a small scale at first and limited to selected sectors of the economy that would particularly benefit from a safe environment to experiment and innovate.
An innovation-friendly and pro-growth tax system

A key element of the business environment is an innovation-friendly and pro-growth tax system. Two issues are especially relevant in this respect for fostering IHGEs:

- Firstly, as potential IHGEs normally undertake more R&D and innovation than other SMEs and are developing products and services using disruptive technologies or processes, many will be young (start-up) firms for which targeted tax-incentive schemes may be relevant.
- The tax system may be geared to encourage investment by stimulating business angels, venture capitalists and other equity investors to invest in potential IHGEs. Combined with other measures, should develop an appropriate investment ecosystem. However, such incentives need to be carefully designed to avoid adverse effects on the market, for example displacing private activities or providing funding towards unviable businesses.

Most countries providing R&D tax incentives focus the incentives on reducing the cost of R&D and encouraging increased expenditures on it. This approach can take various forms, such as credits applied against income, reduced payroll taxes for wages or a tax relief for capital investments for R&D. Other commonly seen incentives are accelerated asset depreciation, allowing the recovery of initial investments faster than would be the case using the prevailing depreciation regime for long-lived assets and enhanced depreciation where taxpayers can recover more than 100 per cent of the cost of the R&D expenditures.

As the below table indicates, all SPECA countries have tax incentives for innovative companies in place, but these are often limited to firms located in special economic zones or science and technology parks, meaning many otherwise qualified businesses are excluded. It is common in many countries around the globe to have R&D tax schemes in place that are open to all companies with R&D expenditures. In some instances, tax incentives are geared towards certain segments of an enterprise population, for example, enterprises of a certain age, size or that meet ‘innovativeness criteria’, while in other cases, such firms operate under the normal tax regime but may have larger claims for permissible deductions (Mitchell, Testa, Sanchez Martinez, Cunningham, & Szkuta, 2019). Box 2.5 provides some brief details regarding the tax incentives employed by the Belgian Government for young and innovative companies, an example which could serve as a model for SPECA countries to reduce their reliance on place-specific incentives.

Moreover, when putting these incentives in place, robust monitoring and evaluation should be done. This is needed as the absence of such scrutiny results in a pronounced risk that large companies benefit more than smaller ones from these incentives and that the ultimate impact on innovation activities may be small (OECD, 2020).

As the above table illustrates, tech parks and similar institutions are present throughout the SPECA sub-region. In Azerbaijan, for example, this approach was largely based on applying Western law to companies registered in the park and is linked to exempting them from all corporate taxes, including VAT and profit tax as well as customs duties. However, such schemes should be considered as transitory measures that help to foster a conducive ecosystem for IHGEs pending an alignment of the overall business environment, not as a permanent feature of the support landscape creating an uneven playing field between firms inside these parks and those outside.
Supporting Innovative High-Growth Enterprises in the SPECA Sub-Region

A UNECE Policy Handbook

Tax incentives for venture capital (VC) and business angels can play a role in fostering investment in (potential) IHGEs and are widely used across the OECD countries and beyond. However, to be effective, they should use qualifying criteria (to limit the risk of tax avoidance), promote investment quality via performance-related tax relief and combine features that promote uptake (PwC, 2017). The great advantage of tax relief on future returns on investment is that it means a greater focus on success by investors in the country and hence, further attraction of investment.

Such incentives are especially useful to kickstart a domestic investor ecosystem. This seems especially relevant for countries in the SPECA sub-region due to their combination of underdeveloped equity finance markets and the relative scarcity of support for equity instruments. One example of such a tax scheme not limited to firms in technological parks and similar structures can be drawn from within the SPECA sub-region. Uzbekistan introduced a waiver for all taxes and mandatory payments and established the unified social payment for VC investors of existing venture funds that co-finance high-tech entrepreneurial startup projects (among other potential beneficiaries) (Kurbanbaeva, 2020). While this is a positive development, this would ideally be complemented by further efforts to ensure the right legislative and regulatory frameworks are in place to encourage VC activities. Another example that could serve as a template for all SPECA countries is presented in Box 2.6 below, which provides insight into the policy experience of Turkey in its efforts to foster business angel activities through fiscal incentives.

Demand-side policies - Government as a driver of innovation

The role of government in stimulating demand for innovative products and services is increasingly recognized as an important policy lever. Demand-side innovation policies help stimulate innovation in areas where societal needs are pressing and where

**Box 2.5 Tax incentives for young, innovative companies in Belgium**

The federal government of Belgium has taken several initiatives to support innovative businesses, especially so-called ‘young innovative companies’ which carry out research projects and have expenditures on R&D that amount to at least 15 per cent of their total operating costs, among other criteria.

Since 2006, ‘young innovative companies’ have benefited from a partial salary withholding tax exemption for their scientific personnel thereby lowering their wage costs. This system was extended over time and the deduction rate increased from 50 per cent to 75 per cent and later to 80 per cent. Unlike corporate tax exemptions which generally do not apply when the firm makes losses, this incentive allows young firms and start-ups to benefit immediately from government support rather than wait until they trade profitably. Currently, the scheme supports more than 400 beneficiaries with proven positive impacts on R&D expenditure.

Other initiatives in the area of innovation and R&D-incentivizing taxation include an exemption based on the educational degree of R&D employees, a scheme for companies involved in research cooperation with an HEI or similar organization and a reduction in the tax rate for revenue generated by patents. In addition, Belgian companies can choose between a tax credit and a tax deduction for their investments into R&D.

Source: UNECE, based on Dumont, 2019.
government action can complement market mechanisms, ideally with minimal financial outlays. There is a range of policy instruments available in this regard, including setting standards that encourage innovation and providing various incentives that go beyond tax regimes for the uptake of innovative technologies. Furthermore, given the importance of the public budget in many countries, public procurement of innovative products and services is increasingly recognized as a key component in stimulating demand, especially initial demand.

### Table 2.5 Existing relevant tax incentives for IHGEs in the SPECA sub-region

<table>
<thead>
<tr>
<th>Country</th>
<th>Tax incentives/deductions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>Businesses operating in industrial and technology parks are eligible for certain privileges and exemptions for 10 years starting from the first reporting year in which residents are registered in the industrial and technology park.</td>
</tr>
</tbody>
</table>
| Kazakhstan    | Astana Hub - Technopark specializes in IT start-ups and provides several tax benefits for its residents, including 0 per cent income and corporate tax, 0 per cent VAT and 0 per cent social tax for non-residents employed by the start-ups.  

Astana International Financial Centre (AIFC) was established in 2018 and provides a special tax regime based on the principles of English law. AIFC participants benefit from income tax exemptions until 2066, no VAT on turnover/income from the provision of financial services and pay no property or land tax. The AIFC also provides additional incentives with no currency restrictions and no work permit requirements for foreign nationals employed by participants.  

<table>
<thead>
<tr>
<th>Kyrgyzstan</th>
<th>The Law on High Technology Park provides residents of the park with exemptions from corporate income tax, sales tax and VAT, as well as a 5 per cent income tax rate for employees. From 1 January 2019 to 1 January 2022, a temporary ban (moratorium) was imposed on inspections of business entities.</th>
</tr>
</thead>
</table>
| Tajikistan    | Tajikistan established five separate Free Economic Zones (FEZs) in economically active regions of the country to attract foreign investment and support the private sector. While they are not ICT/innovation-focused, operating companies are exempt from most taxes, including customs and import duties as well as construction-related taxes. They also provide preferential rental rates equating to US$ 1/m².  

A new draft of the Law On Technology Parks was developed at the end of 2021 with participation by international stakeholders (UNDP, IFC and OSCE) but has not yet been adopted. There is an existing Law of the Republic of Tajikistan on Technology Parks that has been in place since 2010, however, it does not specify any tax incentives and deductions for residents.  

<table>
<thead>
<tr>
<th>Turkmenistan</th>
<th>According to the Law on Innovation Activity, which came into force in 2014, there are financial benefits for residents of science and technology parks in terms of rent and their use of services. However, tax incentives for innovation have not yet been implemented (Aronskyi, 2020).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uzbekistan</td>
<td>The residents of the IT park in Uzbekistan operate under a special tax regime established by a presidential decree passed in 2017. According to this decree, residents are exempt from social, VAT and land taxes as well as customs duties for importing goods for company uses. The park residents also have a reduced income tax rate of 7.5 per cent.</td>
</tr>
</tbody>
</table>

Source: UNECE, based on (PWc, 2017) and feedback on the handbook provided by EESC stakeholders.

2. [https://aifc.kz/tag/IAS](https://aifc.kz/tag/IAS)
5. [ЗАКОН РЕСПУБЛИКИ ТАДЖИКИСТАН О ТЕХНОЛОГИЧЕСКОМ ПАРКЕ | Национальный центр законодательства при Президенте Республики Таджикистан (ncz.tj)](https://ncz.tj/)
6. [2014-08-16 106-V zakon_ru.pdf](https://science.gov.tm/)
7. [ITPARK - Residents (it-park.uz)](https://it-park.uz)
Innovation-enhancing public procurement can be used to drive demand for innovation, providing opportunities to experiment in addressing social and economic challenges, as has been demonstrated in the case of UNECE’s work in Georgia\(^{10}\) and showcased at the UNECE Teams of Specialists on Innovation and Competitiveness Policies\(^{11}\). It can also help foster potential IHGEs by creating demand for innovative products or services, supporting high-growth enterprises obtain funding, bridging the pre-commercialization gap and assisting innovative firms to scale up their activities, thereby reaching critical mass and becoming more competitive.

Public procurement of innovative solutions (PPI) is procurement where contracting authorities act as a launch customer for innovative goods or services which are not yet available on a large-scale commercial basis and may require conformance testing. It is particularly useful in certain areas (e.g. mobility, health, construction, e-government, waste management, recycling) where the public sector accounts for a large part of the demand and can use its procurements to address key societal challenges such as sustainable transport, resource-efficiency and improved health and aged care (European Commission, 2014). More recently, pre-commercial procurement (PCP) and PPI mechanisms have been used to support the public-sector response to COVID-19 (European Commission, 2020). While it has become a common practice among high-income countries to integrate innovation policies and considerations in public procurement, the practice appears uncommon at best in the SPECA sub-region.

While there is untapped potential to follow the lead of high-income countries and use public procurement as a strategic tool to stimulate innovation activities in the sub-region, SPECA policymakers should first take steps to improve their public procurement system more generally, which would benefit young and small firms disproportionately, thereby indirectly boosting the activities of IHGEs.

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**Box 2.6 Supporting equity investments through tax incentives: an example from Turkey**

In 2015, Turkey adapted its tax regulations to make equity investments more attractive for businesses. More precisely, the new regime allows businesses to deduct cash capital increases from the companies’ paid or issued capital amounts, or from the cash amount of the paid capital of newly established capital companies. Moreover, licenced business angel investors can deduct 75 per cent of the capital they invest in innovative and high-growth SMEs whose shares are not traded on the stock market from their annual income tax base. The deduction increases to 100 per cent for those investors investing in SMEs whose projects were supported by the Ministry of Science, Industry and Technology, the Scientific and Technological Research Council of Turkey (TÜBİTAK) and the Small and Medium Enterprises Development Organization (KOSGEB) in the last five years. The licencing process for angel investors, introduced in 2012, has also been instrumental in shaping the VC industry, including its professionalization. It is worth noting that the above incentive scheme is complemented by other relevant tax incentives, including an incremental tax allowance of 50 per cent of R&D expenses (extended to the 2023-2027 period in 2021) that can be carried forward indefinitely. Furthermore, the scheme offers an accelerated depreciation rate for machinery and equipment used in the process of R&D coupled with a partial exemption for employers from social security contributions.

Source: UNECE, based on (Boschmans & Pissareva, 2018) and (OECD, 2021).
In this regard, a recent forum funded and organized by USAID brought experts and practitioners from the SPECA sub-region together to discuss avenues to make public procurement more transparent, accountable and effective. Its recommendations include:

- Make all parts of the procurement cycle from planning to execution, publicly available;
- Apply relevant procedures and legislation equally to all tendering agencies, including at the subnational level in the context of many tendering bodies operating outside the public procurement laws and existing exceptions to normal procedures;
- Strengthen the oversight of and liability for schemes and agencies that avoid laws and protocols deliberately to avoid competition;
- Improve the skills and competencies of public procurement officers, especially at the subnational level;
- Simplify and standardize relevant procedures, for example, by providing officers with standard templates of technical procedures coupled with the development of national standards (Orazymbet, Nurgaliiev, Ahkmetova, & Nestulia, 2021).

2.2.2 Business development services for IHGEs

Standard business support and advisory services should be adapted to the unique needs of IHGEs. Doing so requires a tailored package of support that can enable them to rapidly develop and deploy their innovative products and services. This section distinguishes between three broad types of advisory services:

- Advisory and mentoring services tailored to the growth stage needs of IHGEs;
- Developing ‘scale-up ecosystems’ and peer-to-peer networks;
- Innovation support services (e.g. product development and testing, intellectual property rights protection).

Ideally, Governments should complement the provision of BDSs to SMEs and entrepreneurs with tailored services offered to IHGEs and businesses with the potential to become IHGEs in a two-pronged approach managed within a coordinated framework. This applies to business growth (scale-up) advisory services and dedicated programmes that are focused on growth and scaling (with a strong focus on international expansion) of a cohort of companies as well as efforts to develop entrepreneurial ecosystems in which growth ambitions can be realized.

A scale-up system should ideally include financial and investment players (see the next section) but also advisory services, facilitating access to and use of innovation infrastructure (testbeds, pilot plants, living labs, etc.) that enable IHGEs to develop and test their products and services, often through a user-driven or open-innovation process.

Policy interventions such as business incubation and acceleration programmes that target innovative firms, including those with high growth potential, are relatively novel in the SPECA sub-region. During interviews with key stakeholders, there were several references to a weak start-up and IT culture, both in terms of the underdeveloped startup ecosystem and the lack of an entrepreneurship culture among the population. On a positive note, the general impression from stakeholders is that policy action to
support the scaling up of innovative firms has moved up the policy agenda in several countries, including Kazakhstan, Kyrgyzstan and Uzbekistan where support mechanisms have proliferated in recent years as a consequence.

However, the implementation of these support mechanisms could be improved. A recurring barrier to the success of such policies is the lack of awareness among potential beneficiaries, namely the start-ups and innovative companies these mechanisms target, which is also linked to the lack of regular, transparent and substantial consultations with the private sector by those government agencies providing this support. The lack of dialogue is one of the reasons for public-sector entities misunderstanding private-sector needs and the former’s failure to meet them effectively. Thus, for example, institutions providing BDSs should ideally involve qualified professionals with business experience (possibly from abroad) rather than simply filling these positions with available public sector staff, with the latter being a practice that persists in SPECA countries. There was a sentiment throughout the sub-region that the wheels of the bureaucracy (especially in terms of the timeliness of support reaching its beneficiaries) often turn too slow for the fast-moving environment of IHGEs and especially start-ups.

In addition, the management of accelerators, incubators, technology parks, innovation agencies and similar organizations often lack the necessary experience and would benefit from additional training and practical knowledge of good international practices in supporting the growth of innovative firms. Building the internal capabilities of staff of innovation support infrastructure institutions is thus of high importance in the SPECA sub-region.

Finally, as the table below illustrates, most countries in the sub-region have a dedicated agency or department in the relevant ministry providing support for SMEs and entrepreneurship, however, these need to evolve further. While these initiatives are of relevance for potential IHGEs and provide space for putting special emphasis on IHGEs,

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**Figure 2.9 • Business development services for IHGEs**

<table>
<thead>
<tr>
<th>Targeted advisory services</th>
<th>Developing ecosystems and peer-to-peer networks.</th>
<th>Access to innovation services and infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated growth/scale-up programmes</td>
<td>Networking ecosystem actors - coordination function</td>
<td>Innovation infrastructure: fab labs, living labs, testbeds, etc.</td>
</tr>
<tr>
<td>Advice for funding applications (e.g. R&amp;D grants, etc.) and investment sources</td>
<td>Scale-up networks, exemplars and role models</td>
<td>Support services for innovation</td>
</tr>
<tr>
<td>Supply/value chain and (international) market access advice</td>
<td></td>
<td>IP rights advice</td>
</tr>
<tr>
<td>Support marketing, digitalization and so forth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UNECE
they typically lack a coordinated and strategic approach. This in turn has negative implications for their effectiveness in promoting SMEs more generally, including IHGEs.

Going forward with a view to effectively supporting IHGEs, the sub-region’s governments could embed IHGE support into existing policy coordination mechanisms on entrepreneurship, making sure relevant ministries and public bodies are involved with private-sector engagement. Canada provides an example of how IHGE policy could be embedded in a broader SME or innovation strategy with subsequent coordination taking place upon implementation. The Canadian Government introduced the Innovation and Skills Plan in 2017 that guides policy efforts over the 2017-2025 period in the areas of innovation, science and economic development. One of the ambitions of this plan is to double the number of high-growth enterprises during this period through a coordinated approach involving several key actors, including regional development agencies, accelerators, incubators, cluster organizations, the intellectual property agency.

**Table 2.6 Enterprise support framework in the SPECA sub-region**

<table>
<thead>
<tr>
<th>Country</th>
<th>Enterprise support agencies</th>
<th>Current policy framework</th>
<th>Policy framework oriented towards IHGEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>Entrepreneurship Development Fund ‘Damu’</td>
<td>State Programme for Support of Entrepreneurship ‘Business Roadmap 2025’)¹¹ A draft concept, entitled the Development of Small and Medium Business in the Republic of Kazakhstan until 2030, is currently under review².</td>
<td>No specific strategy to support IHGEs. Business Roadmap 2025 provides financial support mechanisms for entrepreneurs as well as “subjects of industrial and innovative activity”, primarily by subsidizing interest rates on loans. Policy support for competitive SMEs is planned under the roadmap draft concept. According to the document, high-growth enterprises should receive priority in investments from the Government. It also mentions that a separate policy document with a specific focus on high-growth enterprises will be developed.</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>Intellectual Property and Innovation (Kyrgyzpatent)</td>
<td>Government Programme for the Development and Support of Small and Medium Businesses in the Kyrgyz Republic for 2019-2023</td>
<td>No specific strategy to support IHGEs. The programme mentions supporting the export potential of SMEs as one of its goals. This will be achieved partly through the creation of a national e-commerce platform.</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Entrepreneurship Support Department at the State Committee on Investment and State Property Management</td>
<td>Programme of State support of entrepreneurship in the Republic of Tajikistan for 2012-2020. This programme was adopted in 2012 but no new programme for SME development has been announced.</td>
<td>No specific strategy to support IHGEs. In early 2022, the president announced that the period between 2022-2026 are “years of industrial development”, possibly marking a shift in policy-support focus⁵. Currently, the Government is focusing on the social aspects of entrepreneurship, launching a grant support scheme for 2021-2025 to improve gender parity.</td>
</tr>
</tbody>
</table>
The first step towards enhancing support for IHGEs through BDSs should be to draw up a focused strategy that distinguishes between standard BDSs open to all SMEs and those that are customized and targeted at potential IHGEs, provided via a client-management or portfolio-type approach (see Table 2.7, Key building blocks of a portfolio/client management system for IHGEs). As ambitious firms target geographically broader markets and as export-oriented entrepreneurs tend to have greater growth ambitions, the services provided should include support for market access (see section 2.2.5 Going global: networking and scaling in international markets).

The account management system, which allows for a more personalized approach to fostering company growth, is the preferred option of enterprise-support agencies in advanced economies. According to this approach, companies are of differing sizes and at developmental stages but each is selected based on its growth potential.

The support offered is adjusted to the identified needs or challenges the given company faces and the AM’s role is to ensure the easy and timely mobilization of support from all relevant public and private organizations in the business ecosystem to foster growth. Hence, an AM should be able to draw from a portfolio of flexible support mechanisms, including existing ones that may be useful as part of an overall support package tailored to an individual IHGE.

The success of the account management approach thus depends on the professionalism of the AM and the level of development of the innovation support ecosystem, i.e., existing solutions and policy mechanisms facilitating the growth
of a company. When implemented in this manner, many aspects of this approach would significantly improve how such services are currently delivered in the SPECA sub-region and, as such, is worth considering by SPECA policymakers.

An example of a scale-up programme based on working with a cohort of potential IHGEs is the Enterprise Singapore Scale-up SG Initiative (Figure 2.10 Singapore Scale-up SG program method). Participating companies go through the programme in cohorts aimed at facilitating peer networks, collaboration and learning. Each cohort comprises 10 to 15 companies with similar growth profiles and priorities with each cycle lasting 2.5 years and comprised of four key phases. A co-funding principle applies to ensure commitment from companies participating in the programme whereby up to 70 per cent of the programme’s participation costs are paid by Enterprise Singapore.

<table>
<thead>
<tr>
<th>Building block</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Dedicated high-growth units or teams</td>
<td>Depending on the baseline situation in each country, the support unit (high-growth team) can be based in an existing SME agency or within a dedicated stand-alone organization. The people acting as account managers (AMs) should ideally have prior business experience (e.g. as an SME manager or start-up founder) to ensure their credibility and ability to provide added value.</td>
</tr>
<tr>
<td>Selection/segmentation criteria</td>
<td>Based on a mix of objective criteria, trigger points (e.g. management change, product/service offering) and outreach to determine the level of growth ambition of companies. Typically, this will not be based on the sectoral or technological fields in which companies operate but the companies will usually be selected based on an introductory diagnostic step (that will include collecting data on companies’ performances, analysing business strategies, product portfolios, etc.) which can be conducted either by qualified agency staff or experienced business consultants accredited by the agency to carry out such work.</td>
</tr>
<tr>
<td>Support adjusted to each stage of growth and the type of company</td>
<td>The type of advice and support required by a manufacturing firm growing after a change of management or new product development will be different from that of a technology start-up that needs to secure investment and scale rapidly on international markets. A support programme where potential IHGEs work together, accompanied (mentored) by a cohort of their peers and guided by highly experienced entrepreneurs, can help foster network-based forms of support and experiential learning (see the Singaporean case cited below).</td>
</tr>
<tr>
<td>Inter-agency co-operation and partnership with private sector expertise</td>
<td>The delivery of advice and services to potential high-growth firms is best done via a network of accredited specialized experts (in finance, management, etc.) rather than a single agency or organization. Business owners will often place more faith in advice from mentors who are successful entrepreneurs, investors or specialists (legal, intellectual property, branding, etc.) in the field they are providing advice about. An AM’s role is to help steer the growth process and make sure that the right advice is proffered at the right time from the right source.</td>
</tr>
</tbody>
</table>

Source: UNECE
Scottish Enterprise is Scotland’s national economic development agency. Since the early 2000s, the agency has adopted a bespoke account management approach for its dealings with IHGEs. The main aim of this approach is to provide support that is tailored specifically to the needs of these companies, recognising that a one size fits all approach is unsuited to IHGEs. The account management process is facilitated by an account manager (AM) – a single point of contact who coordinates one-to-one support, advice and guidance to a strategic contact (or contacts) within the supported company.

For Scottish Enterprise (SE), the AM has access to a team of specialists within the agency and through external consultants who provide intensive input across key areas regarding business growth, including how to gain access to finance and investment, innovation, market development, business improvement as well as organizational and strategy development.

The delivery process follows four steps. First, the terms of engagement are stipulated detailing the purpose and nature of support, after iterative communication with the client. Second, the account manager conducts a review to fully understand the company, its strategy and growth plans. The Company Review Workbook (CRW) is an essential tool in this regard. The CRW contains a company profile, key performance metrics, forecasts and growth ambitions as well as outlining the specific development projects that the company will undertake to realize its growth ambitions. It allows the AM to gather intelligence in a standardised manner, and should form the basis of how SE support is shaped and delivered.

The third phase is the delivery of support, articulating the strategic direction of support measures. These support measures can take many forms, varying, for instance, from a single, specific intervention, to multiple and long-lasting activities across different business domains. It can also comprise different elements, including various financial support measures, input from specialists, advice, mentoring and networking activities and so on. As a fourth and final step, the support delivery is made concrete through the so-called Intervention Framework. SE has 59 different products in its support portfolio and the Intervention Framework puts forward a detailed breakdown of product support offered to the client.

Source: UNECE, based on (Upperquartile, 2013).
An ecosystem conducive to high-growth entrepreneurial activity

Since the mid-2010s, increasing attention in advanced economies has been paid to the need to extend the efforts of developing start-up ecosystems to developing entrepreneurial ecosystems that foster scale-ups via coordinated efforts for sustained growth of both start-ups and existing SMEs.

A scale-up ecosystem needs to include the right mix of elements to support value creation and growth over time while working for all types of firms (Figure 2.11). Many of these elements already exist in the SPECA sub-region so the issue that needs greater priority here is to incentivize and mobilize them to focus on the growth potential of innovative firms.

Fostering a high-growth or scale-up ecosystem does not necessarily require large public investments. It means putting in place a team or partnership that coordinates the efforts of existing ecosystem players and communicates clearly the needs and challenges of IHGEs while helping to channel support to fulfil these enterprises’ growth potential. What is important in this undertaking is to ensure that more and more companies are dynamically scaling up.

Examples of public-private partnerships working to develop scale-up ecosystems can serve as pointers for reinforcing the support to IHGEs in the SPECA sub-region.

Figure 2.11 · Components of a scale-up ecosystem

Source: UNECE, adapted from https://www.businesswest.co.uk.
Four main steps should be followed to refocus and strengthen the start-up ecosystems throughout the sub-region to provide more targeted support to IHGEs:

1. **Identify enterprises with potential for growth** (e.g., using data relevant for trigger points, such as recent investments or changes of ownership) as well as mapping existing high-growth firms and scale-ups that serve as role models of successful growth strategies in diverse types of companies and sectors.

2. **Map the existing support** that is available to potential IHGEs and identify gaps in the ecosystem in terms of the main challenges faced by such firms (e.g., through business surveys, information collected in cooperation with chambers of commerce, clusters associations and accelerators).

3. **Internationally promote and network the group of potential IHGEs** through public-private partnerships (e.g., using a task force established for this task) between government agencies (e.g., inward investment and export services) and high-growth business support organizations and investors.

4. **Monitor and evaluate the performance of enterprises that have been supported** (e.g., compared to the performance of a control group to measure additionality) and assess how to improve performance and fill gaps in the ecosystem over time.

### Access to innovation services and infrastructure for IHGEs

A key driver of a high-growth ecosystem is the availability of quality research and innovation (R&I) infrastructure and specialized engineering, technology and testing services to support the design and development of innovative products and services provided by IHGEs.

**There are several notable areas of the SPECA sub-region’s innovation infrastructure that need overall improvement.** First, key actors and programmes tend to operate in relative isolation as they are disconnected from one another, an issue partly driven by the fragmentation of innovation governance systems and coordination failures. A more strategic approach to policymaking in this area, ideally with one institution acting in a coordinating role, may foster linkages and closer interactions. Second, there is a need to strengthen innovation intermediaries and support institutions, facilitating the dissemination of innovative practices and knowledge (Dobrinsky, 2021). Third, while there is an ever-increasing focus from policymakers and various other public-sector actors not directly involved in policymaking on innovation, there is often insufficient focus on bringing these innovations to the market (Dobrinsky, 2021). In the context of commercializing R&D results, a well-functioning and balanced IP rights system is a sound means of encouraging R&D and innovation activities by potential IHGEs. This would increase the likelihood of international investors licensing technology to companies in the sub-region (e.g., easily imitable technologies such as software) and can thus improve the chances of attracting equity investment. In addition, raising the awareness of and developing the needed skills in potential entrepreneurs on IP rights would further facilitate the commercialization of innovative ideas and their further growth, which not only contributes to a thriving business population overall but is crucial for the development of IHGEs.
In short, due to the relatively weak R&D systems and insufficiently developed research commercialization and technology licensing frameworks, SPECA countries should balance investment in innovation infrastructure (prototyping facilities, industrial R&D labs, pilot plants, etc.) with funding for value-added services (including ideation, proof of concept, testing and piloting, living labs, etc.) that provide support to IHGEs to engage in the development of market-ready products and services.

### 2.2.3. Finance and investment services adapted to growth stages

The type, number of rounds and scale of investment required by IHGEs differs markedly from the financing required by other firms. The different growth phases (Figure 2.12 Finance stages for high-growth firms) of an IHGE typically involve the use of financial instruments ranging from family and friends, crowdfunding and business angels through to government subsidies (grants, loans as well as tax incentives) and equity investments. More established firms with growth ambitions that desire, for example, to expand to foreign markets or to digitalize, will use a different mix of financing sources and instruments than a locally-focused high-tech startup. Beyond interventions to tackle
market and system failures that restrict access to finance, a key role for public policy in this respect is to foster the development of an investor ecosystem that ensures potential IHGEs have access to the finance they require when they require it. This can include co-investing, supporting financial education and public-private partnerships in the finance field, etc.

Interviews with stakeholders across the SPECA sub-region indicate a lack of funding in the private market that is available to start-ups and scale-ups, especially of the equity type. Bank credit is relatively expensive throughout the sub-region and, in any case, not very well-suited to the needs and characteristics of high-growth firms, especially those with innovative or transformational business models that result in an elevated risk profile.

Debt financing

While commercial bank lending is not ideally suited to the needs of IHGEs, its availability does provide an indication of the overall sophistication of the financial system and the likelihood of IHGEs securing at least part of their needed funding from domestic sources, especially in their expansion phase (e.g. bank loans with or without public-sector credit guarantees that can be used during the expansion phase).

The banking sector in the SPECA sub-region has a lot of room for improvement when compared to banking sectors in other emerging economies and high-income countries. Domestic credit provided to the private sector by banks, which is a common proxy used to assess the overall development of a given banking sector, ranged from 2 per cent in Afghanistan to 36 per cent in Uzbekistan. This is markedly lower than the world average of 99 per cent. SPECA countries also score low on the percentage of adults who added to their savings at a financial institution in the past year, which is an indicator of a banking sector’s development and its potential to channel private savings into commercial loans.

Figure 2.13 · The banking sector development in SPECA countries

Source: UNECE, based on (World Bank, 2022) and (World Bank, 2022).
Note: Data on domestic credit to the private sector by banks as a percentage of GDP was not available for Turkmenistan.
A similar picture emerges when looking at other data, such as the percentage of firms having a bank account, the collateralization requirements and rejection rates for enterprises applying for financing. While there are some exceptions, SPECA countries again generally perform below the world average on these indicators (see Table 2.8).

**Public initiatives to increase access to credit finance for enterprises are relatively common throughout the sub-region.** As an example, the government of Kazakhstan provides various forms of support to firms in need of credit finance (including credit guarantees, loan subsidies and a soft lending scheme) through DAMU, its entrepreneurship development fund. Micro-credit institutions are also relatively active in the sub-region with, for example, 32 institutions active in Azerbaijan and members of a sectoral “umbrella” organization representing microfinance institutions in the country.

In addition, an increasing number of countries around the globe started targeting their debt support programmes towards innovative companies or start-ups, in recognition that these segments of the enterprise population are not well served by the private sector in the absence of public interventions. For example, the government of South Korea has designed specific guarantee products for innovative firms and various initiatives to encourage the collateralization of intangible assets (OECD, 2020). Similar efforts to tailor policy interventions in debt markets towards potential IHGEs should be also encouraged in the SPECA sub-region.

**Direct financial support**

Governments can also target IHGEs via direct financial support, such as vouchers, grants and reimbursable loans (often concessional in nature) to support investment in R&D and innovation activities in developing proof of concepts, prototypes and testing. In this regard, it is important to ensure that direct financing measures adhere to the principle of additionality and that policies do not crowd out private investors or entrepreneurs while simultaneously targeting clear market failures.

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**Table 2.8 Bank financing indicators for enterprises in the SPECA countries, 2019**

<table>
<thead>
<tr>
<th>All Countries</th>
<th>Per cent of firms with a cheque or savings account</th>
<th>Per cent of firms with a bank loan/line of credit</th>
<th>Proportion of loans requiring collateral (%)</th>
<th>Value of collateral needed for a loan (% of the loan amount)</th>
<th>Per cent of firms not needing a loan</th>
<th>Per cent of firms whose recent loan application was rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan*</td>
<td>43.7</td>
<td>5.1</td>
<td>70.7</td>
<td>..</td>
<td>45.0</td>
<td>35.3</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>94.5</td>
<td>16.8</td>
<td>77.8</td>
<td>198.6</td>
<td>64.5</td>
<td>10.2</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>97.3</td>
<td>17.2</td>
<td>79.3</td>
<td>158.3</td>
<td>63.7</td>
<td>22.5</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>97.0</td>
<td>25.8</td>
<td>93.6</td>
<td>244.3</td>
<td>69.1</td>
<td>7.0</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>89.2</td>
<td>18.0</td>
<td>64.2</td>
<td>125.5</td>
<td>68.1</td>
<td>9.5</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>83.8</td>
<td>22.2</td>
<td>96.4</td>
<td>166.1</td>
<td>58.5</td>
<td>15.1</td>
</tr>
</tbody>
</table>


Note: Turkmenistan was not covered in the database, * data for Afghanistan are from 2014
Direct financial support instruments appear not to be widely used across SPECA countries. Vouchers to high-growth and innovative enterprises, while common in high-income countries, are not in use in the sub-region, while grants and concessional loans to innovative enterprises are uncommon and, even when they are available, they often operate on a small scale. In Azerbaijan, for example, the National Innovation Agency was established in 2019 and has since disbursed concessional loans and grants to innovative companies (replacing a previous scheme targeting the ICT sector only); however, its overall budget is small and limits it to providing only small scale support measures. When it comes to the use of such instruments in transition economies, Georgia has achieved significant success and represents a noteworthy policy example of how to implement direct financial support measures (see Box 2.11).

**Equity financing**

While direct financial support can be critical for the design and development of innovative products and services, **IHGEs generally require access to external equity capital to support their product development, operations and expansion phases into international markets.** Hence, the regulatory environment for investors (crowdfunding, angel investors, private equity funds) to be able to invest and exit in confidence is of critical importance.

### Box 2.11 Direct financial support to IHGEs: the experience from Georgia

The Georgian Innovation and Technology Agency (GITA) was established in 2014 under the auspices of the Ministry of Economy and Sustainable Development. It offers a wide range of products and services to innovative enterprises active in the country, as well as a focus on providing STI infrastructure, such as technology transfer offices, technology parks, innovation centres and so forth. The agency provides a structured mix of matched advisory and financial support that aims to assist start-ups in each development stage, including the growth stage (OECD, 2020).

GITA awards Innovation Matching Grants with values ranging from €40,000 to €200,000 to develop products, processes and services (or innovative uses of existing ones) that are new, to at least the Georgian market, with preference given to projects that enable the provision of services to international markets. These tools have proven popular among target companies, as evidenced by the several hundred applications received by GITA each year. In 2021 there were twenty grant winners, each one selected by an investment committee consisting of international venture investors, which is GITAs normal format.

In 2019, GITA partnered with the Ivane Javakhishvili Tbilisi State University to disburse grants amounting to €1 million to assist in the commercialization of innovative science technologies. This project, while primarily aimed at universities and R&D institutions, will likely spur the creation of high-growth entrepreneurial activities through spin-offs and the transfer of technology to the private sector.

By way of a final note regarding GITA, it has the authority and resources to disburse grants to promising enterprises outside of the above schemes. As a case in point, Pulsar AI, a company that develops communication automation technology for automotive dealerships in the United States received a grant of close to €200,000 in 2021.

Source: UNECE, based on (OECD, 2020) and www.gita.gov.ge.
Equity financing is often well suited for IHGEs ventures and governments can play a catalysing role in equity market development in the SPECA sub-region.

For entrepreneurs with an innovative idea, pre-seed and seed funding can help test the concept (ideation, proof of concept, product design, etc.), while start-up or early-stage funding can be used to further develop a new company, including during the first phase of the commercialization of its products or services.

Based on interviews with key stakeholders in the SPECA sub-region, VC markets, business angels (or networks) and crowdfunding opportunities are reportedly in an early stage of development (if they exist at all), have low levels of activity and tend to rely heavily on public support. This leaves many high-growth ventures in a situation where they must rely on international funding organizations.

Reliable and comparable data on VC, business angel investments, crowdfunding and similar activities in SPECA countries are rarely available. As one potential source of data, KPMG issued a report on the private equity market in Kazakhstan, the largest economy in the sub-region by far, and hence the market with the greatest potential for a large deal and liquidity flows. Aside from noting a paucity of data in the country (and even more so in other SPECA countries), the report describes the equity market as in its infancy, confirming the anecdotal information from the interviews with stakeholders. It also highlights the importance of public and especially quasi-public institutions to the market. In particular, Kazyna Capital Management, a fund of funds, was highlighted as a key driver of activities (KPMG, 2019). As another country example, a 2020 report from the OECD categorizes the VC industry in Azerbaijan as nascent and largely limited to a handful of local funds providing seed capital on a limited scale (without providing estimates of VC or other equity activities) (OECD, 2020).

Policy has a key role to play in developing equity markets through a combination of demand-side, supply-side and structural measures (see Figure 2.18), which is especially true when markets are not well developed. As the table below illustrates, investors may be reluctant to invest in markets with little activity, liquidity and exit options (the so-called ‘thin markets issue’). At the same time, companies are unlikely to explore options to obtain external equity if there are few investors present which, in turn, further dampens the appetite of would-be investors. Government intervention may be useful to break out of this cycle and allow markets to reach sufficient scale and degree of maturity (after which the Government should reduce its involvement, leaving space for the private sector to step in).

While there are other equity instruments, this report focuses on three of particular relevance for IHGEs in the SPECA sub-region, namely, i) business angel investments, ii) equity crowdfunding and iii) VC investments. In addition to the various instruments cited above, financial support to IHGEs is often channelled through incubator and accelerator programmes which combine financial and non-financial support mechanisms.

i. **Business angel investments**

A business angel investment is normally a minority investment (usually 10-30 per cent) and is directed at the pre-seed, seed, early-stage or start-up phase. Moreover, business angels increasingly invest via syndicates (groups) of investors and alongside seed
An important aspect to keep in mind is that business angels are typically people with business and managerial experience who often invest in sectors they are familiar with. As a consequence, they can offer services beyond financing to the companies they invest in.

VC funds. In the EU, the average business angel investment is approximately €25,000 while the average investment total for an investor syndicate or group is approximately €180,000 per company. The individual angel investment and average total investment per company in the SPECA sub-region are likely to be lower but difficult to put an actual figure on given the scarce data in this regard and judging by the overall development of the investor ecosystem.
in, including access to their professional networks, mentoring, advisory services and so forth. For this reason, as well as for their tendency to invest in the early stages of a firm’s life cycle and to co-invest with others, business angels are considered key actors in the innovation ecosystem (OECD, 2016).

In the SPECA sub-region, there are several business angel networks, including one that operates at the sub-regional level, namely the Association of Business Angels in Central Asia. However, reliable information about business angel activities, such as the number of investments, the amounts invested and the number of angel networks that are members of an umbrella operation are difficult to find.

Policymakers have different levers at their disposal to encourage business angel activity in their respective countries. These levers range from but are not limited to, fiscal incentives and public-private co-investment schemes through to logistical and financial support for the creation and expansion of business angel networks (BANs), (OECD, 2016). Countries in the SPECA sub-region would be well-advised to explore the different policy options available and adapt and adopt good practices accordingly.

**Box 2.12 A spotlight on investor readiness programmes**

Most public interventions in an equity market focus on the supply side of the market by trying to expand the available resources that can be invested. However, there is increasing recognition that these measures should ideally be complemented by initiatives to raise the number of companies and projects that investors find attractive. In advanced economies, there is often a dearth of so-called ‘investment-ready’ firms and projects that could be defined as having the capacity to understand and meet the specific needs and expectations of investors.

Initiatives in this respect include investor readiness programmes, which target only a limited number of companies (which can be categorized as IHGEs or potential IHGEs) that have the ambition to attract outside equity investments. The programmes are typically intensive in nature, requiring individualized mentoring, training and coaching.

One example of the above approach is the Pioneers of the Balkans, an initiative launched by the World Bank, whereby 174 innovative SMEs active in the Western Balkans were offered an intensive two-month programme that included a structured online-business assessment, individualized mentoring (averaging 11 hours per firm), weekend masterclasses and pitch training. The average cost of participation was approximately US$ 4,000 per firm and covered by the beneficiary.

A similar programme, open to companies in Central and Eastern Europe is run by Impact Hub Vienna, an Austria-based innovation lab that works in partnership with the Austrian Development Agency and several consultancies. It offers four-month personalized training and support programmes for companies with business models that have been validated by the market and are scalable. The cost of participation in the programme is estimated at € 15,000 per participant. Critical to the success of this scheme is the involvement of some 25 mentors drawn from different countries and economic sectors who all have extensive business experience.

Countries in the SPECA sub-region could find inspiration from the above examples and set up similar schemes, possibly involving multiple countries as in the Pioneers of the Balkans scheme to ensure a critical mass of potential beneficiaries and mentors.

Source: UNECE, based on https://investment-ready.org/ and (World Bank, 2018)
ii. Equity crowdfunding

At the pre-seed, seed and start-up phases, equity crowdfunding can be used to attract a pool of small investors and is a form of financing that is gaining traction in many countries around the globe (OECD, 2020), including in the SPECA sub-region. As with other equity investments, investors receive a dividend from the investees’ profit and may benefit from selling the equity at a higher price.

Governments can foster crowdfunding markets by passing regulations specific to this form of investment and/or by allowing for sufficient flexibility and room for experimentation more generally (e.g., through sandboxes). As an example of the first approach, and a potential model for SPECA countries, Box 2.13 provides details on the regulatory framework for crowdfunding in Malaysia.

Another way to support the market is by raising awareness among potential investors, especially regarding firms with the right profile that require finance. Innovation, SME agencies and public banks can play an important role in this respect as seen, for example, in the operations of BPI France (the French public investment bank) that manages a portal for crowdfunding platforms in France and refers clients with the potential to issue equity through crowdfunding platforms to this portal. Another example can be found in the UK where, in 2016, the Government obliged big banks to refer firms whose credit applications they declined to a designated online finance platform.

iii. Venture capital firms

Venture capital refers to the provision of capital by an investor to start-ups and small companies with significant growth potential. Venture capital firms are usually structured as limited liability
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to promote IHGEs

partnerships in which different partners invest in the firm’s fund that is typically managed by a committee tasked with making investment decisions. The pooled capital from the fund’s contributing partners is then used to take sizeable stakes of equity in firms with high growth potential. Important to note here is that VC funds typically take part on the board of the investee firm or co-decide its strategic direction by other means. In other words, VC funds also inject business expertise alongside finance into an investee. Another consideration is that these funds invest in high-risk ventures with potentially significant upsides that the investors believe can be realized in a relatively short period, this is important as they typically want to exit their investment in a period of no more than about five years. This means that by definition their target firms are IHGEs (Thompson, Boschmans, & Pissareva, 2018).

There are several instruments governments can deploy to support VC investments that can be employed in addition to the aforementioned tax incentives and demand-side measures, such as investor readiness programmes. These additional instruments include:

- **The equity carry model (portage)** - a contractual arrangement where a Government acquires equity shares from private investors for a fixed period and sells them back at a pre-specified price in the future.
- **A co-investment model with two types of governmental support:** i) a privately managed government-backed VC fund that invests on a non-exclusive basis in innovative companies; and ii) public investment as a co-limited partner in a privately managed VC fund.
- **The fund-of-funds model** requires the establishment of a public fund that takes minority equity stakes in existing or new privately-managed VC funds.

In terms of legal and operational complexity, the **equity carry model is the simplest of all and has proven useful in countries with underdeveloped capital markets**. However, it tends to have limited spill-over effects in promoting the development of a domestic VC sector and enhancing competition among potential VC investors. The other two models require the presence of established innovation infrastructure, including active business angel networks and VC investors in addition to a relatively advanced operational and regulatory environment. The latter is of particular importance as private VC investors must have a high level of confidence in a country’s legal system, rule of law as well as the transparency of the local tax regime and public policy before making their investments.

These models have proven effective in, inter alia, the EU, the US and Israel in the early stages of the development of their respective investor ecosystems and VC markets. Experience suggests that co-investment funds and fund-of-funds, both of which seek to leverage private sector investment, are likely to be more effective than direct public equity funds.

**Co-investment funds have also proven to be an effective instrument in limiting the risks associated with market distortions due to government intervention.** This is because public investment only occurs when it is at least matched by private equity investments from business angels or venture capitalists. For example, the European Investment Fund (EIF) has partnered with a range of national investment bodies to establish co-investment vehicles (for more information, see (UNECE, 2021)).

**The fund-of-funds mechanism** has also been extensively utilized across Europe and beyond to ensure public investment is used effectively to leverage private funds. Examples include the multi-country level initiatives in the Baltic States and the Western Balkans that are cited below and specifically target investments toward innovative companies.
• The European Investment Fund (EIF) and Bank Gospodarstwa Krajowego (BGK) Fund of Funds stimulates equity investment into growth-focused enterprises in Poland and the CEE region. At the first closing, this fund-of-funds had a commitment of €90 million with a target size of €180 million at the final closing.

• Baltic Innovation Fund 2 (BIF 2) is a €156 million fund-of-funds initiative launched by the EIF in cooperation with the Baltic national investment agencies KredEx (Estonia), Altum (Latvia) and Invega (Lithuania). It builds on the success of BIF 1, its predecessor programme. BIF 2 manages investments into private equity and VC funds focused on the Baltic States to boost equity investments into SMEs with high-growth potential.

• The Enterprise Innovation Fund (ENIF) is focused on tech companies in the Balkans. The €40 million fund is dedicated primarily to early-stage and growth-stage investments. Within the fund’s ‘seed pocket’, focusing on the very early stages of a firm’s life cycle, €1.5 million is allocated for investments of up to €100,000 per company. The majority of the fund is allocated for early-stage and growth-stage investments of up to €3 million per company. These investments are intended to fuel the international business expansion and growth of the most promising tech start-ups that can show traction and prove their potential to “make it big”.

iv. Financial support through incubator and accelerator programmes

Business incubator and accelerator programmes, also called “start-up factories” (NESTA, 2013) give early-stage and high-growth companies access to mentorship, investors and other support that help them become stable, self-sufficient businesses. Participants being able to access peer learning from other ventures at a similar stage of development is often perceived as one of the main advantages of incubation. In addition, incubators often make seed funding available, liaise between their participants and potential (equity) investors, and help companies to comply with the demands and requirements of these investors (European Commission and OECD, 2019). Later stage equity funding can then drive the expansion of a soundly operating company.

An accelerator programme model has five main features that set it apart from other approaches to new-business support mechanisms:

• A highly-competitive application process that is open to all types of enterprise, albeit with a selective focus on companies with a clear potential for high growth.

• The provision of pre-seed investment, usually in exchange for equity.

• A focus on small teams rather than individual founders.

• Time-limited support comprising programme events and intensive mentoring which tends to be bespoke and tailored to the needs of the recipients.

• Cohorts or ‘classes’ of start-ups rather than individual companies.

As previously mentioned, there has been a proliferation of incubator and accelerator programmes in the SPECA sub-region in recent years. In Tajikistan, for example, three business accelerators were established between 2012 and 2019 with other initiatives in the pipeline, three co-working spaces were launched (which also offer some of the aforementioned services and support) and hundreds of start-up events have been organized (Aliyev, 2020). Kyrgyzstan has established twelve business incubators in its
higher educational institutions across the country, Uzbekistan is running CAT Science Accelerator and is investing in the development of technology parks in each of the regions to support innovative business ideas. However, these initiatives are yet to catalyze broad innovation and their impact depends in part on the progress on comprehensive reform process, as has been noted in the UNECE Handbook on "Business Incubators for Sustainable Development in the SPECA sub-region" (UNECE, 2021).

One notable Tajik initiative is the Enterprise and Innovation Programme (EIP) funded by the UK’s Foreign, Commonwealth and Development Office (FCDO). It has set up innovation and incubation centres in Dushanbe, the capital of Tajikistan. The EIP aims to "support inclusive and sustainable economic growth in the country, principally through the creation of business and innovation centres, the strengthening of company-investor linkages, the provision of market-making activities, and the improvement of the business advisory infrastructure."\(^\text{21}\) Accelerate Prosperity represents another incubator initiative, this time funded by the Aga Khan Network, a network of development agencies. Since 2016, it has provided promising ventures with business modelling, coaching, mentorship programmes and networking in Central and South Asia. In addition, participating companies can receive investment readiness training as well as seed and growth financing. A total of 158 companies have benefitted from the Aga Khan Network’s support\(^\text{22}\).

Tajik Startups, an organization supported by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and the German Government, runs an incubation programme that lasts three months and offers consultation services, technical infrastructure and training to innovative firms in their start-up phase\(^\text{23}\).

Other noteworthy examples in this respect are, firstly, the Tech Hub of the Astana International Financial Center (AIFC) which has launched Kazakhstan’s first Fintech Accelerator in partnership with Mastercard and the Internet Initiatives Development Fund (a Russian VC fund). Secondly, the C.A.T. Science Accelerator is an initiative established by the Centre for Advanced Technologies which itself operates under the auspices of the Ministry of Innovative Development in Uzbekistan. The C.A.T. Science Accelerator focuses on 'scientific' projects and the commercialization of scientific research. These initiatives, and many others throughout the SPECA sub-region, are promising and often benefit from their use of expertise and business experience drawn from various international organizations. Going forward, it will be important to ensure there is ongoing strong involvement of experts with business experience for the provision of quality mentoring services for entrepreneurs.

### 2.2.4 Reinforcing firms’ in-house capabilities to grow: skills and talent

**Ensuring IHGEs have access to skilled employees**

Access to educated and skilled staff is essential for any business to be viable. However, for IHGEs, the range and type of expertise needed are likely to be significantly more demanding to source than for ‘regular’ businesses. This is because IHGEs typically require individuals with advanced technological know-how, language skills as well as an understanding of both international market trends and business practices in target markets.
Overly stringent employment protection legislation which reduces the ease with which skilled employees can move between firms leads to less dynamic firm growth, especially in R&D intensive sectors, and this, in turn, leads to significantly lower productivity growth (OECD, 2020).

For IHGEs, the challenge is to source STEM graduates who also have the needed know-how gained through a complementary entrepreneurial and financial education. Interviews with SPECA stakeholders identified skill shortages as especially problematic to the success of high-tech ventures and IHGEs more generally, especially for skills related to digitalization and ICT.

These perceptions have been confirmed through the OECD’s PISA (Programme for International Student Assessment), whereby 15-year-olds are tested for their proficiency in reading, maths and science in a standardized manner, allowing for comparisons across countries. A 2021 report revealed that students from Azerbaijan and Kazakhstan, the only SPECA countries taking part in PISA, performed considerably worse than their counterparts in both OECD countries as well as those in Eastern and Central European countries (OECD/UNICEF, 2021).

Three main types of policy support are commonly used to make sure the necessary skillsets, as well as creative and specialized staff, are available to potential IHGEs:

- Entrepreneurial education focused on specific skillsets necessary to develop IHGEs;
- Ensuring access for IHGEs to STEM graduates as well as other specialized skills (including design, marketing and international business know-how); and
- Talent attraction (e.g., start-up and IT visas, etc.) as well as measures to avoid a ‘brain-drain’ from the sub-region.

There are pronounced differences in higher education systems across the SPECA sub-region, as highlighted by a UNESCO study focusing on Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Gross enrolment rates in higher education vary from only 10 per cent of the eligible population in Uzbekistan to 62 per cent in Kazakhstan. The tertiary education completion rates (defined as the proportion of students enrolled in tertiary education who successfully complete two to four years of tertiary education) also range from 10 per cent in Uzbekistan to 52 per cent in Kazakhstan, with the two other countries’ rates falling in between. While there is one HEI for every 107,000 inhabitants in Tajikistan, the corresponding number in Uzbekistan stands at one in 833,000 (UNESCO, 2021).

The report also indicates some challenges in higher education systems which are common to the region and impede the development of a knowledge-based economy. First and foremost, there are considerable skills mismatches, with close to half of employers in the region not finding qualified personnel, a figure that is almost certainly higher for IHGEs based on the experience of other regions. There is a strong emphasis on rote learning in most of the sub-region’s HEIs and an absence of mechanisms to monitor the quality and harmonize both education and qualification standards. This is especially worrisome because the education budget and the number of qualified teachers and trainers have generally not kept pace with the rising student populations engaged in higher education. Finally, there are inequalities in gaining access to and then successfully completing higher education syllabuses that are driven by socio-economic background,
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geographical location and gender, further limiting the talent pool available for innovative enterprises with high-growth potential (UNESCO, 2021).

This skills mismatch is aggravated by longstanding weaknesses in lifelong learning opportunities as well as technical and vocational education and training in the SPECA sub-region. SPECA countries have been engaged in important policy efforts to improve their education systems in general and align them to teach the skills that are in high demand on the labor market (Asian Development Bank, 2021) and (OECD, 2021). While this is a positive, further efforts in this area are required and would ideally include mapping and identifying skills gaps and fostering upskilling and retraining.

In an effort to attract talent and retain skills, some governments have made it easier to locate and establish businesses in their country, for example through start-up permits or visas (see Box 2.5Azerbaijan’s e- and m-Residency Programme). Such visas can be attractive parts of an overall package offered by countries or cities positioning themselves as entrepreneurial or tech hubs. However, and even more importantly, they should be part of a credible, broader policy package aimed at developing an entrepreneurial high-growth ecosystem. Visas or e-residency type measures alone are unlikely to attract entrepreneurs to set up their businesses in a country.

While countries in the SPECA sub-region may explore avenues to attract foreign talent with highly sought-after skills, a more pressing priority is to slow or even reverse the emigration of highly-skilled professionals, especially the younger generation, from the sub-region to other parts of the world, as well as to encourage the diaspora to provide impetus to establish and further develop IHGEs back home. All SPECA countries have registered significant emigration flows since the collapse of the Soviet Union, with Kyrgyzstan and Tajikistan

Box 2.5 Azerbaijan’s e- and m-Residency programme

Azerbaijan has made efforts to become more attractive to global entrepreneurs, launching the Digital Trade Hub (DTH) in 2017 to help develop the country’s digital ecosystem and attract both foreign investors and small business owners. One of the DTH’s major initiatives so far came in 2018 with the introduction of the electronic residency (e-Residency) and mobile residency (m-Residency) programme, a move that made Azerbaijan the second country in the world (after Estonia) to offer an e-Residency programme designed to provide easy, fast and reliable services to foreign investors and businesses.

The m-Residency programme provides virtual government-verified identification in Azerbaijan and successful applicants receive a specially issued Asan Imza (Mobile ID) SIM card for secure authentication and electronic signatures. With this, it is possible to start official activities in the country and use any banking service. Although international applications currently come with limitations, the m-Residency programme has high-growth ambitions.

having the highest rates\textsuperscript{24}. While the loss of these individuals has been problematic, it also presents an opportunity if they can be convinced to meaningfully contribute to fostering potential IHGEs back home by bringing the knowledge, skills, networks and financing they have acquired oversea back to their homelands.

There are no easy fixes to address the ongoing outflow of highly-skilled professionals from the sub-region, however, efforts are being made. Kazakhstan has been the champion in the SPECA sub-region in this regard, setting up the Bolashak scholarships to finance the study of its highly-capable students abroad under the condition that graduates return to Kazakhstan afterwards to work for at least five years in the country. The establishment of centres of excellence, such as the one at the Nazarbayev University which began operating in 2010, also helps to retain capable students if they provide access to world-class research and education services. Another potential option to reverse the ‘brain drain’ is through tax incentives as, for example, has been done in Malaysia under the Returning Expert Programme, where highly skilled Malaysians who have lived abroad for at least five years can return to Malaysia and enjoy tax breaks (World Bank, 2019).

**Leadership skills for IHGEs**

Taking a long-term perspective, the importance of incorporating entrepreneurial education into educational curricula from the primary school level upwards is now widely acknowledged as an important element of private-sector development efforts. Fostering this development further and adding more of the ‘growth mindset’ to entrepreneurial education (NESTA, 2019) would help support the dynamics of experimentation and innovation more broadly throughout the sub-region. Two recommendations are offered here to facilitate this, namely:

- **Incorporate real-life examples from the SPECA sub-region** as well as other relevant economies such as the Baltic countries, Georgia, etc. rather than only using individuals who established and grew IHGEs in more remote, advanced and larger economies. Interviewees stressed the importance of promoting role models that could be related to and learning from their experience to inspire other innovative entrepreneurs to aim for similar successes.

- **Focus not only on the skills** needed to have an entrepreneurial mindset or to launch a ‘start-up’ but also on the process of growth and scaling up companies via the skills (in-house) and networks (peers, investors, etc.) required at each growth stage.

Innovative companies in their growth stage perform better when backed by equity investors (Vlerick Business School, 2020), which highlights the importance of educating and training potential IHGE managers to be open-minded enough and equipped to work with external investors, especially business angels that bring both capital and experience. There is a range of leadership programmes run by business schools, enterprise agencies and private training providers that focus on the skills required to promote high growth in an enterprise. These types of programmes, many of which can be found using the UK ScaleUp searchable directory of support programmes, can provide inspiration for the SPECA countries to develop tailored versions thereof for local managers of potential IHGEs (See Box 2.6 Examples of management training programmes for growth-oriented businesses: Ireland and Scotland).
Few public business leadership training programmes appear to exist in the SPECA sub-region, and while this alone is a concern, it is made even more so by the results of a series of STI gap analyses conducted by the UNECE which, among other findings, revealed low sub-regional capacity and capabilities in this area (Dobrinsky, 2021). Management training programmes can, therefore, be considered as a currently underutilized policy instrument to stimulate high-growth entrepreneurship.

2.2.5 Going global: networking and scaling in international markets

Countries in the SPECA sub-region are landlocked and small in terms of population, arguably with the exception of Afghanistan and, to a lesser extent, Kazakhstan. High-potential firms may rapidly outgrow their small domestic markets and need access to foreign markets to reach their full potential. This holds especially true for companies that operate in activities that are both in niche markets and scalable. For example, Cerebra is a company from Kazakhstan that was founded in 2018 to develop AI-powered software for early stroke detection, an activity that is relatively narrowly focused but with the potential to find customers around the globe if successful. IMAM is another similar example, an Uzbek company that provides ‘buy now, pay later’ services in compliance with Islamic finance principles.

Despite the economic rationale, exports in the region are, by and large, dominated by a handful of primary commodities that are controlled by a relatively small number of large firms that are often partially or fully State-owned. What this translates to is that the participation of the majority of SPECA-based firms in global production networks and value chains remains limited. In addition, regional integration in SPECA is largely underutilized in the areas of trade, finance and investments, despite continued efforts in this regard by the governments (Lee, 2020). Poor logistics and high transportation costs represent the key challenges for exporters of physical goods, as evidenced by the fact that logistics costs in SPECA countries account for around 20 per cent of the sub-region’s GDP compared to 9 per cent in OECD countries (International Transport Forum, 2019).

Although somewhat anecdotal in nature, interviews with entrepreneurs and other stakeholders in the SPECA sub-region indicate that other SPECA countries and Russia are perceived as the natural markets to expand into once the domestic market is saturated. The close cultural, historical, linguistic and economic ties make expansion across the border easy compared to what is required to conduct business further afield. Such expansion is also facilitated by various bilateral and multilateral trade agreements, such as the Commonwealth of Independent States Free Trade Area (CISFTA) and the Eurasian Economic Union, of which Kazakhstan and Kyrgyzstan are both members. In addition, SPECA countries have committed to enhancing their regional trade linkages in line with SDGs through implementation of the SPECA Principles of Sustainable Trade.

These trade arrangements, or lack thereof, influence the potential of IHGEs in the SPECA countries to attract investors and enter foreign markets, although the type of products or services offered by IHGEs matter as well. IHGEs from the SPECA sub-region providing digital services (e-commerce, software, etc.) are likely to find it easier to sell to consumers or other businesses than, for example, IHGEs exporting more heavily regulated products such as financial services or medical equipment.
Box 2.6 Examples of management training programmes for growth-oriented businesses: Ireland and Scotland

**IRELAND**

Enterprise Ireland’s Leadership 4 Growth initiative was established in 2006 to build on the leadership talent within Ireland’s local industries. It seeks to increase job and wealth creation throughout the country. Enterprise Ireland partners with the IESE business school and in association with Learning Partnership, a community of psychologists and business professionals who specialize in training for executives, with 400 CEOs having taken part to date. An evaluation, carried out in 2015, found that following their programme participation, participants exceeded the export growth of a control group of companies by an average of 55 per cent and improved their average annual sales per employee ratio by 15 per cent more than the control group.

The Leadership 4 Growth programme aims to equip business leaders with the necessary visionary, strategic and innovative capabilities required to scale up sustainable companies on the global stage. The programme entails three overseas week-long residential modules which cover dynamic business strategy, high-performance leadership and sustainable growth. Each module is followed by a one-day Ireland-based Insights Session involving the participant’s senior leadership team. Throughout the programme, each participant is assigned a business adviser to encourage, challenge and assist in implementing their strategic frameworks and apply core leadership concepts to their companies. Customized one-day masterclasses for chief financial officers and chief human resources officers are another additional element to the programme.

**SCOTLAND**

First launched in 2015, the Growth Advantage Programme (GAP) at Strathclyde University provides relevant, accessible and practical learning for fast-growing Scottish businesses embarking on a scale-up journey. It is aimed at existing businesses with a minimum GBP 1 million turnover with real growth ambitions. The programme targets the founding managing directors, chief executives or principals of the business with a significant ownership interest. Businesses can come from all over Scotland and a wide range of sectors are eligible, including companies that have recently started from scratch or been bought or are multi-generation family businesses – the common denominator is that they all must have ambitions to grow.

Independent evaluators found that, after participation, the average annual turnover of programme participants was 15.9 per cent higher than that of a control group, while the average growth in employee numbers was 10.9 per cent higher. Furthermore, the first cohort of participants saw turnover growth of 17.6 per cent one year after starting the programme and cumulative turnover growth after four years was 67 per cent.

Participants are offered a programme that links high-quality executive education with insights and shared learning from peer networks. Business leaders attend an initial one-day orientation meeting followed by four two-day workshops that take place over 10 months. Each workshop concludes with the creation of a 60-day action plan which is reviewed at the start of the next workshop. Strathclyde University also provides practical support with GAP cohorts having access to project support from the Hunter Centre of Entrepreneurship, product design resources from the Engineering Faculty and access to talent through the University Careers Service.

Source: Author’s analysis for UNECE.

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b See: [https://www.strath.ac.uk/business/huntercentreentrepreneurship/gap/](https://www.strath.ac.uk/business/huntercentreentrepreneurship/gap/)
Fostering IHGEs to become active internationally requires a holistic policy approach (OECD, 2018). Many of the elements of the policy toolkit already presented in this handbook inherently entail an international dimension given the necessity to rapidly move from national markets to regional or global, depending on the business model. Therefore, accessing international expertise involved into accelerator programmes, leadership training and skills initiatives, as well as international funding opportunities are an important element of success for IHGEs.

**Export promotion agencies often play a crucial role in the support of companies with the potential to become active abroad** (see Box 2.7 featuring the experience from Slovakia). Existing export promotion agencies in the SPECA countries have the same goal, however, they are often under-developed in terms of the range and sophistication of support they provide to enterprises in the SPECA sub-region.

The diaspora network could potentially also be tapped into to enhance the network for IHGEs looking to export or expand abroad. **A more structured relationship with the diaspora networks of the SPECA countries would help provide tailored support and access for potential IHGEs to foreign markets.** Global Scots network is an example of such that is managed by Scottish Enterprise. It is a worldwide network of business contacts, usually of Scottish descent or that have a link to Scotland, who are experts in their field and are motivated to help Scottish companies develop, expand and thrive in a competitive international market. An example closer to home for SPECA countries is that of the Armenia Virtual Bridge, a similar network but one designed to facilitate market launches and business growth for Armenian start-ups via educational programmes and mentoring.

**Box 2.7 Export promotion agencies: The experience in Slovakia**

The Slovak Investment and Trade Development Agency (SARIO), a part of the Ministry of Economy, is the main government body in charge of Slovakia’s export promotion. Its portal provides tailored information to both current and would-be exporters. It aims to develop a comprehensive database of specific supply chains that Slovak companies are well placed to take part in and, in doing so, identifies untapped opportunities that allow it to reach out to specific companies that could move up the value chain. In addition, SARIO provides matchmaking services among companies in its database (both domestic and foreign) that have the potential to collabo rate.

SARIO also runs a number of related programmes, such as overseas or local business missions, exhibitions and fairs and makes specific efforts to include local SMEs in these activities. The Export Academy, a supporting entity run by SARIO, also organizes seminars across the country on topics of particular relevance for exporters and would-be exporters. The efforts of the agency are complemented by EXIMBANKA, Slovakia’s export credit agency which provides both BDSs for internationalizing and banking, guarantee and insurance products for exporters.

Source: UNECE, based on (OECD, 2021).
Notes

2 Presentation by Leah Pape, Scottish Enterprise, UNECE training on IHGEs in EESC, Session 2 at https://unece.org/eci/documents/2021/03/presentations/practitioner-insight-scottish-scale-ecosystem-ensuring-high
3 World Bank Doing Business 2020 Report
4 Tajikistan Economy Profile. Doing Business 2020
6 The UN Secretary-General’s Special Advocate for Inclusive Finance for Development defines a regulatory sandbox as “a regulatory approach, typically summarized in writing and published, that allows live, time-bound testing of innovations under a regulator’s oversight.” https://www.unsgsa.org/sites/default/files/resources-files/2020-09/Fintech_Briefing_Paper_Regulatory_Sandboxes.pdf
9 These are physical spaces for the testing and demonstration of new technologies and innovations, under special legislation and control by regulatory entities.
11 The dedicated paper was presented at the UNECE Committee on Innovation Competitiveness and Public-Private Partnerships to take place on 02-04 June 2021. Accessible through https://unece.org/sites/default/files/2021-05/ECE_CECL_2021_5_2103936E.pdf
12 https://www.ic.gc.ca/eic/site/062.nsf/eng/h_00083.html
14 https://amfa.az/
15 This information is largely based on an analysis of a series of reports by the UNECE over the 2020-2021 period in which a gap analysis was conducted on the STI policies of all seven SPECA countries.
16 The practice of funding a project or venture by raising money from a large number of people who each contribute a relatively small amount, typically via an internet platform. See also: https://ec.europa.eu/growth/tools-databases/crowdfunding-guide/what-is/explained_en
17 Business angels are conventionally defined as high-net worth individuals who invest their own money, along with their time and expertise, directly in unquoted companies in which they have no family connection in the hope of having financial gain (Mason, 2013).
19 https://www.eif.org/what_we_do/resources/BIF2/index.htm
22 https://tj.accelerateprosperity.org/
23 https://www.tajik-startups.com/our-services/incubation-program/
24 Around 750,000 Kyrgyzstani lived abroad in 2016, representing about 30% of the economically active population, according to official data (and hence likely to be an underestimate as undocumented migration is not included in this number). Close to 500,000 Tajiks were officially residing in Russia alone in 2018, out of a population of around 9.5 million (Olimov, Grote, & Behrooz, 2020).
26 See: https://www.globalscot.com
27 https://armenianvirtualbridge.am/en/armenian-virtual-bridge
Part III

THE WAY AHEAD: ACTION TO REALIZE IHGE POTENTIAL IN THE SPECA SUB-REGION
Supporting Innovative High-Growth Enterprises in the SPECA Sub-Region
A UNECE Policy Handbook

This handbook has examined the rationale for and types of policy interventions that can be mobilized to support the creation, development and growth of IHGEs. Based on the available evidence from enterprise and innovation policy reviews, the handbook has highlighted specific drivers and barriers for IHGEs in the SPECA sub-region and has provided examples of existing public and/or private initiatives that seek to improve framework conditions for such ambitious business ventures.

IHGEs will be central to the economic future of the SPECA countries

The seven SPECA countries are at a something of a crossroad, with convergence with high-income countries having slowed in recent years, meaning governments can decide to persist with existing growth models based on commodity exports and/or remittances, or opt for a more innovative path. Indeed, the ambition to transition towards a digital, knowledge-based economy, including a larger role for entrepreneurship, is a key, common thread running through multiple national development plans and related strategic documents that have emerged in recent years.

Innovative high-growth enterprises have a crucial role to play to realize those ambitions. These ventures contribute disproportionately to employment, output and R&D investments. Moreover, many of these firms can drive broader transformational changes that yield significant societal benefit to SPECA countries by, for example, addressing the chequered progress towards the Sustainable Development Goals (SDGs) (UNESCAP, 2021).

IHGEs can develop innovative solutions to put the sub-region back on track in this regard, and contribute to a sustainable post-COVID-19 recovery, and the circular, green and digital transformation of the sub-region.

As defined for the purposes of this handbook, IHGEs are firms that:

- Have at least 10 employees at the beginning of their high-growth stage;
- Have an average annualized growth in the number of employees and/or turnover greater than 10 per cent over three years;
- Engage in innovation, defined in a broad sense as any activity that involves new or significantly improved products or business processes, business models, etc.

IHGEs can be found in any sector of the economy, contrary to the common misconception that they are mainly high technology start-ups, and they differ from other SMEs in experiencing existing regulation, market and system failures more severely.

Therefore, the transformative change and value generation driven by IHGEs require policies to ensure the overall effectiveness of entrepreneurial ecosystems and framework conditions. These should be further supplemented by targeted support measures that to address the specialized needs of IHGEs as distinct from the general business community.

Desk research and interviews with stakeholders from the SPECA sub-region indicate that SPECA Governments have stepped up their efforts in recent years to support the innovative entrepreneurship development with a significant uptake of the incubation and acceleration programmes and wider development of innovation support infrastructure (e.g., proliferation of start-up incubators in Azerbaijan, Kazakhstan,
Kyrgyzstan and Uzbekistan, availability of start-up finance, R&D grants, venture capital market development across the sub-region). This reflects the growing recognition of governments in the region that innovative entrepreneurship is important to future economic and societal development.

**Further improving the business environment and innovation support infrastructure can help foster the creation and expansion of IHGEs**

Much remains to be done, with uneven progress across the SPECA countries, to foster an innovation- and entrepreneurship-enabling environment. As this handbook points out, such improvements would benefit all businesses, but particularly firms with high growth potential exposed to the higher risk that innovation entails.

Despite progress in recent years, business regulation across the SPECA sub-region remains complicated as rules often overlap or contradict one another and regulations are subject to frequent change without due consultation, in some cases without stakeholder consultation. Customs regulations and border procedures remain expensive and complicated in most countries in the sub-region, meaning that tax compliance often produces bottlenecks that hamper effective business operations. Dispute settlements are not always perceived as fair, transparent or of adequate quality in the context of a reported lack of public accountability and there is reluctance, for example, to challenge State bodies and SOEs in court (OECD, 2021). The tax regimes in certain SPECA countries serve as one example of regulations that hamper enterprises, especially those with novel business models and where strict compliance is difficult. Here, even external assessments have noted that these regimes are overly complex and can impose severe penalties for minor infringements (Ernst & Young, 2020).

In addition, there is room for the Governments in the SPECA sub-region to boost demand for innovation through public procurement while addressing the sustainable development challenges faced by the countries.

Measures targeting a pro-growth business environment should be complemented by efforts targeting improvements in innovation support infrastructure, including building the managerial capacity of accelerators, incubators, technology parks, innovation agencies and similar organizations through additional training and practical knowledge of best practices to support innovative firms. Furthermore, actions to foster the development of the investor eco-system to enhance firms’ access to finance and to ensure the availability of appropriate funding at each stage of growth are crucial (including debt and non-debt mechanisms).

**Targeted policies should be strengthened and move away from high-tech start-ups to include other type of firms**

Most state interventions to support innovative firms in the SPECA sub-region can be classified in the category of support for the acceleration/scaling of (high-tech) start-ups, the first broad category of public interventions identified in this handbook. The proliferation of tax incentives for companies in technology parks constitutes a common example.

The support for the growth of established manufacturing or service firms through product development and market penetration, the second broad category of interventions, appears less widespread in the sub-region. Export promotion agencies,
Supporting Innovative High-Growth Enterprises in the SPECA Sub-Region

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for example, are often not active or operating on a small scale (with Kazakhstan arguably being an exception), thus missing out on opportunities to foster IHGEs. Many advisory services appear also to be geared towards start-ups and young firms, thereby missing out on the innovation and growth potential of firms at later stages of development. Such an approach may reflect a view that innovation and high growth take place primarily at the early stages of a firm’s life cycle and in high-tech sectors, contrary to international experience.

Few examples of programmes to facilitate spillovers from large enterprises, including multinationals, towards smaller companies were identified across the sub-region, which is the third category of targeted policies. The attraction of ambitious entrepreneurs and/or scalable companies from abroad to establish locally and grow globally is also uncommon in the SPECA sub-region. While most if not all SPECA countries have a policy framework in place to attract FDI, most public support is geared towards large multinationals, not small innovative ventures with potential to grow. Programmes to attract foreign entrepreneurs or to encourage indigenous talent abroad to return are also largely absent. Kazakhstan appears to be a frontrunner in this regard, having recently established initiatives in both areas, while Azerbaijan has developed its relatively ambitious m- and e-residency schemes (mobile and electronic) targeting a similar outcome.

Finally, the scope for research-based spin-offs emerging from public research institutes or HEIs (the fourth broad category of public interventions) appears limited. The difficulty here is driven by structural underinvestment in public research and the immaturity of knowledge transfer and commercialization structures in the SPECA countries.

An important factor in this transition from a focus on high-technology start-ups to a broader range of firms is the policy implementation capacities of the public agencies and ministries. While we have sought to present examples from other (often more ‘developed’) countries, the institutional structure and quality of governance in both the public and private sectors in SPECA countries may not always allow for the rapid and smooth adoption of recognized good practices and policy mechanisms to support IHGEs. In particular, countries in the sub-region often lack the “ability to engage with the private sector, coordinate across several public agencies and ensure continuity of policies whose effects are usually felt beyond the electoral cycle” (Radosovic, 2021).

IHGE policy could be developed based on the six recommended steps covering the full policy cycle. To build their capacity and capabilities in policymaking, SPECA countries could adopt a policy framework that fosters the design and delivery of more targeted IHGE policies by following the six key steps below. These steps are aligned with a typical policy cycle running from baseline analysis through to evaluation of policy impact, allowing comparisons to be made with the baseline situation.

At each step, local technical abilities should ideally be strengthened in collaboration with external stakeholders from both the private and public sectors, building on the lessons learned from other policymakers and on other relevant expert knowledge. Close cooperation with counterparts in other countries, foreign donors and key international organizations could help policymakers to more clearly understand what their policies need to achieve, how to optimally design these policies and the most advantageous means of implementing them.
A policy recommendation common to these six steps particular relevant to the SPECA countries is to consult with the private sector in a more transparent and inclusive way rather than adopting a largely top-down approach. It will be important to ensure gradual private sector involvement in policy implementation to ensure effective delivery.

1. Develop an evidence base

First, solid relevant data needs to be available and analysed to determine the adoption of new policy tools. The scarcity of data on firm demographics, activities and performance hamper the identification of the right policy tools and the assessment of progress made following the introduction of interventions and next steps. Partly due to data shortages, policy monitoring and evaluation are not undertaken systematically, making it hard to know and evaluate policy effectiveness and adapt them to address existing gaps. As a concrete example, no data could be found on the number of IHGEs or the sectors in which they are active in any of the SPECA countries.

The effort required for the first step should not be underestimated given the aforementioned lack of a reliable evidence base. Statistical offices in the SPECA sub-region could collaborate with their counterparts in other countries to see what is required in terms of data collection, analysis and the dissemination of the results, all in accord with international good practices.

This would also allow to better track start-up and scale-up businesses, as is being done by the TechUkraine platform which maps data on key tech players in the Ukrainian business environment.

Figure 3.1 • Six steps for developing an IHGE policy

- **step 1** Develop an evidence base
- **step 2** Establish a governmental IHGE policy unit
- **step 3** Adopt a strategy and policy priorities for IHGEs
- **step 4** Design an action plan for IHGE policy
- **step 5** Set up pilot schemes for IHGEs to be scaled up if successful
- **step 6** Monitor and evaluate policy initiatives

Source: Author’s analysis for UNECE.
ecosystem. Such tools provide a basis for policy discussions and analysis of the growth potential of enterprises throughout the economy, meaning such considerations need to be extended beyond specific tech fields to better cover existing manufacturing and service companies with growth potential (e.g., by tracking increases in annual turnover, mergers or acquisitions that can indicate trigger points of growth). The advantage of SPECA countries developing a similar platform for their local use is that it provides a means of monitoring enterprises’ performance over time both for internal purposes and for the promotion of specific cases of ‘high-growth champions’ nationally.

2. Establish a governmental IHGE policy unit

To enable a client management system, generating better-quality official statistics on IHGEs is only the first step. Developing a particularly specialized policy framework that is effective requires a dedicated governmental unit. This does not necessarily mean recruiting significant numbers of additional staff, although it may be necessary to train existing staff and recruit a limited number of specialists such as data analysts and the like, drawn from an SME agency or seconded from existing private initiatives supporting enterprise. In short, this is about bringing together a small team with a tight focus on their responsibility to drive the policy development process forward.

A ‘high-growth policy unit’ within an existing SME agency is a more cost-effective and sustainable option than creating a separate agency. An alternative would be to set up an inter-agency unit that would ensure an increased focus on relational support to the identified segments of potential IHGEs. Whichever path is chosen, it is critical to design and build a support portfolio that reflects firms’ life cycle, i.e., support options for each stage of growth that are mobilized promptly. This would include diagnostic assessments of potential IHGEs, identifying external advisers, bringing together networks of investors and scale-ups as well as running tailored growth programmes for cohorts of IHGEs (see examples from the policy toolkit section).

3. Adopt a strategy and policy priorities for IHGEs

The strategy design process coordinated by a high-growth policy unit or similar organisation (see previous paragraph) should be done in partnership with a stakeholder group - a task force - of public and private actors involved in the support of or delivering services to businesses. The task force’s role is to propose a set of priority actions that form an overall strategic framework to boost the number and scale of IHGEs in the country.

The recommendations of the task force would be cross-departmental given the need to address both structural, institutional and legislative challenges (getting the enabling environment right first), as well as designing interventions that bring together and make available a broad-based portfolio of support from different government and public-private sources. The goal of this task force would be to clarify policy priorities, lay the foundations for an action plan and then coordinate efforts by different stakeholders to efficiently achieve this goal.
4. Design an action plan for IHGE policy

While some countries in the SPECA sub-region have put in place support programmes targeting high-growth businesses and entrepreneurship, they lack a cohesive strategy with overarching goals. Ideally, an action plan that covers a period of 4-6 years to allow the necessary time for testing and evaluation of both current and additional actions should be put in place to address this lack of cohesion. Helpful here because of its level of detail is the OECD’s proposed timeline, presented in Figure 3.2 below, for the roll-out of a pilot programme to support IHGEs in Belarus, which includes a relevant framework that is worthy of consideration by governments in the SPECA sub-region as well.

At the operational level, the enterprise (SME) and/or innovation agencies should investigate the start-up and scale-up ecosystem in their country, disaggregated by geographical region as required, to address weaknesses in the system rather than focusing on individual companies. As an example, given that there is a shortage of mentors and advisers with business experience throughout the SPECA sub-region, trying to expand the available pool of such individuals, as well as effectively matching them with appropriate innovative companies with high potential would likely reap long-term benefits. Similar long-term

Figure 3.2 • Suggested timeline for a pilot programme for IHGEs

- **Assess firm’s eligibility**
  - Motivation to participate
  - Growth potential
  - Social spillovers

- **Recent growth indicators**
  - Past growth rates
  - Organisational change
  - Increase in staff
  - Search of growth potential

- **Business Diagnostics**
  - Firm’s business diagnosis
    - Business concept
    - Organisation
    - Operations
    - Customer relations
  - Sector-specific diagnostics
  - SWOT analysis

- **Capacity building**
  - Specialist/managers coaching
  - Core skills training/ workshops
  - Relational support
    - Network of peers and mentors
    - Trade and foreign fairs
  - Financial assistance
    - Matching grants to access BDS

- **Role of SME Agency**
  - Raise SME awareness about the programme
  - Analyse recent growth performance
  - Firms selection
  - Perform initial business diagnostic
    - Identify external advisors to provide training/consulting
    - Provide financial support to SMEs (e.g. matching grants)
    - Monitor progress in programme implementation

- **Activities**
  - Review company’s status
    - Identify barriers to growth
  - Define growth plan
    - Set strategic objectives
    - Link plan’s activities to expected rules
    - Assessing funding sources
  - Implementation of growth plan
    - Develop workforce plan
    - Enhance managerial capacity
    - Adjust internal processes
    - Develop links between firm and knowledge institutes
    - Expand client base

- **Tools**
  - Recent growth indicators
  - Business Diagnostics
  - Capacity building
  - Role of SME Agency

- **Evaluation of progress achieved**
  - Impact on firm’s performance
  - Provide further financial assistance

- **Year 0**
  - Review company’s status
  - Identify barriers to growth
  - Define growth plan
    - Set strategic objectives
    - Link plan’s activities to expected rules
    - Assessing funding sources

- **Year 1**
  - Review company’s status
  - Identify barriers to growth
  - Define growth plan
    - Set strategic objectives
    - Link plan’s activities to expected rules
    - Assessing funding sources
  - Implementation of growth plan
    - Develop workforce plan
    - Enhance managerial capacity
    - Adjust internal processes
    - Develop links between firm and knowledge institutes
    - Expand client base

- **Year 2-3**
  - Evaluation of progress achieved
  - Impact on firm’s performance
  - Provide further financial assistance

- **Year 4**
  - Evaluation of progress achieved
  - Impact on firm’s performance
  - Provide further financial assistance

Source: UNECE, adapted from (OECD, 2020).
ambitions that could be pursued include fostering an ecosystem of equity investors and improving the support mechanisms for firms with the ambition to capture a share of an international market.

As an additional and more advanced step, the designated agency could develop a segmentation strategy that combines ‘business demographic’ indicators for the first-level segmentation with qualitative criteria on trigger points for growth gathered from interactions between staff (e.g., client-focused staff, export or enterprise programme managers, etc.) and potential or existing client firms.

5. **Set up pilot schemes for IHGEs to be scaled up if successful**

Policy experimentation is key to addressing existent deficiencies in the start-up ecosystem and policy landscape, this is particularly the case for countries with limited institutional capacity, such as those from the SPECA sub-region, where ‘policy overreach’ or the misallocation of support measures can pose risks and limit benefits. Small-scale pilot schemes could be designed at the regional level or for a specific industry as a first step. Through piloting, successful schemes can be scaled up and unsuccessful ones revised or scrapped (Radosovic, 2021). While not an exhaustive list, mentoring programmes, co-investment schemes and support for internationalization were identified as key areas that would benefit greatly from pilot schemes.

6. **Monitor and evaluate policy initiatives**

The implementation of an IHGE action plan should be monitored by setting up transparent, accountable and flexible mechanisms to implement and evaluate the support measures offered and this should, in turn, feed back into policy design.

The decision to scale up, revise or cancel policies and pilot programmes should be based on the outcomes of such evaluations. More generally, monitoring and evaluation are necessary to assess whether policy interventions are achieving or have achieved their stated goal and are also needed to identify areas requiring improvement. As highlighted in this handbook, countries in the SPECA sub-region lack an evaluation culture. Even relatively basic steps in the evaluation process, such as monitoring the take-up of public schemes (which should be broken down by firm size, sector, age and other characteristics to be truly useful) and surveying recipients on the impacts of support and their general opinions, appear uncommon. Some countries, however, such as Kazakhstan and Uzbekistan, have increasingly invested in regulatory impact assessments to improve business conditions for SMEs in their respective economies.

_There is merit in collaboration across the SPECA sub-region to effectively foster innovative entrepreneurship, contributing to the sub-region’s sustainable development to overcome current crises_

Countries in the SPECA sub-region would benefit from closer collaboration in designing and implementing policies for IHGEs. This is especially true in light of their geographic proximity, relatively small individual markets, the similarity of the challenges they face as well as the close economic and cultural ties they already have.
As one example, qualified trainers and mentors from one country could potentially assist companies in another and vice versa, ideally through the establishment of a support hub spanning multiple countries, thereby expanding the available pool of mentors highlighted as an area for improvement in previous sections. This support hub would supply advisory services (technical assistance) to national SME agencies and related bodies on moving to a portfolio (account management) approach to support IHGEs as well as how, where and when to establish pilot IHGE programmes across the region.

In the SPECA sub-region, or possibly in just two or three selected countries in the sub-region, a pilot growth/scale-up programme could be run (e.g., with support from an international donor) with a group of 4-5 IHGEs selected from each SPECA country for mentoring and support. One particular advantage to this format would be that companies could build international partnerships to grow their businesses both within the sub-region and beyond, enabling them to then serve as mentors to future cohorts of participating companies. This would represent a major building block in efforts to address the managerial skills gap of IHGEs and support innovative entrepreneurship.

There is also scope for cross-border expansion of a sub-regional level early finance ecosystem. This would, at least to some extent, address structural issues in equity markets in the sub-region, including fragmentation, the lack of liquidity and the limited scale each country faces when attempting to develop such an ecosystem by itself. Funds of funds could also operate on a sub-regional level, similar to examples from the Baltic and the Balkans that were cited in this handbook. The WB EDIF program in the Western Balkans is an especially relevant model for SPECA countries since it combines equity financing and support services for IHGEs into a single coherent package (in addition to a loan guarantee facility for SMEs).

A fund-of-funds operating at the sub-regional level would provide a mechanism for investing in national co-investment funds (with business angels or VC investors) with a focus on supporting companies that can expand sub-regionally and then globally. Also at the multi-country level, further strengthening the sub-region business angel network to encourage cross-border investment through facilitation of relevant networks, adoption of relevant legislation and policy mechanisms will help to promote the investor ecosystem development in the SPECA sub-region. Crowdfunding platforms that match investors and investees could also operate across borders, thereby boosting liquidity and market scale. SPECA Working Group on Investments could be instrumental in providing platform for discussions in this area and reaching agreements between the SPECA countries.

Another recommendation consists of coordinating efforts on export and trade promotion activities across several SPECA countries, including activities such as exhibitions, fairs and the establishment of trade offices around the world could be jointly organized and run, to the extent possible. A prime example in this regard is the Caribbean Export Promotion Agency, a regional export development, trade and investment promotion organization under the auspices of the Forum of Caribbean States (CARIFORUM). The agency runs, among other things, several programmes to boost the export development of and promote investment in 15 different Caribbean countries. The SPECA Working Group on Trade could be instrumental in providing platform for discussions in this area and building consensus between the SPECA countries.
In the short term, there is merit in **sub-regional cooperation in designing, implementing and monitoring IHGE policy**. This should include, but not be limited to, improving statistical data on high-growth enterprises, reviewing the regulatory barriers such firms face as well as harmonizing rules and regulations to facilitate sub-regional initiatives. The SPECA Network of Business Incubators and Accelerators for Sustainable Development under the Working Group on Innovation and Technology for Sustainable Development could help to drive these policy efforts forward, bringing together key national stakeholders, and offering a platform for dialogue on how best to provide support for IHGEs. Discussions should also include how to put these policies into practice, using existing institutions, habits, and incentives, such as the UN ECE Transformative Innovation Network.

The handbook has demonstrated that, despite their common challenges and economic history, SPECA countries are at different stages on the developmental curve when it comes to areas such as business regulation, innovation and skills development, which highlights the scope for mutual policy learning and exchange of good practices among SPECA countries.

UNECE stands ready to support the SPECA countries efforts in strengthening their national innovation systems, promoting cooperation on innovation for sustainable development, as well as fostering innovative entrepreneurship and IHGE policy to enable a sustainable and resilient post-COVID 19 recovery and transition to a more circular, green and digital economy.

### Notes


2. [https://techukraine.org/ecosystem-map/](https://techukraine.org/ecosystem-map/)

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UNECE supports closer cooperation among its 56 member States in the pursuit of the UN Sustainable Development Goals (SDGs) and the 2030 Agenda. Its Economic Cooperation and Trade Division (ECTD) assists member States with economic integration and in promoting and enabling a better policy, financial and regulatory environment. To foster sustainable development, including progressing towards an increasingly circular economy and building resilience to events such as the COVID-19 pandemic, experimentation with ideas and technologies must become systematic across UNECE economies and societies.

The Innovative Policies Development Section within ECTD focuses on promoting a supportive environment for innovative development and knowledge-based competitiveness. Activities include policy dialogue, recommendations and good practices, analytical reviews, and capacity-building.

The United Nations Special Programme for the Economies of Central Asia (SPECA) was launched in 1998 to strengthen subregional cooperation in Central Asia and its integration into the world economy. The countries of SPECA are Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The United Nations Economic Commission for Europe (UNECE) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) jointly provide overall support to the Programme.

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