



**FRIEDRICH NAUMANN  
FOUNDATION** For Freedom.  
Moldova



MINISTERUL  
EDUCAȚIEI ȘI CERCETĂRII



DIRECTIA GENERALA EDUCATIE, TINERET SI SPORT  
CONSILIUL MUNICIPAL CHIȘINĂU



Centrul Municipal  
de Tineret Chișinău



LABORATORY OF INITIATIVES FOR DEVELOPMENT

# Overview on the startup ecosystem.

Best practices and recommendations for  
Moldova

# 2023

## Authors:

**Erki Raja** - Estonia

**Monika Kajalidis** (Moje Panstwo Foundation) - Poland

**Mihaela Grumeza** - Moldova

**Elena Oprea & Dan Tataru** - United Kingdom

**Mircea Vădan** (Activize, RoStartup) - Romania

## **Summary of the Regional policy paper on development of the startup ecosystems**

In the following pages, together with our partners we have analyzed various European startup ecosystems with the aim to discover best practices, examples that we can use in Moldova and, in general, learn from more advanced ecosystems in terms of funding, startup programs, legal structure, ecosystem infrastructure and state support. We've chosen experts from Estonia, United Kingdom, Poland, Romania and Moldova to illustrate these practices. While in the last part of the document we dive into the Moldovan startup ecosystem analysis. We hope that this paper will serve in improving the local ecosystem and provide inspiring ideas for the ones interested in developing the startup ecosystem in Moldova.

The Policy Paper is developed in the framework of the project “Activating the Economic Potential of Youth” developed by the Laboratory of Initiatives for Development (LID Moldova) with the support of the Ministry of Education and Research of the Republic of Moldova, the General Directorate of Education, Youth and Sport of the Chisinau Municipal Council and the Friedrich Naumann Foundation for Freedom.

<b>General Introduction</b>	<b>3</b>
<b>Estonia - startup ecosystem overview</b>	<b>4</b>
Country Introduction	4
Current state of the startup sector of Estonia	5
Startup Estonia and the startups ecosystem	7
The challenged ahead and the next steps	11
<b>Poland - startup ecosystem overview</b>	<b>12</b>
Country Introduction	12
National policies for the startups support	12
Facilities for startup-ers and young entrepreneurs	13
Quantitative indicators about the startup ecosystem overall in the country	15
<b>United Kingdom - startup ecosystem overview</b>	<b>17</b>
Country Introduction	17
Funding provided	18
Supportive actions	21
Visas for foreigners working in the innovation / startup field	23
<b>Romania - startup ecosystem overview</b>	<b>24</b>
Country Introduction	24
General statistics	24
Programs for startups	24
Venture Capital Overview in Romania	25
Fundraising challenges for startups and proposed solutions	26
Public funding existing	26
Verticals that are growing in Romania	26
Technology Transfer	27
RoStartup initiative	27
<b>Moldova - startup ecosystem overview</b>	<b>29</b>
Overview of the Moldovan ecosystem	29
Description of problems	32
Impact of the program	33
Recommendations for Moldova	35
For the government:	35
For CSOs	36
Conclusion	36



# General Introduction

---

The tech industry in Eastern Europe has been booming for some time now, with venture capital investment in the region reaching record heights. Tech startups are flourishing, government policy is becoming more supportive of the startup ecosystem, and there are a growing number of accelerators, conferences, competitions and other resources available to help entrepreneurs get off the ground.

The influx of venture capital into Eastern Europe has been remarkable in recent years, venture capitalists and private equity firms invested over \$5 billion into tech companies in the region last year (source: [Crunchbase](#)). Investors continue to put money into promising startups across the region. One major driver behind this surge in investment is increasing interest from foreign investors who are looking for new opportunities. With its abundance of highly-skilled engineers and developers as well as favorable regulatory environments, it's easy to see why Eastern Europe has become such an attractive destination for investors looking to diversify their portfolios.

The past 10 years dozens of accelerators offering mentorship programs, workshops and networking events were created. Numerous conferences and competitions offering cash prizes and granting schemes were launched. All these elements combined together create a supportive environment where startups can develop their ideas with less fear of failure or lack of resources - something that was not possible 5 years ago.

Over the past few years, governments in Eastern Europe have become increasingly aware of the positive economic impact that startups can have. As a result, many countries are implementing policies designed to encourage entrepreneurship and innovation.

For example, Poland recently launched "Startup Poland" - an initiative aimed at helping startups access capital and develop their products by providing grants, tax reliefs and other forms of support. Similarly, Estonia has created a series of programs designed to attract foreign investment and foster innovation among local startups. Romania is creating several funding schemes for venture capital creation, both on national level and on regional / local level, while innovation agencies are supporting educational initiatives.

As a region, we are facing macroeconomic challenges which in turn are hitting on the startup ecosystem. The war is having a big impact on the economic situation. We have seen high levels of inflation, lower investor confidence, thus some limitations in access to financing for startups. As well, on policy making, there are various laws that need to be adapted in order to increase the attractiveness for external investors, to lessen the effort to grow as a startup, to facilitate easier access to angel funding and to raise the impact of startup programs.

Overall, despite the challenges, there's never been a better time for aspiring entrepreneurs looking to start businesses in Eastern Europe than right now. With government policy becoming increasingly supportive towards startups; rising levels of venture capital investment; plus a decent number of acceleration programs, resources & events available – it is a good region for startup initiation and we hope it will get better in the coming years.

In this context, Moldova sees its growth as well, together with the other countries. Of course, each country has its own challenges and especially Moldova has many steps to make in this direction and we hope this paper will contribute to this growth.

# Estonia - startup ecosystem overview

---

## Country Introduction

After regaining their independence in 1991, the state of Estonia needed a way forward to catch up with the western countries and saw the digital revolution as a potential catalyst for further development. Estonia carried out projects to develop their IT infrastructure and know-how with the most notable project called **Tiger Leap** (*Tiigrihüpe*), which focused on the development and expansion of computer and network infrastructure in Estonia, with a particular emphasis on education. This project enabled internet access to all Estonian schools and allowed schools to update their computer labs in order to teach the new generations about the potential possibilities of computers and the internet. Additionally, in 2000 **all government proceedings were digitized** and made accessible to the public in order to find ways to create more efficient and accessible services to its citizens, followed by developing country-wide API (*application programming interface*) powering Estonian digital infrastructure called X-Road and releasing **ID Cards** as digital authentication system for all citizens and residents in 2002. These actions created the foundation for further digital advancements for the country.

A pivotal point in the country's startup scene history was in 2003, when Estonian programmers developed the initial version of VOIP software (*voice over internet protocol*) which later became known as **Skype**. The successful exit to eBay and Microsoft set a significant example and therefore sprung a wave of young entrepreneurs with a vision to follow in their footsteps. Combining the newly acquired mindset with smart policy and infrastructure decisions such as the further digitalisation of government services and adoption of the idea of a paperless society, paved the way for development of the startup scene, although the country was still lacking a corresponding ecosystem. In 2006, the governmental **Estonian Development Fund** (*Eesti Arengufond*) was established with the aim of supporting and stimulating changes in the Estonian economy. With the help of development monitoring, the task of the Development Fund was to find new sources of economic growth, to contribute to the implementation of innovative solutions that emerged from monitoring with pilot projects, and to invest risk capital in Estonian knowledge-intensive technology companies that think in a new way and operate ambitiously. Alongside these events, the first and second generation of successful startup **founders started re-investing their capital** into local emerging high potential companies, which fuelled the development of the startup sector. The founders established the first official startup community called Startup Leaders Club in 2009, now known as Estonian Founders Society and the same year the Estonian Private Equity and Venture Capital Association (EstVCA) was created.

The following years saw a significant development in the scene with the emergence of hackathons and community platforms in **Garage48** and investor associations such as Estonian Business Angels Network (EstBan) and Baltic Innovation Fund. During the same period, **Startup Estonia** started their first pilot activities under the Development Fund. Up until this point, the Estonian startup scene was a community-driven network, where the initial successful founders created new startups, raised capital and reinvested it in local startups. In order to formalize and to support the scene, Startup Estonia was initiated in 2015 by an executive order of the Minister of Entrepreneurship with the goal to draw from the successes of Estonian flagship startups and support the transformation from one-shot successes towards a fully-fledged startup ecosystem.

Over the years, Startup Estonia devised initially as a support mechanism for disseminating European structural funds (2014-2020) to boost startup-focused initiatives, evolved into the cornerstone umbrella organization for the startup scene, partnering with and uniting with startups, incubators, and accelerators both in the private and public sector. Today Estonia has a vibrant startup community with more than 1 400 startups, including 10 who have reached the unicorn status.

## Current state of the startup sector of Estonia

Estonia has over 1 400 registered startup companies, which is nearly 6 times the European average per capita (see Figure 1). Estonia does not only boast with a high quantity of registered startups, but with the quality as well, as 10 of the companies have grown into unicorns, meaning they have a valuation of over 1B EUR – **7.7 unicorns per million capita** makes Estonia the leader in unicorns per capita in Europe. Additionally, Estonia has raised the most VC investments per capita in Europe as well, followed by Sweden and Switzerland (see Figure 2). The startup sector is the fastest growing economic sector in Estonia with annual employment growth of over 30% on average.

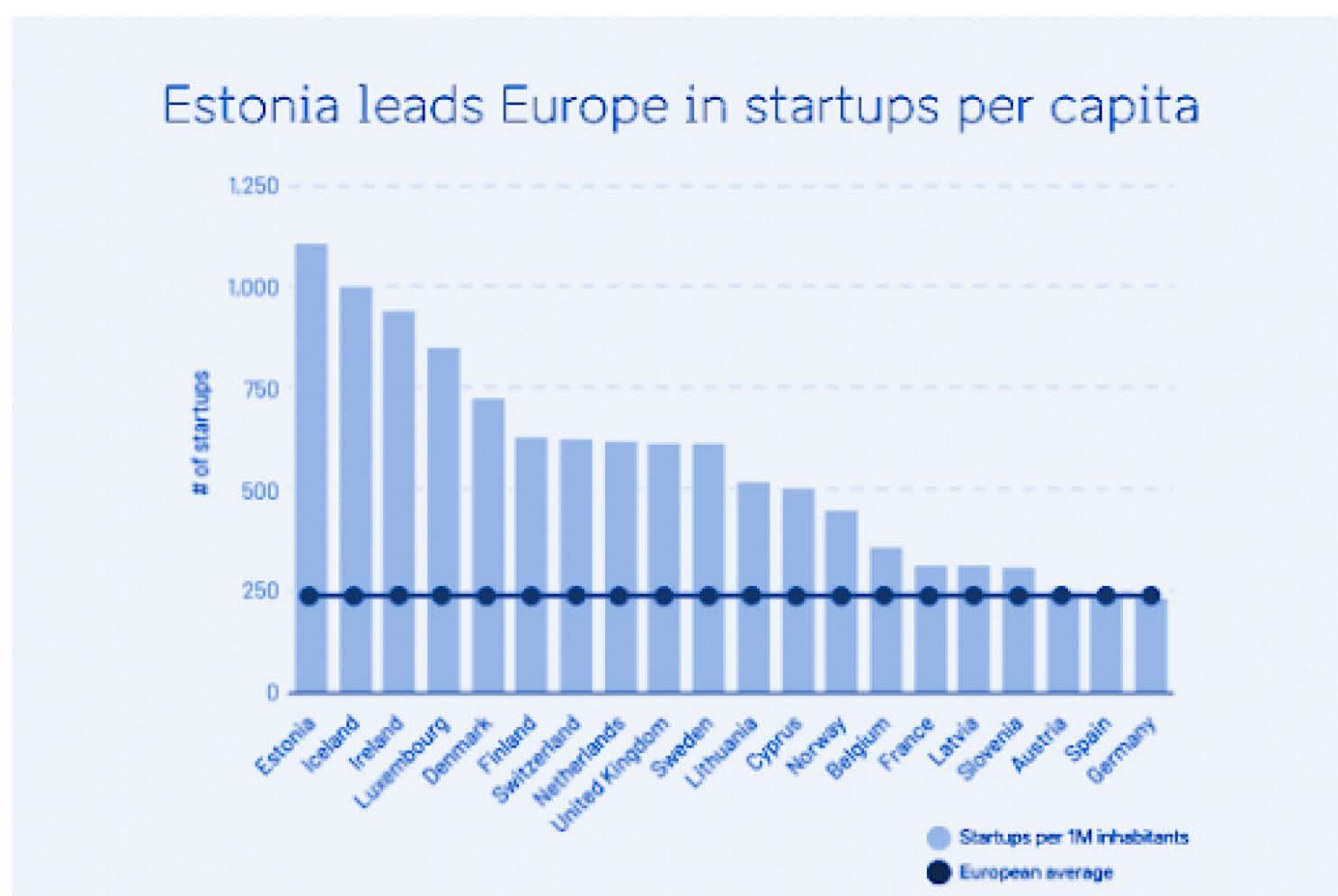


Figure 1. Number of startups per one million capita by country. Source: dealroom.co

As of the first half of 2022, investments into Estonian startup sector have reached **1B EUR benchmark** with startups **employing nearly 10 000 people** (1,6% of the total active workforce; +36% compared to 2021 H1) and have paid **83,4M EUR in employment taxes** (+46% compared to 2021 H1). The Estonian Startup Database is home to 1 442 startups with 32% of the startups in the database having been active for 5 or more years. The largest sector in terms of active startups is Business software & HR with 258 active companies (18% of all startups in the Estonian Startup Database), followed by FinTech with 193 active startups (13%) and Consumer products & services with 156 active companies (11%).

The current top employer is [Wise](#) (previously known as Transferwise) with 1 444 employees and 226 new hires this year, followed by [Bolt](#) with 1 231 employees and 210 new hires, [Swappie](#) with 592 employees and 179 new hires and lastly [Veriff](#) and [Starship Technologies](#) with 423 and 243 employees respectively. The aforementioned five companies constitute for nearly 41% of the whole employee count of the Estonian startup sector.

### Estonia has raised the most investment per capita of any country in Europe.

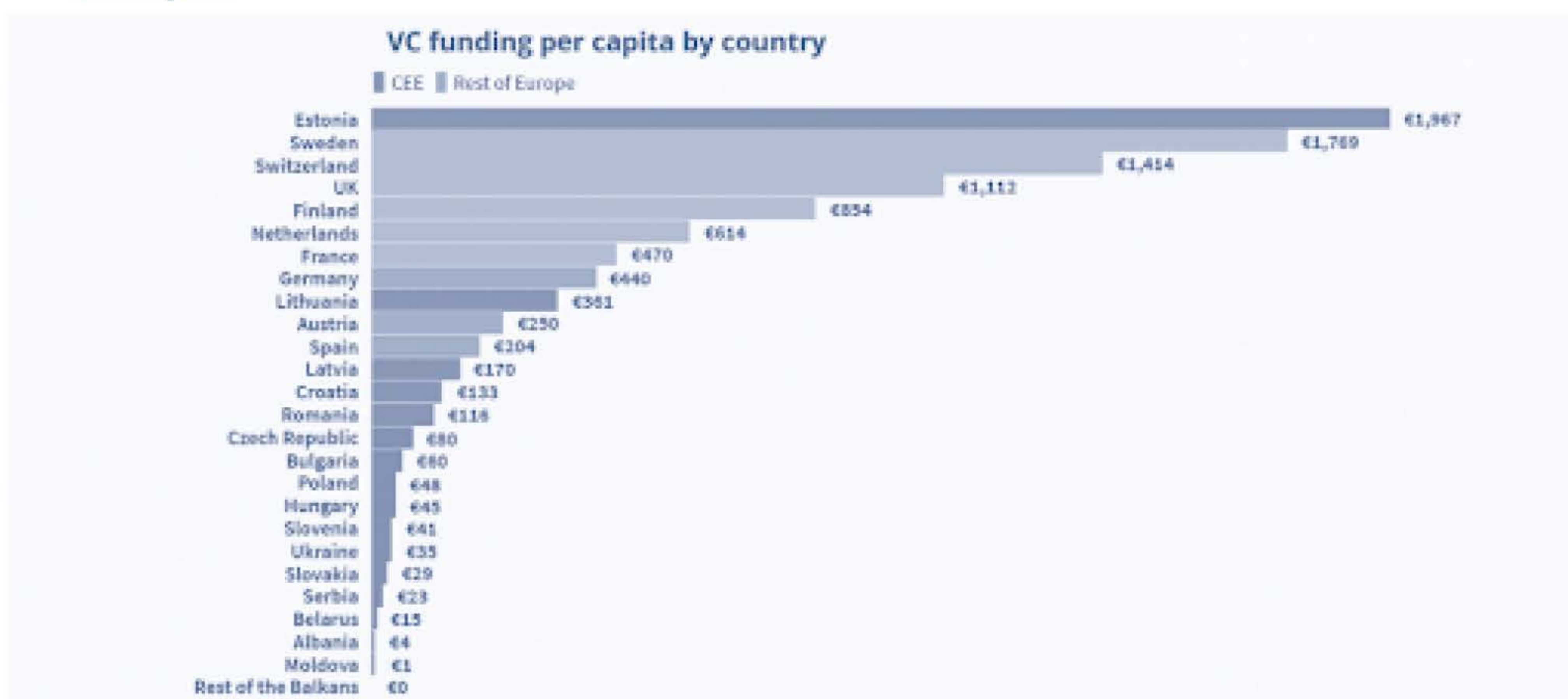


Figure 2. VC funding per capita by country. Source: dealroom.co

According to Statistics Estonia, the average monthly gross salary in Estonian startups over the first half of 2022 was 2 840 EUR, which is approximately **two times higher than the Estonian average**. The average salary rate in startups has risen 6% compared to the same time last year as the startup sector continues to provide one of the most competitive wages in Estonia. According to the quarterly data of the Estonian Tax and Customs Board, Estonian startups generated a record-breaking 958M EUR in turnover in the first half of 2022, a 68% increase compared to the same period in 2021 (571M EUR).

An important measure to mention is the [Estonian Startup Visa programme](#), initiated by Startup Estonia in 2017, which helps non-EU founders grow their startup in Estonia, and also facilitates Estonian startups in the process of hiring non-EU talent. According to Startup Estonia, all of the largest startups use the Startup Visa today. In 2021, 310 people worked in startups established with the help of the Startup Visa programme with 4.2M EUR paid in labor taxes to the state with a total turnover of 37.4M EUR. Last year, Estonian start-ups hired 925 workers from abroad with the help of the Startup Visa programme. The countries with the highest numbers of workers coming to Estonia are Russia, India, Brazil, and Ukraine.



## Startup Estonia and the startups ecosystem

Even though the Estonian startup scene initially emerged as a community-driven network without significant state intervention, the state identified the need to create a unifying umbrella organization in cooperation with market makers in order support new startups and entrepreneurs and to formalize a corresponding startup ecosystem.

Today, Startup Estonia serves as the main supporter and enabler of the Estonian startup community, mediating between founders, ecosystem members and the governance and public sector. It is also the international representative of Estonian public sector driven startup initiatives. In order to fulfill the evolved goals, Startup Estonia areas of activities are divided into four fundamental core pillars:

Strong Ecosystem	Smart people	Smart Money	Friendly Regulations
Strengthening the Estonian startup ecosystem – uniting and building the community through different events and activities, creating and executing unified marketing and branding strategies, assisting regional development and science-based decision making;	Co-organizing impactful startup events with the community, advocating diversity in age, gender, culture, and backgrounds;	Working on educating the local investors and attracting foreign investors to Estonia, helping available resources and vital know-how to reach startups and the community;	Working on eliminating regulative issues and barriers that are complicating the process of operating a startup, investing or raising funding in Estonia, and implementing startup friendly regulations such as the Startup Visa.

Figure 3. The four fundamental pillars of Startup Estonia.

Even though the initial success with Skype skyrocketed Estonia onto the scene and provided a critical foundation for further development, the next steps of developing a functioning startup ecosystem is crucial for providing sustainability for the future. The Estonian start-up supporting ecosystem is in the developing stage, consisting of about **110 organizations** that offer their help and services to startups in various stages of development, starting with entrepreneurship and innovation training and mentoring programs, incubators and accelerators, co-working communities and ending with finding suitable partners and investors for scaleup companies.

Most of the training programs, accelerators and incubators are offered by foundations or non-governmental non-profit organizations, which get their funding from both public (Estonian Research Council, local municipalities, universities) and private sources (large companies and interested parties) and work in collaboration between the public and the private sector. The Estonian coworking communities can be divided into two categories – communities designed for startups with relevant events, training etc (**Lift99**, **Palo Alto Club** etc) and communities that focus on offering flexible workspace (**Workland**, **SpringHUB** etc). In both cases the co-working opportunities are moderately costly and there are no significant price reductions for startups. In order to thoroughly understand the current Estonian startup ecosystem landscape provided by Startup Estonia and the associated opportunities, it is best described from four different stages of startup development:

Startup Mindset	Pre-Startup	Startup	Scaleup
Discovering & Understanding	Ideating & Concepting	Commitment & Validation	Scaling & Establishing

Figure 4. The development stages of an Estonian startup.

## Startup mindset

The first stage of development is cultivating the initial startup mindset and educating individuals about the potential opportunities and developing the habit of working together with likeminded people. The first stage is mainly targeted towards students and people who would like to know more about the sector as a whole but who are unaware of how and where to start.

Similar to the following stages, it comprises mentoring events and workshops, incubators and accelerators and co-working communities to give the individuals an understanding of how the ecosystem operates and what it takes to get from an innovative idea to a working product and/or service. These organizations are waiting for the young curious individuals, who are keen to create innovative projects for launching new products and solutions with the help of technology tools.

The mentoring programs and events to create the startup mindset include most notably [Changemakers](#) (entrepreneurship programs for youth aged 14-19), [Garage48](#) (ideation hackathons for all ages), [Loomehäkk](#) (ideation hackathon), [Spinner Program](#) (entrepreneurial internship program in technology companies for youth aged 16-18 from the outskirts of Estonia), [Edu Tegu Starter](#) (business idea development program), [Hüppelaud](#) (summer program for youth focused on products and rapid prototyping), [Ajujaht](#) (the largest business idea competition in Estonia), [kood/Jõhvi](#) (modern and international coding school), [sSTARTUp Day](#) (the biggest startup-minded festival in the Baltics) and many others targeted towards specific groups (IT, entrepreneurship, and technology programs for girls and women like [Future Heroes](#), [digigirls](#), [HK Unicorn Squad](#), [Techsisters](#) etc).

There are different projects, incubators and accelerators created to bring these like minded individuals together and work as groups, including [TalTech Mektory](#) (pre-incubator for seed startups), [Cleantech forEST](#) (accelerator for Clean and GreenTech) and [Nula](#) (incubator for new societal initiatives). In both cases the co-working opportunities are moderately costly and there are no significant price reductions for startups. Therefore, these communities are mostly used in the later stages of development.

There are even funding opportunities (albeit limited) for this specific group of individuals, including [Heateo Haridusfond](#) (Good Deed Education Fund), which supports initiatives solving problems in the education sector and [Lift99 RocketFuel scholarship](#), which aims to bring innovative minds to the world of IT and startups.

## Pre-startup

The second stage is designed and targeted towards individuals who already have an idea of a scalable, innovative product or a service with a clear concept and set milestones on how to get there. The goal of this stage is to support the individuals and ideas with resources and toolkits to develop the early prototype, build teams and to test the ideas with potential clients. The main focus of the stage is to find partners for the development of the prototype through mentoring and supporting networks.

Similar to the previous stage, it comprises mentoring events and workshops, incubators and accelerators and co-working communities but has a larger emphasis on bringing together individuals with distinct ideas and potential investors.

The mentoring programs and events include [Loomehäkk](#) (ideation hackathon), [Garage 48](#) (ideation hackathons for all ages), [Founderly mentoring](#) (bringing together other founders and industry experts), [EstVCA mentoring](#) (Estonian Private Equity & Venture Capital Industry), [startup grind](#) (community of startups, founders, innovators and creators) and many others.

Compared to the previous stage, pre-startup stage has a lot more incubators and accelerators to take part of, including [Alpine House](#) (1-year training program of startups), [Microsoft for Startups](#) (supporting founders from idea to exit), [prototron](#) (accelerator and grant program), [Ideelabor](#) (entrepreneurship training and pre-incubation services for all University of Tartu students), [DIGIX](#) (incubator for Creative and MediaTech), [Health Founders](#) (accelerator for health technology), [startmeup](#) (incubator for early stage startups in natural sciences) in addition to aforementioned [Mektory](#), [Cleantech forEST](#), [Ajujaht](#) and others.

In this stage, the variety of different co-working opportunities expand significantly, most notably with startup communities with the likes of [Lift99 HUB](#), [Palo Alto Club](#), [Draper Startup House](#) and workspace sharing communities like [Sunly](#), [Workland](#), [theWorkshop](#), [SpringHUB](#), [Edukontor](#), [Forwardspace](#) and many others providing coworking communities in many different regions of Estonia.

Compared to the previous stage, the companies and ideas in this maturity stage have a lot more funding opportunities from different organizations and VC funds including the likes of [Lift99](#) (mostly pre-seed investments), [Lemonade Stand](#) (early stage tech startup investments), [Superangel](#) (Early stage investments from entrepreneurs to entrepreneurs), [ESTBAN](#) (seed stage investments), [the better fund](#) (VC fund for female founders), [Thorgate Ventures](#) (pre-seed to A-round investments) and [United Angels VC](#) (pre-seed to A-round investments).

## Startup

The third stage is designed for the more matured startups who have already developed a minimum viable product (MVP) and have signed the shareholder agreement between founders and who are looking for investments to accelerate the business with the help of angel investors, accelerators and investment funds. Ecosystem partners in this phase will also help the founders with market validation and scaling.

Previous mentoring activities focused mainly on the understanding of the so-called bigger picture, but as the companies are getting more knowledgeable about their specific bottlenecks and roadblocks, these mentoring programs designed for this level of maturity are more specifically designed to cater to the needs of the companies and its founders in their respective fields of the activity.

Most notable events and mentoring programs include [Latitude59](#) (flagship startup and tech event of e-Estonia), [SEB mentorship program](#) (business growth), [ESTVCA mentoring](#), [Estonian Founders Society](#), [KPMG New Ventures](#) (growth and innovation), [Elamuslabor](#) (team building trainings) and [.Cocoon de-acceleration program](#) (focusing on founders' personal development).

In addition to previously mentioned incubators and accelerators (Ajujaht, Alpine house, Elisa, Health Founders, Microsoft for Startups), new opportunities arise for startups in this stage with [Startup Wiseguys](#) (accelerator for B2B SaaS, Cyber and FinTech), [EIT Climate-KIC](#) (zero-carbon economy), [Beamline Accelerator](#) (CleanTech), [Buildit](#) (hardware and IoT), [Technopol Startup Incubator](#) (ICT, Green and HealthTech), [Tallinna Loomeinkubaator](#) (CreativeTech), [Telia Vunk](#) (B2B and B2C startups) and others.

As the main focus of this stage is find investments, the potential scope of investors is significantly wider than previously with the likes of [Contriber Ventures](#) (NewNordic teams), [Change Ventures](#) (seed stage venture capital in the Baltic States), [Fund Fellow Founders](#) (seed stage and A-round investments), [Fundwise](#) (equity crowdfunding), [karma.vc](#) (early stage and A-round investments), [Limitless](#) (early stage investments), [SEB FinTech investments](#), [Spring Capital](#) (seed and small cap equity investments), [Tera Ventures](#) (seed and early stage), [United Partners](#) (investment and finance advisory) in addition to aforementioned parties in the previous stage.

## Scaleup

The fourth and final stage is designed for scaleups, who already have established themselves with their product and/or service showing a clear and measurable user growth and have successfully attracted significant funding and are looking for help to develop from a local or regional company into a global one with the help of relevant partners.

The primary goal in this stage is to find the right investment partners in order to scale up significantly, find new markets and establish a global foothold. The main resources available (mentoring, incubators and accelerators, funding etc) are mostly the same as in the previous startup-phase, with the addition of the [Lighthouse Development Program](#) with the aim of connecting Nordic and Baltic FinTech communities.

## The challenges ahead and the next steps

According to the Startup Estonia White Paper 2021-2027 the startup scene is still facing many challenges that need to be addressed in the upcoming years.

- Firstly, the decision-makers have not systematically addressed startups and the startup sector as an integral critical development priority. The collection, analysis and implementation of real-time, market-driven data to steer startup and ecosystem focused policy is at an early stage;
- Secondly, the lack of talent is hindering the development of sector, as the sector exceeds what the market and the education system offers;
- Legal challenges constrain the growth of foreign investments, local investments are angel driven and focused on the early stage of the startup life-cycle;
- At a mature stage, successful startups depart Estonia to more attractive destinations, mostly due to access to increased market, capital, or talents. Estonia lags in offering competitive business development and relocation services for sustainable growth;
- The startup ecosystem is mainly concentrated around major cities of Tallinn and Tartu (95%) and the capacity to support entrepreneurship and startups in other regions is low.

In order to deal with the challenges, Startup Estonia has formulated four main strategic priorities up to year 2027.

- Enabling a forward-looking startup ecosystem, including regional hubs;
- Promoting an entrepreneurship and startup mindset in science and R&D, and supporting the growth of scaleups;
- Ensuring a diverse and competitive startup ecosystem through greater diversity in gender, age, and cultural or geographic background;
- Implementing Open data-driven steering and foresight for the Startup Ecosystem.

# Poland - startup ecosystem overview

## Country Introduction

The development of the startup ecosystem gradually forces changes in the functioning of the broadly understood institutional and financial environment - from shaping entrepreneurial attitudes at the level of primary and secondary education, to the development of financial institutions that provide opportunities for long-term financing and stock exchange trading. At the same time, the challenge is the still low social acceptance of business risk and undertaking business activity by people with innovative ideas and the ability to implement them.

Six years ago, at Impact'2016, the first component of the largest program for young innovative companies in Central and Eastern Europe was announced - **Start in Poland**, which is an "umbrella" over government activities for startups. The program supports young, innovative companies locating their business in Poland at every stage of their development, starting from the incubation and acceleration phase, through development and international expansion.

## National policies for the startups support

The Act on Innovation, amending certain acts to improve the legal environment for innovative activity<sup>1</sup> deployed in November 2017 and the Act on the Protection of Industrial Property<sup>2</sup> amended in March 2021 are two main legislative pillars for startups in Poland.

The whole startup ecosystem is under the Ministry of Development and Technology's umbrella, however in practice it is operated by two governmental agencies:

- 1 Polish Agency for Enterprise Development (PARP<sup>3</sup>) - is a government agency that has been providing support to entrepreneurs in the implementation of competitive and innovative projects for over 10 years. The primary objective is to develop the sector of small and medium-sized enterprises in Poland.
- 2 Polish Development Fund (PFR<sup>4</sup>) - A strategic company offering instruments for the development of enterprises, local governments and private individuals, investing in sustainable social development and economic growth in the country.



Figure 5. The structure for the government agencies involved in the Polish startup ecosystem

<sup>1</sup> The Act on Innovation of November 9th 2017 with later amendments

<sup>2</sup> The Act on the Protection of Industrial Property of June 30th 2000 with later amendments

<sup>3</sup> Polish Agency for Enterprise Development official website (<https://www.parp.gov.pl/>)

<sup>4</sup> Polish Development Fund official website (<https://pfr.pl/>)

Legislative<sup>3</sup> activities are an important element of the innovation ecosystem in Poland. Within three years, it was possible through the so-called innovation bills, to create very favorable tax conditions for investing in companies in research and development. The R+D tax relief is very popular, thanks to which over 1000 companies have saved EUR 35 million in the last two years. The value of the research and development works submitted for relief amounted to nearly EUR 45 million.

From the beginning of this year, the IP Box tax relief is also in force, which provides CIT and PIT in the amount of 5% for those companies that commercialize the R&D works they have developed. The new tax relief completes the entire cycle of innovation - from research to the sale of products or services based on research results.

The legislative environment of venture capital funds has also improved significantly. The aim of the Ministry of Development and Technology is to strengthen the development of startups in Poland, increasing their competitiveness and inhibiting the "exporting" of Polish ideas abroad. The new regulations are to facilitate setting up a company and obtaining the capital needed to develop innovative activities.

## Facilities for startup-ers and young entrepreneurs

The most important instruments of the startup support ecosystem in Poland have been consolidated into **Start in Poland**.<sup>6</sup> It is the largest startup program of this type in Central and Eastern Europe. Its budget is approx. EUR 65 million. The government estimates that with this help, 1.5 thousand jobs will be created in Poland.

It concentrates equity instruments, i.e. activities in which an external investor provides capital to a startup in exchange for some shares. They are implemented by the Polish Development Fund. On the other hand, in the field of acceleration programs, where the most important thing is to provide a young company with specific knowledge, contacts and substantive support for large enterprises, the Polish Agency for Enterprise Development plays a leading role. Today, the program includes various types of instruments to support innovative companies at each stage of development - from incubation, through acceleration, to the expansion stage. Most of the activities are financed from EU funds.

The first component of Start in Poland was **Scale UP**.<sup>7</sup> Its essence was the search by an accelerator operating in cooperation with enterprises - recipients of technological solutions - for startups that had products or services that could be used by these companies.

276 startups that cooperated with 66 large companies participated in the program. Until November last year, about 175 different types of implementations had been declared. Today, there are already 201 of them. The demand for solutions created by startups, test implementations and agreements on continuing cooperation is constantly growing. An indirect effect of the Scale Up is also an increasing number of private industry-led investment funds (CVCs) as well as incubators and accelerators run by corporations.

71 large and medium-sized companies have already applied for the new Scale UP (Measure 2.5 of the Intelligent Development Program). This is twice as much as at the start of the pilot three years ago. Importantly, corporations can join the program during its duration. 87 startups are currently accelerating. Young companies from the electromobility industry can use their dedicated activities to help them, among others in winning the first breakthrough order fulfilling the needs of a large business client. The first nine young companies were selected for acceleration. The next recruitment will start soon.

---

<sup>5</sup> Ministry of Development and Technology's official website (<https://www.gov.pl/web/development-technology>)

<sup>6</sup> Polish Development Fund's official website – information on Start in Poland program (<https://pfr.pl/>)

<sup>7</sup> Polish Development Fund's article published on their official website (<https://pfr.pl/>)

**Investment Component** - currently 29 investment funds launched by PFR Ventures<sup>8</sup>, which made the first 9 investments. Over EUR 9 million has already gone to startups. In total, the PFR Ventures Funds established so far have over EUR 45 million for investments (public and private funds). The activities of PFR Ventures are noticed abroad - one third of these VC funds are international in nature.

**Launch platforms** - a separate activity dedicated to startups in Eastern Poland.<sup>9</sup> In the platform pilot, 2,293 submitted ideas were transformed into 210 startups, 102 of which received support for development. The target program, which lasts several months, has already resulted in the submission of almost 1,100 ideas, and their effect is the incubation of nearly 150 startups.

**Legal Aid and Development Loan** - activities supporting the certainty of operation of young technological companies. Last year, 27 startups received legal assistance from selected law firms with experience in helping young companies. The advice applies to the implementation of the investment process: preparing a startup for due-diligence, formal and legal analysis of a draft investment agreement or company agreement, or preparation of an agreement with a contractor. This year, another 40 startups will be supported as part of legal support.

The government has also launched development loans. The budget for 2022 is EUR 5 million. Dozens of young companies are able to receive a preferential loan with sewn-in non-returnable support for refinancing their own contribution in the amount of 10% of the loan value.

**Acceleration Programs**<sup>10</sup> - The acceleration instrument is in operation, which includes the Poland Prize sub-program under which 20 acceleration programs are active, run by 14 accelerators. The acceleration process of 508 startups (selected from 5,975 applications) was completed, and 163 implementations were completed by the end of 2021. In 2021 alone, support was provided to 140 startups, 117 domestic and 23 foreign (out of 1,375 foreign applications). The program identifies the business needs of startups and answers them through an individual approach and provision of services aimed at accelerating<sup>1</sup> its development. The acceleration program assumes supporting startups participating in the program with dedicated services supporting their development and grants, up to the amount of EUR 45,000. Grants are intended for the development of startups' products or services, including adapting technology to the needs of recipients. The accelerators (10) selected in the competition will be required to select min. 25% of startups operating in the following areas: Space Technologies, Fintech, Artificial Intelligence (AI), Smart Plastics, Microelectronics, Industrial Internet of Things (IIoT) / <sup>3</sup>Augmented reality (AR), Smart city, Cybersecurity, Bioeconomy, Pharmaceutical Biotechnology.

---

<sup>8</sup> Polish Development Fund's information on local Venture Capital and Private Equity market, available on their official website (<https://pfr.pl/>)

<sup>9</sup> Polish Agency for Enterprise Development report of 2020 on platforms, programs and grants for startups (<https://en.parp.gov.pl/>)

<sup>10</sup> Ministry of Development and Technology, official website, information on startups in Poland (<https://www.gov.pl/web/development-technology>)



## Quantitative indicators about the startup ecosystem overall in the country

The effects of the development of the startup ecosystem are best seen through the prism of the development of the Venture Capital market. The last two years have seen record investments in Polish startups of funds located in Poland and international groups. During 2021, Polish startups acquired EUR 85 million from investors - this is more than the sum for 2019 and 2020. The number of transactions is growing - 379 of them throughout 2021, and above all - their value. In addition, the number of financial rounds in the range of EUR 2 - 4 million is constantly growing, not only international players present on the Polish market are active, but also domestic investment teams. Startups themselves need much less time to obtain the next financial round. Both these indicators allow the conclusion that the Polish ecosystem of financing innovation with venture capital has not only stabilized but is starting to develop dynamically.

Completely private funds (Polish and foreign) and funds supported financially with public funds (from the SG OP) operate on the VC market. Venture Capital funds launched by PFR Ventures (there are several dozen of them, and the number is constantly changing) started investing in mid-2019. By the end of 2021, they provided financing for 206 enterprises for a total amount of approximately EUR 182 million. Funds with public support operate mainly in seed and pre-seed rounds, at the earliest stage of company development, where the risk of failure is greatest.

### Startup ecosystem in Poland

Enterprise value by launch year<sup>11</sup>

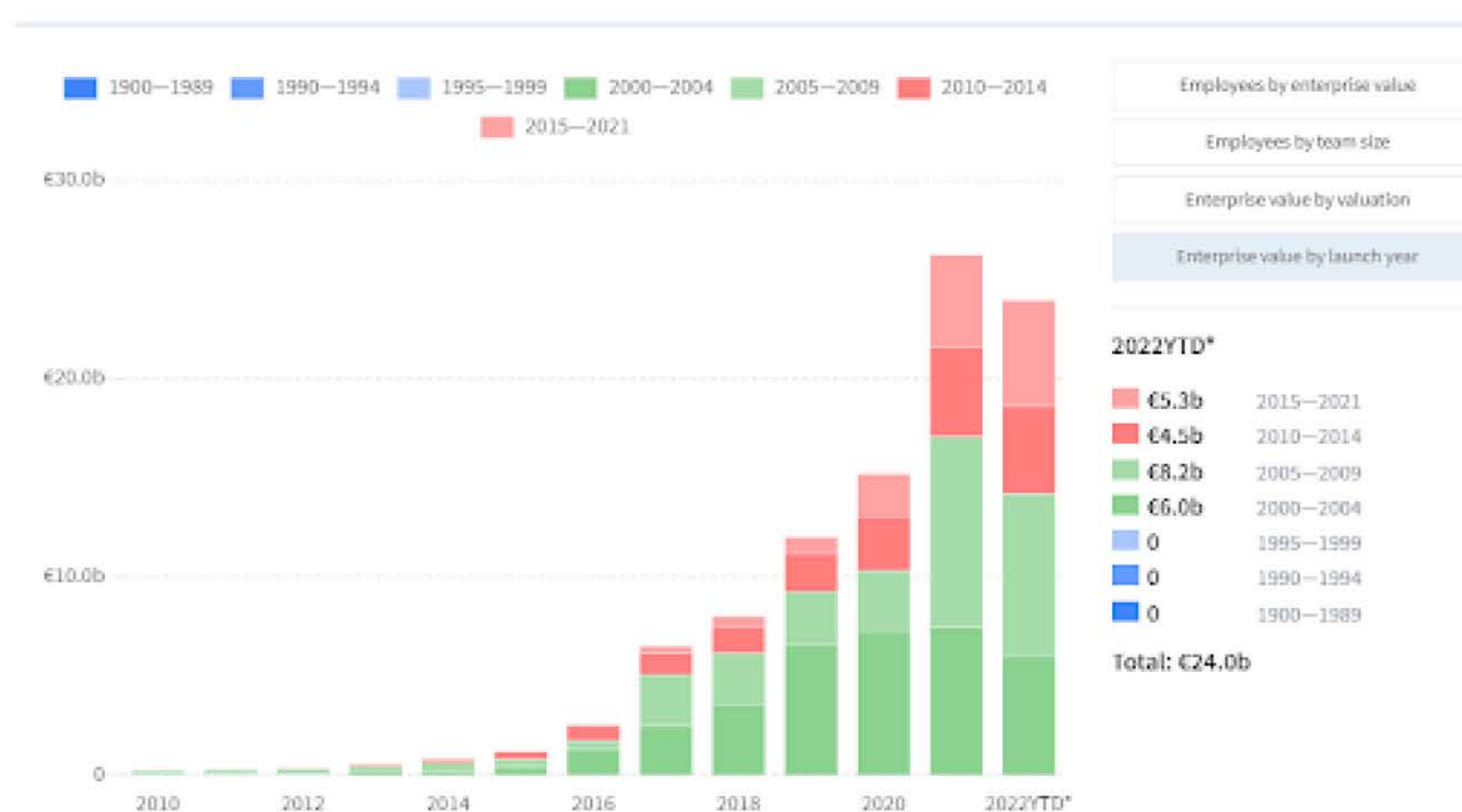


Figure 6. Enterprise value by launch year

<sup>11</sup> Polish Development Fund's report of 2021 on innovation's ecosystem in Poland

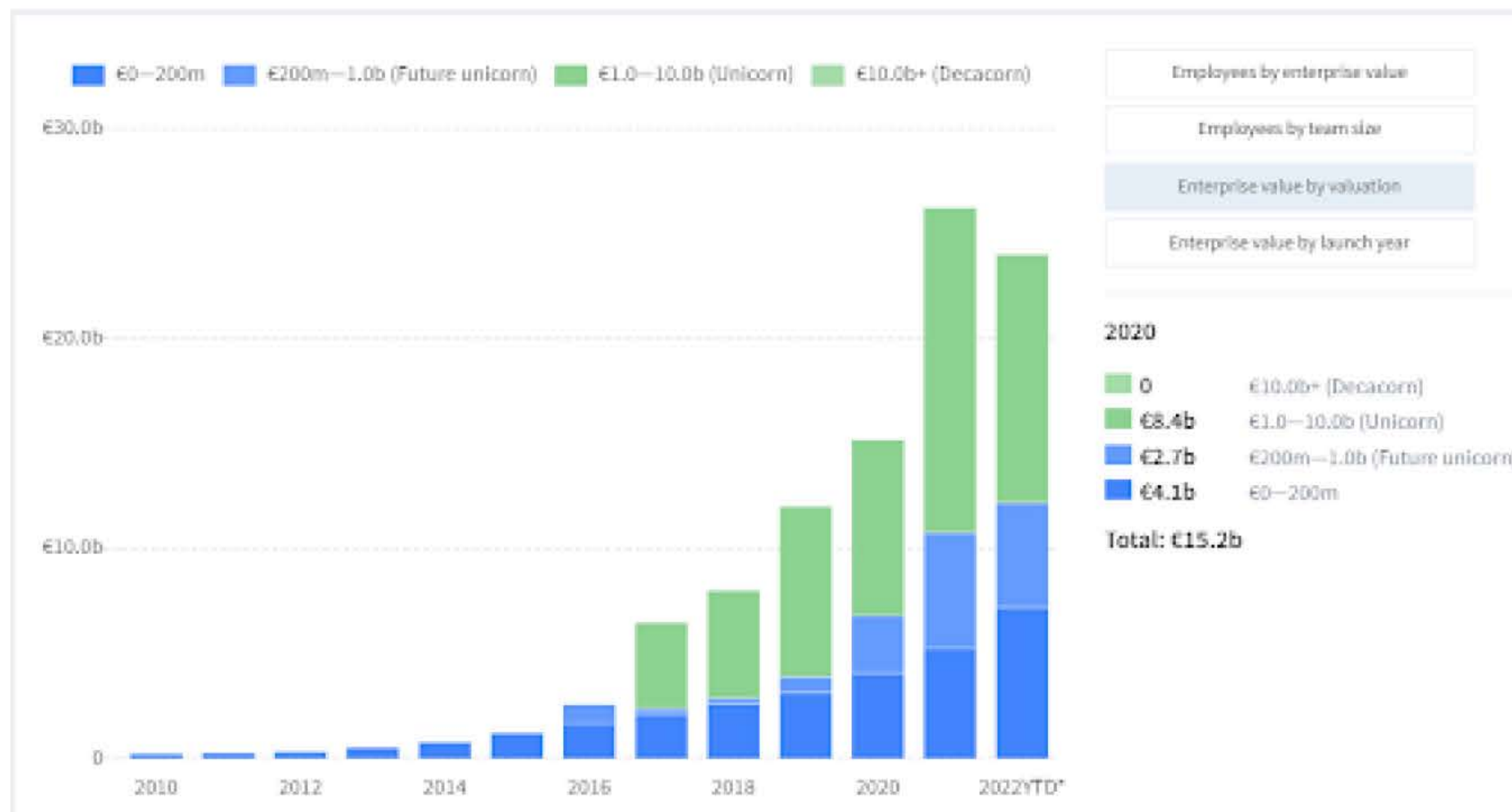


Figure 7. Enterprise value by valuation



Figure 8. Employees by enterprise value

### Rising stars (top 5 in PFR ranking)

<b>GlucoActive</b>	MedTech startup developing the technology of noninvasive glucose measurements
<b>hiPets</b>	All in one platform for pet parents
<b>Her Impact</b>	Edu&social impact startup aiming to help young women to maximize their potential
<b>MyEgg</b>	100% plant-based substitute
<b>HearMe.pl</b>	Innovative way to provide mental health benefits to employees

Figure 9. Rising startups (top 5 in PFR ranking)

# United Kingdom - startup ecosystem overview

## Country Introduction

The UK ranks 2nd globally for startup funding in 2022. UK startups have raised more investment in 2022 than India and China, behind only the US on the global stage. The ecosystem is very active and attracts talent from all over the world.

### UNITED KINGDOM



Figure 10. General metrics about the UK startup ecosystem

The UK has produced 122 billion dollar companies and is home to 258 startups on potential future unicorn track, more than double any European neighbor. Despite London's leading position, a further three UK cities (Oxbridge, Manchester and Bristol) rank among the European top 20 future unicorn cities.

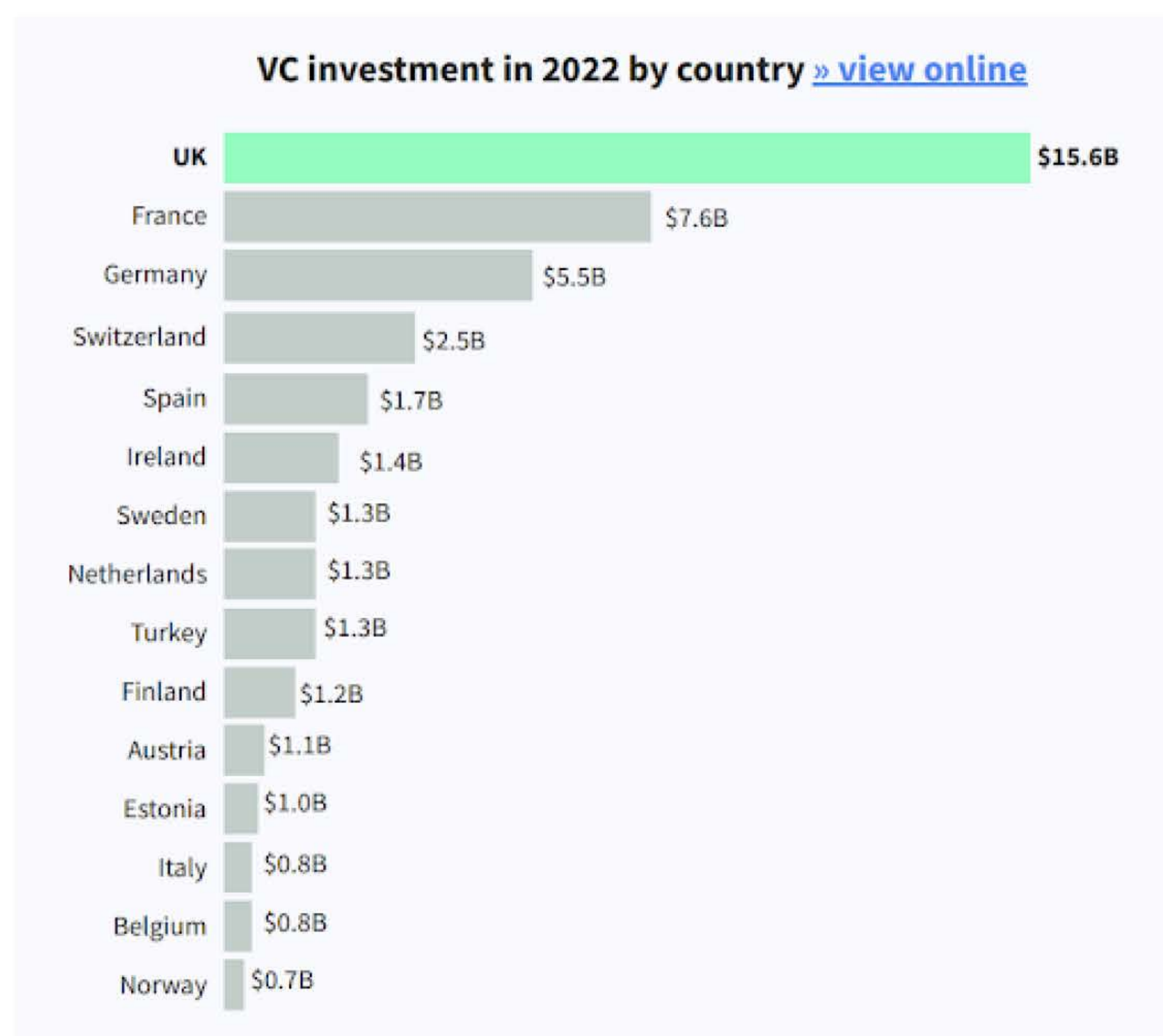


Figure 11. VC investment in 2022 by country in Europe

The UK is also home to 153 potential future unicorns valued at over \$250M.

This year, UK startup investment saw the most significant annual opening on record, with \$11.3B raised by UK startups in Q1, despite the start of global economic uncertainty.

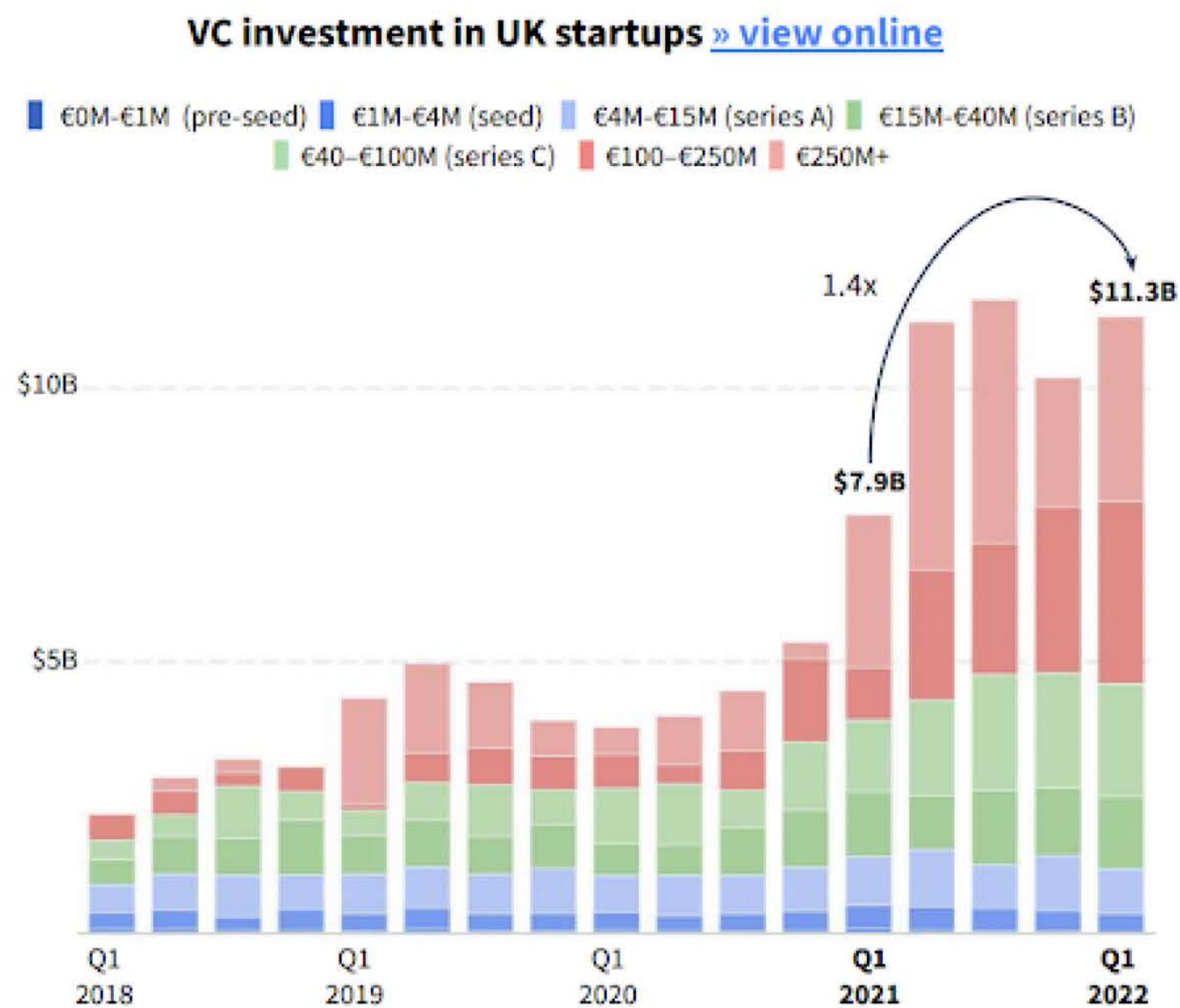


Figure 12. VC investment in UK startups

To enable the startup ecosystem, the UK government provides several forms of support, advice, grants, tax benefits, and investment schemes that offer early-stage companies a substantial competitive advantage on the global market:

## Funding provided

The government offers several funding routes for startups.

### 1.1 StartUp Loans

Reference: <https://www.gov.uk/apply-start-up-loan>

The startup loans scheme offers loans of £500 up to £25,000 at a fixed interest rate of 6% per annum for new business ideas. This is an unsecured personal loan that can be repaid over a period of 1 to 5 years. There's no application fee and no early repayment fee. Another aspect which makes it very helpful for startups is that it does not require any collateral for the loan and is solely based on the person's credit score.

This loan can also be split between founders making the financial burden on a single person less and enabling heightened commitment from every founder involved. The loan program includes support for writing your business plan and free mentoring from professionals for up to 12 months.

## 1.2 Innovate UK

Reference: <https://www.ukri.org/councils/innovate-uk/>

Startups can benefit from a range of funding competitions offered by Innovate UK. It is a national funding agency with a budget of 6 billion GBP for funding and connecting UK businesses to develop new products, processes and services. Innovate UK offers grant funding, innovation loans and expert support. It focuses on innovation and gives grants on specific topics for any companies/startups supporting these directions and who want to develop a related product or service.

How much can startups get from Innovate UK:

- Offers grants of between £25,000 and £10 million.
- Offers innovation loans of between £100,000 and £1 million.

Opportunities may be:

- Themed to fit with one of the Industrial Strategy's grand challenge areas:
- artificial intelligence and data
- aging society
- clean growth
- future of mobility
- Or open to any type of innovation or technology project.

### Case study:

Selftalk startup founded by Moldovan founders established in the UK benefited in November 2022 from a 50,000 grant from Innovate UK to develop their AI self-therapy solution.

The grant covers all their expenses for the first version of the mental health therapy platform. This is of extreme importance due to the fact that it allowed the startup to overcome one of the startups' biggest challenges at the beginning, where accessing significant investments is only possible after having developed a product.

## 1.3 Seed Enterprise Investment Scheme (SEIS) & Enterprise Investment Scheme (EIS)

As part of the UK government's ongoing initiative to support SMEs, the Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS) are each designed to invest in UK-based businesses, an increasingly appealing prospect for potential investors. Recognising the difficulties early-stage companies often face when raising the finance needed for growth, these schemes offer generous tax relief to investors willing to put their faith and money into these ambitious enterprises.

Introduced in 1994, the EIS was the first of the two to be launched – with SEIS emerging as a complementary scheme in 2012. The core difference between the two schemes is that businesses that qualify for SEIS are almost always smaller than those that qualify for EIS – with the qualifying criteria for

the former including a lower maximum number of employees (25 for SEIS vs 250 for EIS) and lower gross assets, amongst other distinguishing factors.

**EIS:** The big brother of the SEIS, the EIS is designed with small and medium-sized businesses in mind and comes with Income Tax relief of 30% against the amount invested – up to the maximum annual investment of £1,000,000 per tax year. For example, an investment of £25,000 would mean tax relief of £7,500. Other vital benefits associated with EIS include:

- Investors will be exempt from Capital Gains Tax (CGT) on any profit from the sale of their shares after they've held them for an initial period of 3 years.
- Investors can defer up to 100% of their investment amount against any Capital Gains Tax they incurred up to 1 year before or 3 years after disposal.
- Shares are generally inheritance tax (IHT) free as long as the shares are held for an initial period of more than 2 years
- If the shares are sold at a loss, investors can offset this against Capital Gains Tax or Income Tax.

**SEIS:** Unlike the EIS, the SEIS is focused on very early-stage companies and offers significantly greater Income Tax relief of 50% against the amount invested. Though the maximum annual investment is smaller (at £100,000 per tax year), when investing in SEIS-eligible businesses, investors can expect exciting tax relief benefits, including the following:

- Investors will be exempt from Capital Gains Tax (CGT) on any profit from the sale of their shares after you've held them for an initial period of 3 years
- CGT write-off of 50% of the investment amount in the same tax year.
- Shares are generally inheritance tax (IHT) free, as long as the shares are held for an initial period of over 2 years.
- If shares are sold at a loss, investors can offset this against CGT or Income Tax.

Investors' equity stake in a single business can be at most 30% to qualify for EIS or SEIS tax relief. For UK investors ready to part with their money in exchange for a stake in an eligible company, the EIS and SEIS schemes offer a chance to support some of our most promising enterprises by providing the crucial cash injection these businesses need to grow and develop.

## 1.4 Research and Development Tax Credits

Reference: <https://www.gov.uk/guidance/corporation-tax-research-and-development-rd-relief>

R&D tax relief or credits are a tax incentive from the UK government designed to encourage and reward businesses for investing in innovation.

The scheme has been around since 2000, and over 39,000 UK companies claimed almost £3.5bn in tax relief last year. The project may include research or development of a new process, product or service or improve an existing one. R & D reliefs support companies working on innovative scientific and technological projects. It can be claimed by a range of companies that seek to research or develop an advance in their field. It can even be claimed on unsuccessful projects.

There are two different schemes available. The Small & Medium Enterprise scheme (SME) and the Research and Development Expenditure Credit scheme (RDEC) - are mainly for larger companies.

The SME scheme is the more common scheme for startups and covers companies with less than 500 employees and either an annual turnover of less than or equal to €100m or a balance sheet totalling less than or equal to €86m.

This government incentive rewards UK firms for investing in innovation by allowing them to deduct 130% of their qualifying costs from their yearly profit (or claim a tax credit of up to 14.5% if the company is loss-making).

For example, if a startup spends around £100,000 on innovation, it will likely get around £33,000 back. They receive it in cash, even if the business is loss-making."

Claims form part of a business's corporation tax return and can be based on expenses such as staff salaries, software costs, materials, utility bills, the hiring of third parties, and volunteer costs in clinical trials. The proportion that can be claimed is different for different types of costs. For example, payments to subcontractors or agencies are reduced to 65% of the original cost. HMRC aims to pay out within six to eight weeks, although one issue to note is that the company has to be considered a going concern.

## 1.5 Other tax benefits

The government has also tried up to this year to attract startups to the country by offering one of the lowest corporation tax rates - 19% in the G20 and the ability to register a company within 48 hours. But, this year, the government has announced that Corporation Tax will increase to 25% from April 2023. The new legislation will also introduce a small profit rate and will set this at 19%.

So, companies with profits of £50,000 or less will continue to pay Corporation Tax at 19%. Companies with profits between £50,000 and £250,000 will pay tax at the main rate reduced by a marginal relief providing a gradual increase in the effective Corporation Tax rate.

## Supportive actions

In terms of support for startups, there are several options:

**2.1 Governmental database for finance and support for businesses** - it maintains a database of schemes offering expertise and advice. This helps startup founders to identify what support opportunities are available quickly.

Reference: <https://www.gov.uk/business-finance-support>

**2.2 Governmental website with business content** - provides information on subjects relevant to startups and other businesses. The website offers tools and guidance for companies and self-employed professionals looking to get support on setting up the business, finances, debt, bankruptcy, importing, exporting, licenses and

license applications, family businesses, childcare providers, waste and environmental impact, patents, trademarks, copyright and designs, scientific research and development.

Reference: <https://www.gov.uk/browse/business>

### 2.3 Tech.London

Tech.London is a comprehensive online platform connecting and supporting London's expanding entrepreneurship ecosystem. It includes all the latest information and resources that people in London need to access opportunities in the tech sector, connect with each other, and grow their businesses. This ecosystem platform is the result of a ground-breaking collaboration between Mayor of London, TechDotX, and a wide number of partners from London's tech community that have a shared commitment to increase jobs, train the workforce of the future, support new business, and ultimately ensure London is at the center of technology innovation.

Reference: <https://www.tech.london>

### 2.4 London & Partners

London & Partners is the business growth and destination agency for London. Their mission is to create economic growth that is resilient, sustainable and inclusive.

Their work helps achieve "good growth" for London and Londoners, as outlined in [The Mayor's Economic Development Strategy for London](#).

Their focus is on:

- High-growth sectors – supporting international and domestic businesses<sup>2</sup> in high-growth sectors to scale through our investment, trade, growth and innovation programmes.
- Visitor economy – attracting visitors and events and developing London as a world-class destination.
- London brand – growing London's global reputation<sup>3</sup> to support economic growth.
- Partnership and ventures – creating partnerships and profit-making ventures to reinvest into our economic growth activity.

Reference: <https://www.londonandpartners.com/>

### 2.5 Global Entrepreneur Programme (GEP)

The UK government's Global Entrepreneur Programme (GEP) helps high-growth overseas companies relocate to the UK. Entrepreneurs or founders of an innovative technology business based overseas are eligible for UK government support to help them move their business to the UK.

The Global Entrepreneur Programme (GEP) offers mentoring and business support to non-UK-based founders to help them set up and scale their businesses from a UK global headquarters.

Support is free and includes:

- mentoring from experienced entrepreneurs
- providing introductions to key networks, including investors
- guidance on how to grow internationally
- continued help from DIT once located in the UK, especially around exporting



GEP participants are mentored by experienced entrepreneurs known as 'dealmakers', who are experienced in setting up, building, scaling and selling technology companies.

Once the founder and company have relocated to the UK, GEP continues to support them through its Alumni Academy Programme.

Reference [www.great.gov.uk/international/content/investment/how-we-can-help/global-entrepreneur-program](http://www.great.gov.uk/international/content/investment/how-we-can-help/global-entrepreneur-program)

## 2.6 Tech Nation

Tech Nation is a government-funded body which provides a range of support for technology companies. There are several programs for founders:

- Growth programmes - their growth stage programmes target the rising stars, fast movers and new leaders, supporting them on the journey of starting up, skilling up and growing up.
- Digital entrepreneurship skills - their academy provides the know-how needed to start, join or grow a digital business, leveling the playing field to diversify the technology landscape.
- Visa scheme - their visa programme fast tracks the acquisition of exceptional people in digital technology, enriching the UK's entrepreneurial workforce with global talent.
- Championing UK digital - their thought leadership showcases data, research and analysis on the UK's digital economy, opening up access to the information, insights and intel that optimize acceleration.

Reference: <https://technation.io/>

## Visas for foreigners working in the innovation / startup field

Foreign workers who want to run a business in the UK can apply for an Innovator visa if an approved body endorses their idea, they're from outside the European Economic Area (EEA) and Switzerland, and they meet the remaining eligibility requirements. They must also have at least £50,000 in investment funds for a new business but do not need this if their company is already established and endorsed for an earlier visa.

Alternatively, they can apply for a Startup visa if they're from outside the European Economic Area (EEA) and Switzerland, meet the remaining eligibility requirements and are endorsed by an authorized body that is either a UK higher education institution or a business organization with a history of supporting UK entrepreneurs.

# Romania - startup ecosystem overview

---

## Country Introduction

With a growing community of entrepreneurs, investors, and government support, there are plenty of opportunities for startups to thrive. In this document, we'll explore the key activities in the Romanian startup scene, as well as some statistics above the ecosystem.

The Romanian tech startup ecosystem is starting to thrive now, thanks to a number of factors including venture capital investment and support, a growing pool of talented engineers, and increasing interest from the government to support the tech startups ecosystem.

In the past few years, Romania's tech startup ecosystem has been growing at a good rate. This has been attracting the attention of both outside investors and organizations, who see the potential for growth and innovation in the country's tech sector.

## General statistics

- 300 to 500 of active tech startups visible in ecosystem (2000 in the past 5 years) <sup>1</sup>
- ~350 - angel investors (publicly named) <sup>2</sup>
- 20 - active angel networks, groups
- 10 - venture capital funds (pre-seed and seed funding):
- 98 - startups that received funding from local investors in 2021
- €116M - venture capital invested in 2021 (publicly announced)
- ~55 - programs (incubators, pre-accelerators, accelerators, competitions)

## Programs for startups

There are many programs focused on the very early stages like idea level, pre-launch or up to early-revenue in the local market.

Many programs existing have an educational part and are connected with the universities; as each university is obliged to have entrepreneurial student organizations which foster workshops, connections, competitions and courses on startup-related topics for startups.

On the next level, there are ~15 programs that help startups prepare for fundraising and connect them with investors which are beyond universities (for example, Innovation Labs, Commons Accel, InnovX, Rubik Garage, Startup Survivor, Bright Labs, Impact Hub programs, FIX Cluj, Cluj Startups Pre-accelerator, ClimaAccelerator). Most of them are localized in the big cities with good programs and mentor networks, but very few of them are offering direct funding to the startups in the programs, usually as prizes.



Figure 13. Ecosystem players in Romania involved in private fundraising and venture capital funding

## Venture Capital Overview in Romania

In the startup ecosystem we have several capital venture funds actively investing in the range of €100K to €4M (Underline Ventures, Gapminder VC, Early Game Ventures, Sparking Capital, RocaX, Catalyst Romania)

While the active angel networks and angel funds (for example: Techangels, Growceanu, Transylvania Angels Network, Smart Impact Capital, Cleverage) are often time making investment deals together as they cannot pull enough capital to cover the whole round in each of them. The majority of these deals are in the range of €50K to €400K (around 30 deals each year), sometimes in combination with the crowdfunding platforms.

Evolution of the venture capital investment in Romania-based startups, 2018 - 2022  
(total amount & no of deals)

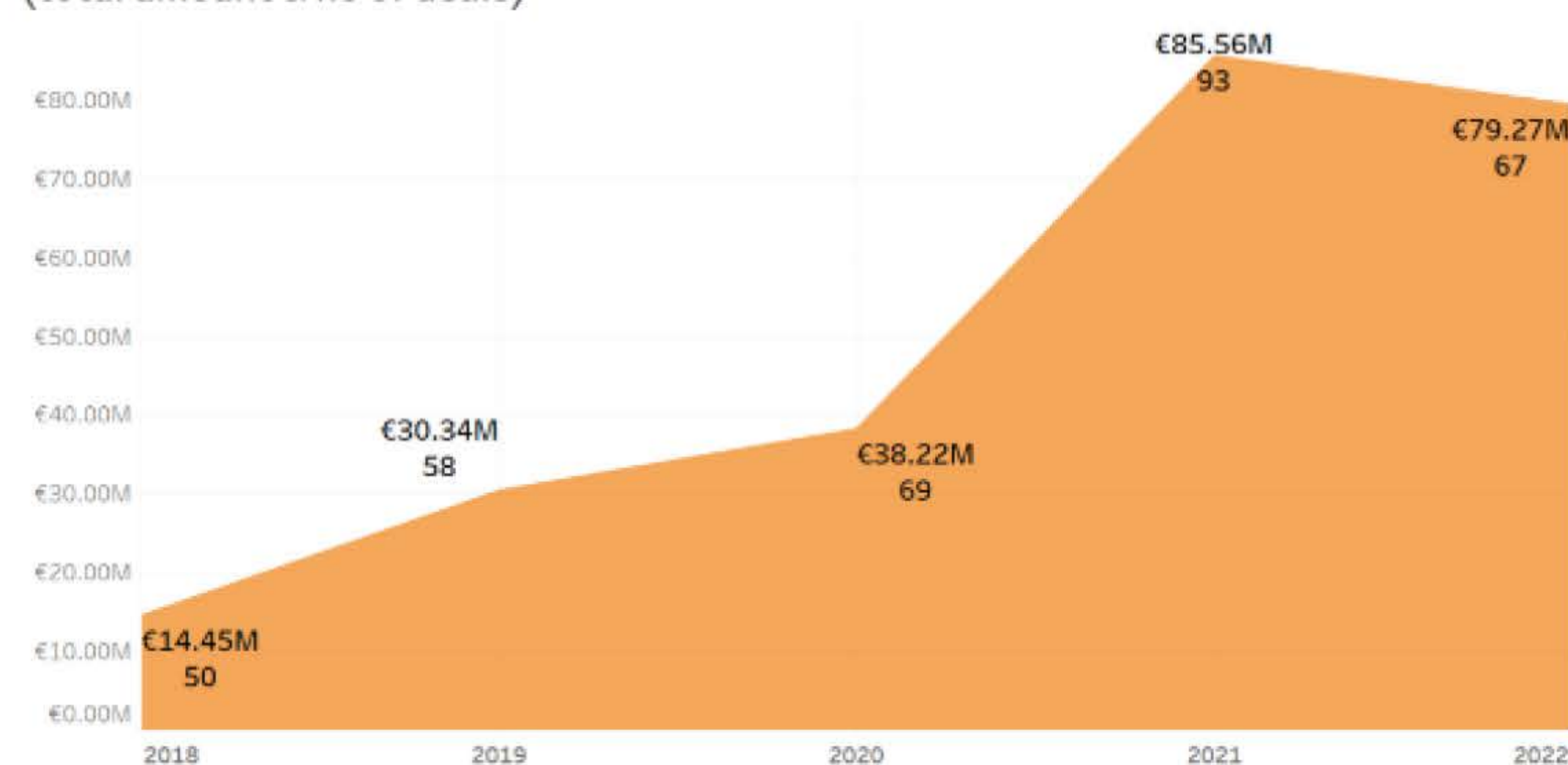


Figure 14. Evolution of the venture capital investment in Romanian-based startups (total amount and number of deals). Note: The graphic above doesn't include the following rounds of investments: FintechOS's \$60M series B round from 2021 and DRUID's \$16M series A round from 2022).

## Fundraising challenges for startups and proposed solutions

In this context, there are two challenges noticeable for the startups fundraising.

First challenge is gathering the sums necessary to fully close the pre-seed round. Sometimes the rounds are closed with less or it takes up to a year to raise the whole sum usually through convertible notes tickets distributed in time, depending on how startup founders find angel investors to commit.

Second challenge is related to closing smaller rounds of €30K to €100K, because the angel investors are not so attracted (as there is not enough traction), while the acceleration funding is not enough to support the number of startups existing in the various programs.

While thinking about both challenges mentioned above, one solution is to design a venture capital fund which is focused on small tickets of €30K to €100K targeting startups that are participating or participated in the pre-acceleration programs in Romania and that can join co-investment rounds with angel investors or other funds at pre-seed level.

As well, in the upcoming years, there will be venture funds created to invest only in smaller regions of Romania, at pre-seed level.

These solutions address the fundraising challenges identified, while not competing with the other<sup>1</sup> investors at this stage, but partnering (co-investing process) and it supports the pipeline formation for the bigger funds in the next rounds.<sup>2</sup>

### Public funding existing

3

In the past ten years there were many programs with grants ranging from 20K euro to 200K euro, for example (Startup Nation, Startup Diaspora and many others).

Although with focus to stimulate entrepreneurship, the impact in the area of innovative entrepreneurship were not strong; while the conditions were strict and sometimes burdening startups with the bureaucratic process.

In the past several years, more and more consultations processes have taken place, with the purpose to encourage, thus increasing the chances to support innovation in Romania. To mention that UEFISCDI (Unitatea Executiva Pentru Finantarea Invatamantului Superior a Cercetarii Dezvoltarii si Inovarii) is among the most active institutions for support the innovation in Romania.

### Verticals that are growing in Romania

Along the years, we saw constant growth in business-to-business and fintech (both in number of startups and investments). The healthtech area has had good growth in the past years, followed by education and agrifood.

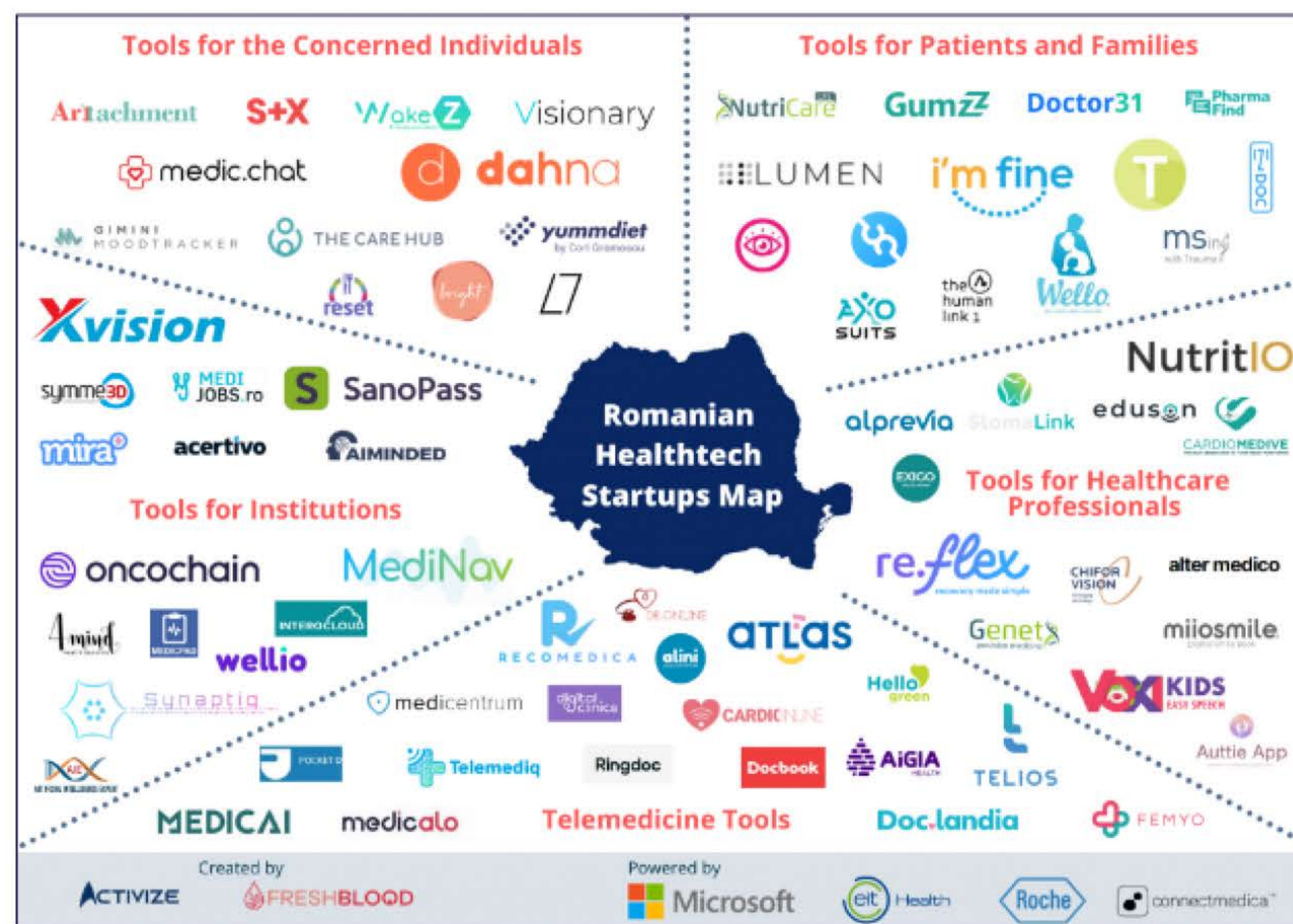


Figure 15. Romanian HealthTech Startups Map 2022: <https://activize.tech/healthtech-overview-report/>

## Technology Transfer

Technology transfer is a promising domain, but in early infancy; in a stage of capacity building; while the Tech Transfer Offices are still finding their way out and private capital for research and tech transfer is limited.

There is openness towards growth; but effort stumbles because of mindset as in the research world there is a need for much more business / market experience and industry partnerships are rarely effective and with impact.

## RoStartup initiative

ROStartup (<https://rostartup.com/>) - Romania's Startup Ecosystem Strategy is a joint public and private action initiative, aimed to support the development of the first strategy for the Romanian Startup Ecosystem.

The initiative is a multi-actor collaboration financed by the European Commission's Directorate-General for Structural Reform Support (DG REFORM) and led by the North-East Regional Development Agency (NE RDA) through Rubik Hub and supported by the World Bank Group (WBG).

Involving many organizations in the ecosystem, together we work to grow a strong and competitive national entrepreneurial ecosystem environment and transform Romania into a leading Startup Hub, both at CEE Region and at European level.

## What exactly does ROStartup do?

- Create a common vision and mission for developing the startup ecosystem by supporting regional economic growth and focusing on convergent development opportunities and gaps in the ecosystem.
- Build a sustainable startup infrastructure with the involvement of all main stakeholders representing all regions at a national level.
- Grow the pool of people considering entrepreneurship as a career path by building entrepreneurial capacity and increasing the number of innovative ideas that materialize in the market by supporting business incubation.

Overall we see a lot of interest and initiatives related to innovation and tech startups. We are aware that it is a long way to have a solid impact, but the first results are being seen and the ecosystem is vibrant and cooperative, so this gives us hope that the next 5 years will have many breakthroughs in our national development.

1

2

3

## Moldova - startup ecosystem overview

---

Entrepreneurship is one of the most important factors in the economy, which presents a substantial link between the number of companies, economic growth and the progress of a nation, and the policies practiced by a state can decisively influence the increase in entrepreneurial density. A new form of entrepreneurship that can influence strategic development and economic recovery are startups.

The development of local startups is influenced by a policy framework designed to stimulate the launch of innovative and technological companies and an ecosystem focused on the education, launch and development of startups. Although the startup ecosystem is a young one for the Republic of Moldova, there are considerable efforts made to take over the best international practices and tends towards the growth of the first national unicorn.

The medium-to-long term national policy framework on the development of entrepreneurship in the Republic of Moldova is provided by the National Program for the Promotion of Entrepreneurship and Competitiveness Increase for 2022-2026, the National Development Strategy "Moldova 2030" and law no. 845 of 03.01.1992 on entrepreneurship and enterprises, which includes measures to increase entrepreneurial education and culture, development of mentoring and business guidance functions, investment of remittances in the economy to reduce the migration phenomenon, greening, digitization of businesses and promotion of internationalization of small and medium-sized enterprises, aimed at encouraging the development of any form of entrepreneurship in Moldova, the creation of a more inclusive entrepreneurial space, with specific actions to empower women, young people and migrant entrepreneurs, including the creation of startups.

Among the key steps taken by the Government of the Republic of Moldova, we can mention the adoption of the Strategy for the development of the IT industry and the ecosystem for digital innovation for the years 2018-2023. The strategy is a strategic planning document that sets out the objectives and priorities for the growth and diversification of the IT industry. The document provides for the development of a competitive IT industry, the encouragement of start-ups and a focus on digital innovation in all sectors of the economy.

One of the key elements of the strategy is the development of the "Moldova IT Park", which has over 11300 resident companies, with over 15,176 employees and an estimated sales revenue of over 270 million euros for 2021.

According to the Global Start up Index 2022, the startup ecosystem in the Republic of Moldova is at an early stage, with growth potential. In 2022, the Republic of Moldova recorded a decrease of 11 places, ranking 88th globally. The index, compiled by StartupBlink, classifies startup ecosystems in 1000 cities and 100 countries around the world. Each ecosystem receives a total score, which is the sum of three sub-scores that measure quantity, quality and business environment. Although the study highlights several challenges of the startup ecosystem in the Republic of Moldova, it still mentions several startups that manage to expand and develop, such as Planable, Zeroqode, Fagura or XOR.<sup>13</sup>

Also, the authors of the study state that "Moldova has some great prospects for the future and it seems that many reforms are underway, as the country has obtained the status of candidate country for the European Union." There are a number of factors contributing to the potential of Moldova's startup ecosystem, including tax incentives and one of the most accessible masses of digital talent in Europe. In addition, according to the study, Moldova has made efforts to develop an interconnected network of startups, experienced founders and corporate finance.

---

<sup>13</sup> <https://www.startupblink.com/startupecosystemreport>

In this context, it is appropriate to note that, in recent years, considerable efforts are being made to develop the support infrastructure and the various actors of the startup ecosystem:

- 1 State institutions (Organization for the Development of Entrepreneurship (ODA), Moldova IT Park, etc.);
- 2 Incubators and Accelerators (*Dreamups, Technovator, XY Partners, Yep Moldova, business incubators network (RIAM), business incubators within universities, etc.*);
- 3 Business centers and co-working spaces (*such as: iHUB Chisinau, Generator Hub,*)
- 4 Tech and creative hubs (*Mediacor, Artcor, FabLab, Tekwill, Fintech Hub, Zip House, Tractor Hub, Simpals Factory, etc.* );
- 5 Business associations (*National Association of ICT Companies (ATIC), Association for the Development of Electronic Communications and Innovative Technologies (ACETI), Association of Creative Industries COR of Moldova (ARTCOR), etc.* );
- 6 Investor communities (*Business Angels Moldova, Investiții.md, Mosaic Ventures, etc.* )

All the above-mentioned stakeholders of the ecosystem developed and implemented programs and projects that aim to strengthen capacities and increase the number of start-up set ups, as well as to facilitate their access to investors, professional guidance and IT specialists.

It is also worth mentioning that in recent years there were more and more events organized, dedicated to promoting the culture of startups, such as: Rockit Conference, Moldova Startup Week, Moldova Startups Day, EU4Digital Forum for Startups and Innovation, etc., which created good premises for discussing the progress and priorities of the Republic of Moldova for the startup ecosystem development through innovative solutions, gathered high-level local and international experts in the field of ICT innovation and the development of the startup ecosystem that shared their experiences, challenges and achievements and discuss future cooperation in this field. In 2022, the EU4Digital Forum launched the Eastern Partnership Startup Ecosystem Platform, which currently gathers together over 2200 startups and 135 corporations.

Additionally, at national and regional level, several support programs for startups are implemented, which motivate and stimulate young people to launch and manage innovative and technological businesses, such as:

- **The program "START FOR YOUNG PEOPLE: A sustainable business at home"** (Government Decision no. 348 of June 1, 2022), implemented by the Public Institution Organization for the Development of Entrepreneurship (I.P. ODA), is a state program to support young people and the development of the SME sector developed in accordance with the provisions of art. 11 of law no. 179/2016 on small and medium-sized enterprises. The program represents a complex of activities and services aimed at promoting entrepreneurship among the younger generation in to support their socio-economic integration by developing entrepreneurial skills, financial support for launching and developing a sustainable business. According to ODA data, during the implementation of this program between 2019-2021, 1459 young people benefited from training in the field of entrepreneurship, and 1066 young people participated in the over 30 hackathons organized in all regions of the country. During both hackathons and training, youth have benefited from guidance and mentoring in generating and identifying the most viable and innovative potential business ideas. As a result, 404 investment projects were financed (grants with a maximum value of 180 000 lei / beneficiary, for the purchase of material and non-material



investment items, of which 340 investment projects in the form of a grant and 64 investment projects in the form of a Business Voucher (max. 10 thousand lei for business development or improvement of young people's skills in the chosen field).

- **The program to support Digital Innovations and Technological start-ups** (Government Decision no. 243 of 13.04.2022), implemented by ODA, has as objective the granting of non-reimbursable financing (max. 500,000 MDL) innovative small and medium-sized enterprises, and Start-payments for products and services in the field of information and communication technologies, new technologies, in order to stimulate research and development in the field of information technologies and communications, prototypes and innovation in sustainable industrial production and green technologies. The program has three thematic funding components: 1) Digital innovation – innovative ideas and methods leading to the development of digital or electronic products, services and/or operating models; 2) Green technology – advances in R&D leading to new technological products and services designed to replace materials, machines, processes and systems that generate negative results for the environment; 3) Sustainable manufacturing – developing innovative processes, practices and applications that transform existing models of industrial production to promote resource circularity. This program was launched in October 2022 and, respectively, data on its implementation are not yet available. The implementation of this program is carried out in collaboration by the Future Technologies Activity Project, funded by USAID and the Embassy of Sweden, which supports various actors of the startup ecosystem, such as accelerators (Dreamups, Technovator, XY Partners, Yep Moldova), innovation centers, business incubators, sectoral associations (i.e. Startup Moldova, Moldova IT Park, ATIC, Nortech, ZipHouse, etc.) to work with startup teams to generate, test and implement new ideas for both on the local and global market.
- **The Digital Impact Program**, implemented by Startup Moldova as part of the EU4Moldova: Startup City Cahul project, funded by the European Union in partnership with Sweden and implemented by ATIC, is a program through which companies from Cahul region, which want to digitize internal processes and innovate, will be able to access financing worth up to 780 thousand lei per initiative.
- **The annual Grants Program for youth organizations**, implemented by the Ministry of Education and Research, is a program dedicated to support youth in the Republic of Moldova, by providing logistical and financial support for the implementation of their initiatives, programs and projects, thus strengthening the cooperation with civil society. The program has a strategic direction - the development of entrepreneurial skills among young people, as well as of the guidance, counseling and qualification services regarding the access of young people to the labor market. Thus, the program supports the economic integration of youth and facilitates their access to entrepreneurial education, by developing specific competences in the field of entrepreneurship.

In addition to the support programs, the Government supported the creation of several industrial parks and multifunctional industrial platforms, which are meant to stimulate entrepreneurial activity too.

All the above mentioned are important prerequisites for the development of a startup ecosystem with great development potential to provide support, consultancy and mentorship to the 167 national startups registered so far in the Republic of Moldova, as well as the creation of new ones.



Figure 18. Distribution of countries according to the Global Development Index (source: Global Entrepreneurship and Development Institute)

## Description of problems

This public policy project wants to highlight the fact that the Republic of Moldova today has an important long-term economic and social development potential, especially existing at the local level, where entrepreneurs, startups and SMEs must be encouraged, and stimulated. In this context, the current PP project highlights the following problems faced by the entrepreneurial ecosystem in Moldova:

### Underdeveloped entrepreneurial education

Entrepreneurship education is presented as a highly necessary performance issue in the economic development of the country, promoted through government policies. The need for entrepreneurial education is a point of interest and motivation for current future pupils and students, for employers, encouraging creativity, innovation and the ability to think differently, generating new ways of learning, life and work (Velisco, 2021).

The national education system at all levels promotes entrepreneurship education through the main national documents, such as the Education Code, the Education Strategy 2020, the National Qualifications Framework, and the national curriculum. The formation of "entrepreneurial skills and the spirit of initiative" as one of the nine key skills stipulated in the Education Code must lead to the initial training of national cadres, who will contribute to the sustainable economic development of the country, to the relaunch of the national economy, to the increase of social well-being.

According to the Framework Plan for primary, secondary and high school education, "Entrepreneurship, creativity and innovation" is recommended as an optional discipline, which can be included in the school curriculum and can refer to such subjects as: designing and promoting projects in order to achieve some objectives for the development of the fields of entrepreneurship and innovations; development of initiative and creativity; taking risks; financial and fiscal education; making personal

decisions of an economic nature; understanding the role of the economy in society; using entrepreneurial skills to make career choices, etc.

In the context of the aforementioned, it is appropriate to develop a Trainer of Trainers program, in order to increase the competences of teaching staff in teaching subjects in the field of entrepreneurship and the application of a unique methodology, accredited and used at the international level.

### **Informational asymmetry or the problem of statistics that do not correspond to reality**

The lack of information, or the existing informational asymmetry between the small business, on the one hand, and creditors or investors, on the other. The problem of information asymmetry results from the fact that entrepreneurs have information about their business that cannot be easily accessed, or cannot be accessed at all by potential creditors/investors. This creates a double problem: on the one hand, lenders/investors cannot differentiate between "high quality" and "low quality" companies or projects (adverse selection problem), and on the other hand, once the money has been allocated, they cannot appreciate whether the means are used appropriately (the problem of moral hazard). The situation is also aggravated by the low level of specific knowledge, because of which entrepreneurs cannot properly argue and support their actions. Often, the information they have is not accurate, realistic, clear and transparent enough.

Greater risks associated with small and medium business. Creditors/investors perceive small and medium businesses as more risky for a number of reasons. First of all, SMEs are less equipped in terms of human resources and capital, to face adverse market conditions. Second, there is the problem of accounting systems, which undermine the accessibility and credibility of information on profitability and solvency. Thirdly, to these is added the problem of the much more volatile operating environment, which negatively influences the security of transactions; Higher administrative and transaction costs in the case of SME financing. Regardless of the degree of risk, SME financing involves higher costs compared to large businesses. Most of the costs involved (administrative, analysis, registration, monitoring, etc.) are fixed costs, which do not vary depending on the size of the financing.

**Proposed public policy: Consolidation of entrepreneurial culture/education by introducing it into the national educational curriculum.**

### **Entrepreneurial Training Program (ToT)**

The entrepreneurial training program for teaching staff in educational institutions will follow the GYB (Generate your business idea) and SIYB (Start and improve your business) methodology, developed by the International Labor Organization in the 1970s, and which is continuously adjusted to market needs . At the moment, the methodology is applied worldwide, through more than 300 consultants.

**The implementation of the program will be carried out in stages.**

#### **1 Selection of participants (teachers)**

Initially, in the process of organizing the training sessions, a public call will be launched with relevant information about the training and will be accompanied by a registration form through which teachers will

express their intention to participate in the course, confirm their availability attending all classes and will present the motivation regarding participation. Following the analysis of the questionnaires, the organizing team, together with the trainer, will organize interviews with the participants, selecting the final list. The announcement will be distributed on all communication platforms of teaching staff and through the directors of educational institutions. Annually, about 100 teachers will be trained.

## 2 Realization of training courses

The training courses will last 10 days, 5 days per module. The number of course participants will not exceed 20 people. Initially, teachers will be trained based on the GYB methodology. The topics addressed within the GYB will be:

Module I. You as an entrepreneur

Module II. The market is waiting for your business

Module III. How do we develop a list of business ideas?

Module IV. The best business idea for implementation

Afterwards, with a break between training of 1 month, the ToT participants will be trained based on the SIYB methodology. The topics addressed within the SIYB will be:

Module I. Assess your readiness to launch a business

Module II. The business plan

Module III. The business idea is reborn

Module IV. The marketing plan

Module V. Team

Module VI. Organization and management

Module VII. Acquisitions

Module VIII. Greening the business

Module IX. Costs for goods and services

Module X. The financial plan

Module XI. Capital required for startup

Module XII. Types and sources of startup capital

Module XIII. Launching the business

The purpose of the training program is the action plan of each training participant, through which they will disseminate the accumulated knowledge and train students from educational institutions.

The action plan will cover beneficiaries from all training cycles and will answer the questions:

- How do you plan to promote GYB/SYB?
- How will you select participants and assess training needs?
- How do you intend to organize the training with the students within the institution?
- How do you plan to facilitate the seminars (alone, with a co-facilitator) and what will the objectives (cognitive, affective and behavioral) and content be?
- How will you evaluate your training activities and what are the follow-up methods?

The action plan will be approved by the lead mentor.

## 3 Implementation of action plans carried out in stages I and II

Following the approval of the action plan, each participant will organize training sessions for various beneficiaries from all training cycles, within the educational institutions they represent.

#### **4 Creation of the detailed report on the action plans carried out**

At the end of the implementation of the action plan, each teacher will prepare an activity report, through which he will present the results of the training session and the challenges encountered. Also, the report will present the ways of sustainably training young people in the entrepreneurial field, over a period of 1 year.

#### **5 Ensuring the transfer of good practices**

Each trained teaching staff will be responsible for disseminating knowledge regarding entrepreneurial training, by organizing training sessions, round tables, conferences.

### **Impact of the program**

The implementation of the professional training program for teachers in secondary and high school educational institutions will generate the results:

- 100 teaching staff from institutions throughout the territory of the republic, including the left of the Dniester and UTA Gagauzia, trained;
- About 2,000 students from all over the territory of the republic, including the left side of the Dniester and UTA Gagauzia trained;
- About 100 training sessions carried out;
- Students will be familiar with notions related to entrepreneurship;
- Trained young people will acquire the necessary knowledge and skills to launch entrepreneurial activities.

## **Recommendations for Moldova**

### **For the government**

- 1** Create an efficient, practical legislative ecosystem which will: encourage the private sector to invest in startups (e.g. by introducing tax reliefs) and support startups in their pursuit for development.
- 2** Create an easy to access and easy to complete system for online registration of new startups, make the formalities as simple as possible.
- 3** Create and disseminate practical strategy with short and long – term goals for the government and its part in supporting the ecosystem for startups (including specific programs and financing mechanisms)
- 4** Invest in professional but most of all inclusive and practical events (e.g. conferences) which will: enable networking (within Moldova, in CEE region), promote Moldova as an innovative country, ready to impact regional economy and technological development, inform potential investors, business angels and inventors, visionaries about opportunities created by the government which aim at boosting the innovative side of the country.
- 5** Encourage the creation of very-early incubators and accelerators, with small grants for startups participating and focused on education for entrepreneurs. The more startups exist, the more founders learn, the greater the chances for successful startups to be created.

## **For ecosystem enablers, non-profit and civil society organizations**

- 1 Advocate for the legislation mentioned above to happen. Promote startups as a type of business which elevates Moldova as a country to the next level which will result in first regional and then pan-European recognition. The government should understand that by creating a proper, motivating ecosystem for startups it will not be helping only these businesses but the economy and prestige of the whole country.
- 2 For this mission to be accomplished, a number of activities could take place such as:
  - a. intensive informative campaigns in social media, possibly with examples from other countries
  - b. cooperation with local journalists who can write success startup stories with an inspiring punchline
  - c. personal meetings with representatives of the government, e.g. negotiating a creation of an interdisciplinary working group which would work on the development of the ecosystem for startups
  - d. regional and European events and conferences, promoted in and out Moldova which would aim at raising awareness, networking and promoting Moldova as a country friendly to startups and innovation
- 3 Use the proximity and connections with the countries more developed (ex: Romania), to learn from the best practices there, have experts as mentors, connect with accelerators and conferences.
- 4 Connect with Moldovan founders from abroad who have good networks and expertise and are willing to give back to the community existing. These founders can become mentors, investors or advisors for startups.
- 5 A paramount step for the ecosystem development is having a consortium of organizations from the ecosystem, aligned in terms of strategy, communication and collaboration with a common vision and efforts on promoting outside and on policy making.

## **Conclusion**

Although in recent years, the Republic of Moldova has made considerable progress in reforming the business environment, significantly improving its ranking in the Doing Business Report of the World Bank. In 2021, ranking 48th out of 189 economies, we still have premises for growth. Although the procedures for launching a company are simplistic, its deletion remains quite complicated. Also, the rapid changes in the technological, economic and social environment require us to speed up the pace of creating regulatory frameworks for new forms of entrepreneurship organization (startups) and to develop favorable ecosystems for the development of such companies.

The Republic of Moldova must now focus on building an entrepreneurial culture and education, developed from an early age, through educational institutions - which will be a tool for developing and strengthening entrepreneurial skills. And by creating an ecosystem adapted to the requirements of the international market, it will facilitate the development of modern, digital and globally competitive companies.



