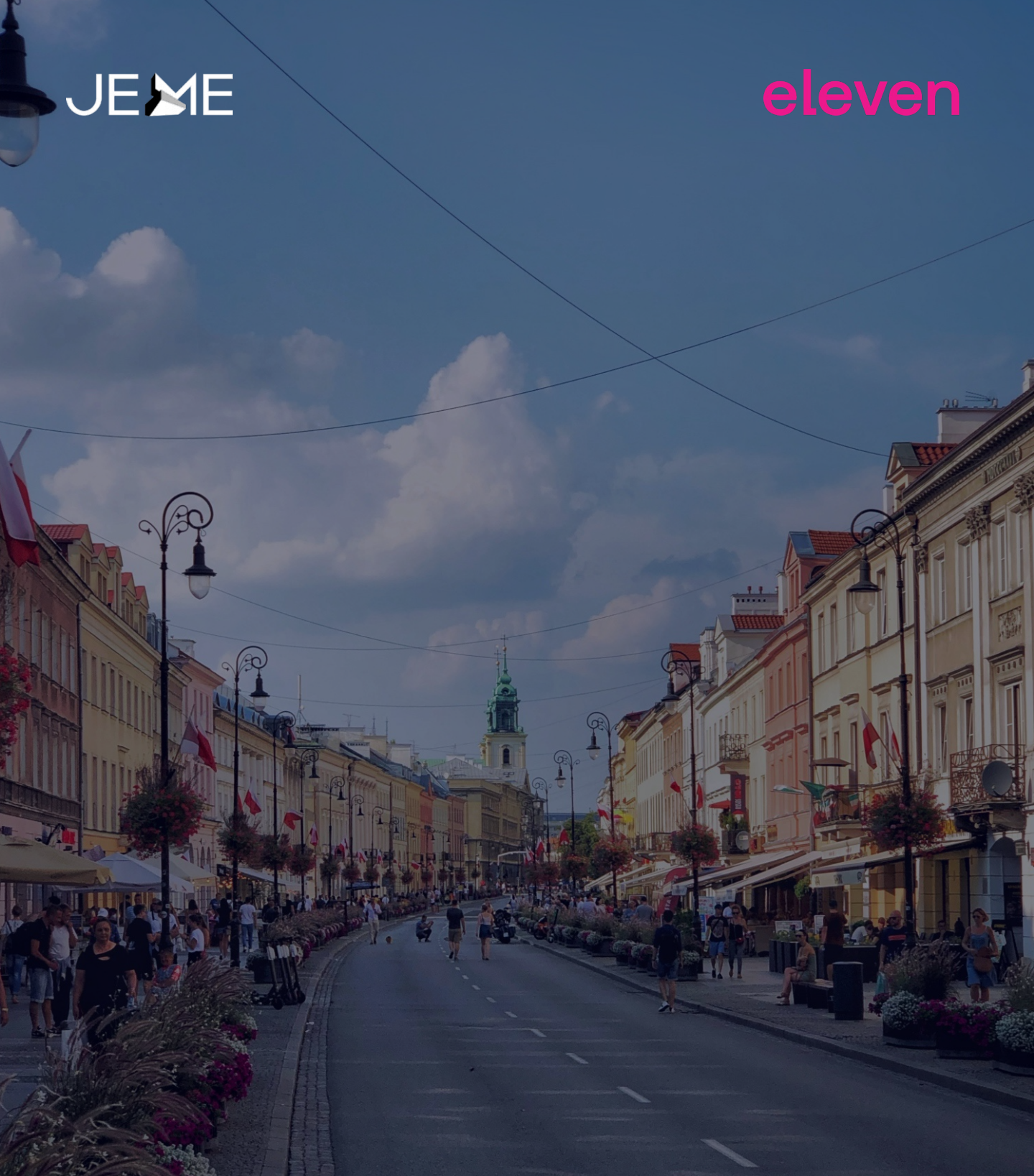




JEMME

eleven

THE STATE OF STARTUPS AND VENTURE CAPITAL ECOSYSTEM IN CEE

INTRODUCTION TO THE PAPER

This report, a collaborative effort between JEME Bocconi and Eleven Ventures, explores the **startup and venture capital landscape in Central and Eastern Europe (CEE)**. It provides an in-depth analysis of the region's entrepreneurial ecosystem, examining startup activity, investment trends, and key growth drivers. It serves as a **guide for navigating CEE's startup scene**, helping stakeholders identify opportunities, mitigate risks, and drive economic and technological growth. Specifically, the report is split into 4 sections: CEE Overview, Startups Analysis, Venture Capital Analysis and Key Deals & Country Insights.

CEE has established itself as a **significant European innovation hub**, distinguished by **exceptional technical talent, cost advantages**, and **maturing institutional frameworks**. The region hosts over 26,000 active startups with a collective enterprise value of €213 billion and has achieved **2.4x growth** since 2019, showcasing remarkable potential despite economic challenges.

The region's venture ecosystem has demonstrated **notable resilience**, experiencing only a 15% decline in deal volume in 2023 compared to 35% in Western Europe. The emergence of **52 unicorns**, growing international capital inflows, and **sectoral expertise** in AI, cybersecurity, and climate tech create a context to assess the ecosystem's trajectory and future outlook.

Using data from venture capital reports, government databases, and industry research, **this report combines quantitative and qualitative insights** to build a complete overview of the CEE startup landscape. Covering both startup challenges, opportunities, and market dynamics, as well as VC funding trends and drivers, it highlights the region's potential for sustainable growth and innovation.

For the purposes of this study, CEE countries include Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia, and Ukraine.

CONTRIBUTORS



Founded in 2012 in Bulgaria, **Eleven Ventures** is an early-stage VC in CEE, backing 150+ startups in Fintech, Healthcare, Future of Work, and Sustainability. It provides capital, expertise, and strategic support to help startups scale while shaping the regional ecosystem and fostering innovation.



Founded in 1988 at Bocconi University, **JEME** is a student-run consulting firm providing strategic insights to startups, SMEs, and corporations. Combining academic excellence with hands-on experience, it supports its clients' business growth and students' personal development.

EXECUTIVE SUMMARY

KEY FINDINGS

The CEE region is experiencing **robust economic growth**, with an anticipated annual GDP growth rate of 3.0% in 2025, significantly outpacing the Eurozone's 1.1%. This growth is powered by the region's unique combination of **technical talent**, **cost efficiency**, and **increasing innovation capacity**. The **combined enterprise value of CEE startups reached €213 billion in 2023**, representing a 2.4x growth since 2019. The region is now home to **52 unicorns** (8% of Europe's total), with Poland, Estonia, Ukraine, and the Czech Republic emerging as key contributors to this success.

Despite global venture capital contraction (down to €248.8 billion in 2023), the CEE ecosystem has demonstrated **notable resilience**. While experiencing a 15% decline in deal volume compared to Western Europe's 35% reduction, CEE startups raised over **€900 million in early-stage funding in 2023**. International investment in the region continues to grow, with non-European investors increasing their share of total fundraising from 9% in 2022 to 21% in 2023.

MAJOR TRENDS

- **Sectoral Concentration:** Enterprise software dominates the CEE landscape with a combined enterprise value of €80 billion, followed by fintech (€30B), transportation (€19B), and e-commerce (€19B). AI has become a powerful growth driver, capturing 45% of total investment in Q1 2024, while climate tech attracted 26%.
- **Public Capital Dependence:** Government funding remains crucial for the CEE ecosystem, accounting for approximately 34% of total startup capital in 2023. While public funding has been crucial to the CEE ecosystem, its role may evolve as private investment grows and government priorities shift toward strategic sectors.
- **Early-Stage Focus:** The region demonstrates particular strength in early-stage funding, with 92% of all VC-backed deals in the pre-seed and seed stages. This pattern diverges from Western Europe's emphasis on later-stage investments, reflecting CEE's still-developing ecosystem.
- **Pragmatic Approach:** CEE founders typically demonstrate a more practical mindset than their Western counterparts, focusing on early revenue generation and profitability rather than rapid scaling and future potential. This conservative approach yields higher capital efficiency but potentially limits ambition.
- **Growing Cross-Border Activity:** Increasing internationalization characterizes the ecosystem, with 91% of Polish startups planning European expansion and 60% targeting North America. Headquarters relocation to Western markets remains common for scaling companies.

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OVERVIEW OF THE CEE REGION

The Central and Eastern European (CEE) region is becoming an increasingly important player in the European economy, with strong growth and plenty of investment potential. Keeping an eye on key financial metrics helps make sense of where the region is headed—things like inflation, debt levels, and overall economic health. These factors don't just affect governments; they shape business opportunities, influence policies, and impact market conditions. For startups and venture capital (VC) investors, understanding these trends is essential for spotting opportunities and managing risks.

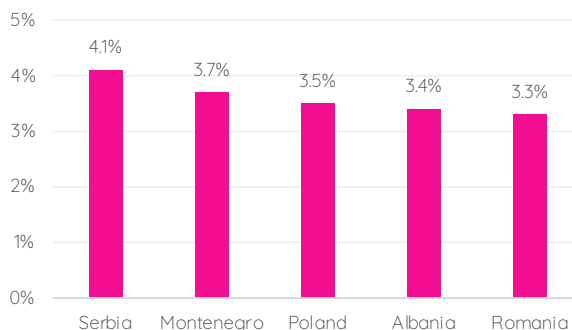
At the same time, the region's mix of economic strengths and challenges creates both hurdles and openings for businesses. Lower labor costs and supportive fiscal policies make some countries great spots for startups, while debt levels and talent migration can impact long-term stability. By breaking down these financial metrics, investors and entrepreneurs can get a clearer picture of the CEE market and make decisions that drive innovation and sustainable growth.

KEY FINANCIAL METRICS

The Central and Eastern Europe (CEE) region, with a GDP of €2.56 trillion and housing 167.47 million people in 2024, is a vital region that contributes to the **economic growth and cultural diversity** within the European Union (EU).^{1,2}

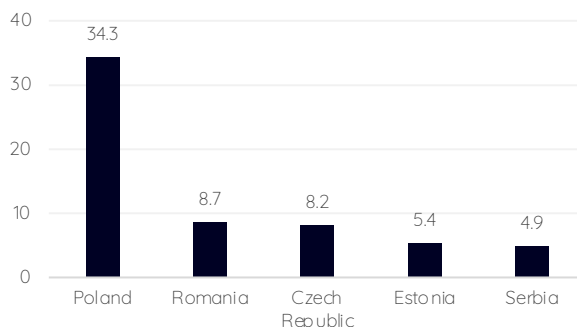
- **Economic forecasts** for the CEE are highly **optimistic**, with an anticipated annual **GDP growth rate** of **3.0%**, significantly outpacing the **1.1%** growth rate for the **Eurozone** in 2025. This creates possibilities for startups to **quickly expand operations** due to increased international investment.
- In particular, development speeds vary across individual countries, with **Serbia** (4.1%), **Montenegro** (3.7%), and **Poland** (3.5%) projected to lead in growth rates.
- Foreign Direct Investment (FDI) has played a **key role** in helping the region **develop economically**.
- Since 1999, the CEE's **GDP growth has more than doubled** largely due steady investment from Western countries.
- Poland, the Czech Republic, and Romania have been receiving the **highest amount of FDI Inflows** in the region, due to their lead in innovation.³

Exhibit 1: 2025 Real GDP Growth



Source: International Monetary Fund

Exhibit 2: 2023 FDI Inflows in CEE (Billions of Euros)



Source: World Bank

ECONOMIC DISPARITIES

- The **economic disparities are evident in the wide range of GDP per capita**, from countries like Slovenia (€35.5 thousand) and the Czech Republic (€32.1 thousand) to those like Bulgaria (€18.0 thousand) and Bosnia and Herzegovina (€8.4 thousand).⁴
- EU membership has boosted CEE economies through the free movement of goods, as well as crucial development funds. Since 2004, **Poland, Romania, and Hungary** have stood out as the **biggest beneficiaries of EU finds**, receiving €7.0, €5.9, and €4.4 billion respectively.⁵
- Since joining in 2004, **member states saw substantial GDP per capita gains over non-EU scenarios**: Poland (40.7%), Hungary (19.4%), Czech Republic (19.0%), and Slovakia (16.2%).⁶

DRIVERS FOR REGIONAL GROWTH

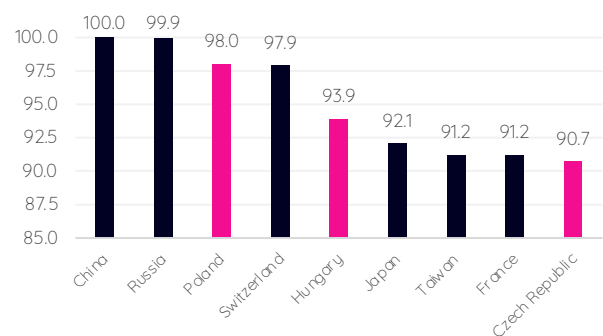
The region is well-known for its rapidly expanding pool of IT professionals. **As of 2023, CEE had more than 1.3 million software developers**, a figure expected to rise in the upcoming years. This trend is driven by a few main factors: cultivating interest in the tech space from a young age, the rise of outsourcing tech jobs to the CEE, and low labor costs.⁷

STEM FOCUSED INSTITUTIONS

- Schools in the CEE region place a **strong emphasis on STEM education**, fostering technical skills from an early age. This commitment is reflected in strong academic outcomes, with students from countries like Poland and the Czech Republic **consistently outperform the international average in PISA math tests**.
- The region's **strong focus on technology is also evident in its higher education**, with 435,000 students enrolled in ICT university programs.⁸

As a result, the region has cultivated a vibrant coding community. Notably, HackerRank, a premier platform for competitive programming, published an article evaluating user performance by country. Notably, **Poland, the Czech Republic, and Hungary rank among the top nations globally for developer expertise** (>90/100 points average), reinforcing the region's reputation as a hotspot for technical talent.⁹

Exhibit 3: Global Developer Expertise Ranking



Source: HackerRank

TECHNICAL EXPERTISE AFFORDABILITY

- The rapid expansion of the IT sector and the **rise in outsourcing** have made computer science and tech-related fields **increasingly appealing to students** across the region.¹⁰
- High demand for skilled tech professionals offers strong career potential, encouraging more young people to enter these disciplines and build technical expertise.
- In 2023, **CEE countries reported some of the lowest hourly labor costs in Europe**: Bulgaria at €9.3, Romania €11, Poland €14.5, and Hungary €12.8, considerably below the EU average of €31.8.¹¹
- These lower wages stem from historical and political factors that slowed the region's economic integration, along with a generally lower cost of living.¹²
- The combination of **affordable labor and a growing pool of skilled talent** benefits the IT sector, drawing in foreign investment and supporting continued economic growth.



STARTUP ANALYSIS

The startup ecosystem in the CEE has seen remarkable growth in recent years, driven by increasing enterprise value, innovation, and a dynamic investment landscape. This section explores key performance metrics, showcasing the expansion of startups across the region, the rise of unicorns, and the key industries driving this progress. With thriving hubs emerging in Poland and the Czech Republic, the CEE region is solidifying its position as a competitive player in the startup scene.

Beyond growth metrics, this section examines the factors shaping the region's entrepreneurial environment, from access to venture capital and regulatory frameworks to the role of accelerators and incubators. Government initiatives and cross-border collaborations have also played a crucial role in fostering innovation and supporting startup success. By analyzing these elements, we gain a deeper understanding of the challenges and opportunities within the CEE startup ecosystem and its evolving role in the global economy.

STARTUP PERFORMANCE AND GROWTH METRICS

The combined enterprise value of startups in the **CEE region reached a combined worth of €213 billion** in 2023, representing a 2.4x growth rate since 2019, driven by favorable business environments, more access to venture capital, and supportive government policies. **CEE is rapidly closing the gap with Western Europe**, with rising valuations and average startup enterprise value, but the UK, Germany, and France still lead in total value and scale-ups.

- Poland (€49 billion), Ukraine (€28 billion), Estonia (€28 billion), and the Czech Republic (€23 billion) collectively account for a substantial share of the total enterprise value.
- Emerging startup hotspots like Croatia, Lithuania, and Latvia have recorded the **highest five-year relative growth** in **combined enterprise value**, at 7.4x, 5.7x, and 4.7x, respectively.
- Valuations in more established markets like Poland and Ukraine demonstrate their continued **dominance** and **maturity in the startup ecosystem**.
- As of early 2024 estimates, the **CEE region is home to over 26,000 active startups**, with approximately 1,200 new startups launched yearly.¹³

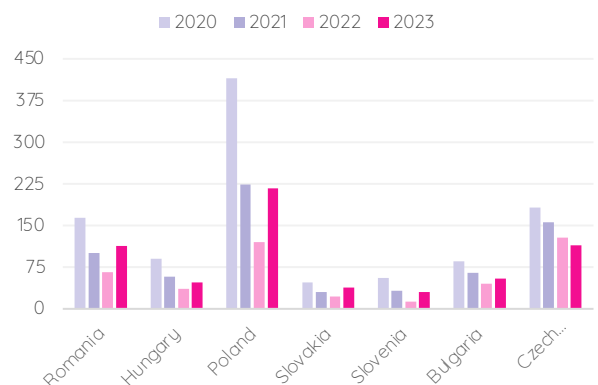
STARTUP ANALYSIS PER COUNTRY

Poland has long been a leader in the **number of startups founded per year** among CEE countries. This dominance is explained by its substantial population, government-backed initiatives, and strong investor presence, as Poland leads CEE with 147 active VC funds counted in 2024.¹⁴

Geographical distributions of startup formations also show that countries like the **Czech Republic, Romania, and Hungary are key players** and make a significant contribution to the region.¹⁵

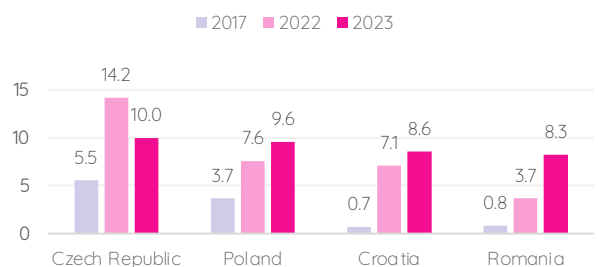
The Czech Republic surpasses Poland in **average enterprise values**, through mature cybersecurity and travel tech startups, driven by their growth potential and global market disruption. Hungary's lower values reflect its early-stage focus. Consequently, enterprise value depends on **industry specialization, investment patterns, and ecosystem maturity**.^{16 17}

Exhibit 4: Startups Founded per Country



Source: Dealroom Database

Exhibit 5: Average Enterprise Value



Source: Dealroom 2024/2022 CEE report

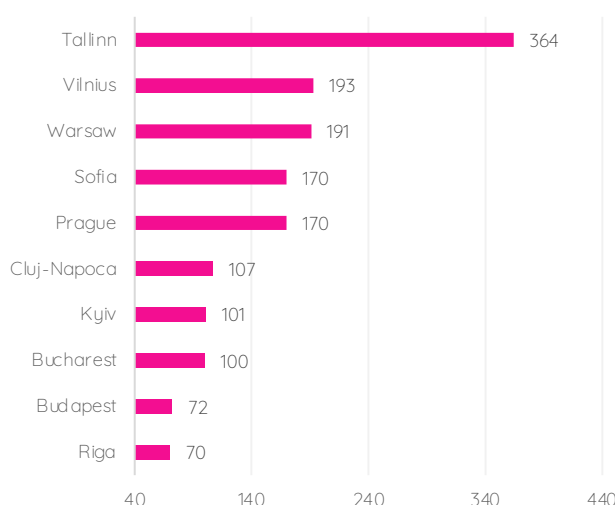
STARTUP PERFORMANCE AND GROWTH METRICS

KEY HUBS FOR STARTUP SUCCESS IN THE CEE

In the CEE, **startups tend to cluster in cities** rather than being evenly distributed across countries. Cities provide infrastructures that support innovation and fast scaling. Urban areas offer entrepreneurs access to **like-minded peers, mentors, service providers, and better digital infrastructure**, all of which are critical for rapid growth. This urban concentration facilitates the fast exchange of ideas and resources, which is diluted when spread across broader national landscapes. As a result, **cities become centers for talent and capital**, driving the growth of globally competitive startups and reinforcing their status as entrepreneurial hubs.^{18 19}

As shown in the graph on the right, hubs have developed prominently in cities such as Tallinn, Vilnius, Warsaw, and Sofia, which attracted the largest shares of venture capital investment in 2023.²² These urban centers have become **growing targets for both regional and international investors**, providing startups with critical funding to accelerate growth and expand globally. This influx of capital reflects **the growing recognition of these cities as innovative ecosystems** where talent, infrastructure, and entrepreneurial support converge to drive startup success.²⁰

Exhibit 6: Top CEE Hubs by VC Investment (Millions of Euros)



Source: Dealroom Database

DRIVERS FOR STARTUP SUCCESS IN THESE HUBS

Entrepreneurship in these cities is largely **driven by dense networks** that foster close collaboration between founders, experts, and investors. This geographic proximity enables **easier knowledge sharing, innovation, and collaborative problem-solving**, advantages that are hard to replicate on a broader national level. Success stories like UiPath in Romania, Wise and Bolt in Estonia, and InPost in Poland inspire new ventures, draw in more investors, and create a reinforcing cycle of growth.²¹

In addition to strong community dynamics, these cities benefit from **a highly skilled and affordable talent pool due to proximity to reputable educational institutions**. Furthermore, **government support, easier access to funding, and the emergence of co-working spaces and accelerators** have further energized these local startup ecosystems. For example, Warsaw and Bucharest are recognized for their influential incubators, while Budapest and Prague benefit from robust university pipelines and dedicated startup support.²²

IMPACT OF SUCCESSFUL STARTUPS

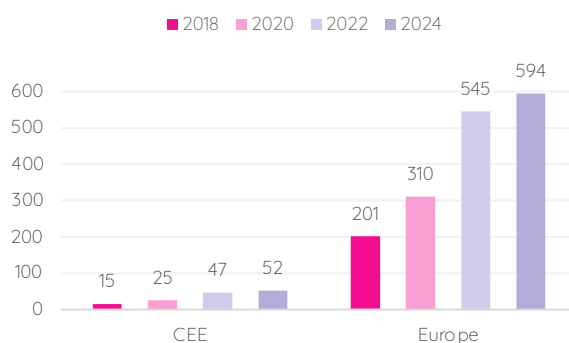
The CEE region currently hosts **52 unicorns**, representing 8% of Europe's 594 unicorns and 2% of unicorns globally.²³ CEE saw the number of **unicorns almost double from 2020 to 2022**, coinciding with the AI startup surge. In 2024, **three new unicorns emerged in the CEE**:

- Poland's **Eleven Labs**, revolutionizing digital communication with AI voice technology
- Czech Republic's **Mews**, transforming hospitality with automated property management
- Ukraine's **Creatio**, boosting business efficiency through workflow automation²⁴

ECONOMIC IMPACT OF UNICORNS

Unicorns are not only **crucial in supporting economic growth** within the CEE region, accounting for approximately 60% of the startup ecosystem's overall value, but are also significant employers within the region. For example, UiPath, a Romanian company with over 4,000 employees worldwide, exemplifies how **regional unicorns drive job creation** and foster significant talent hubs.²⁵

Exhibit 7: Number of Unicorns



Source: Dealroom Unicorn Database

ECOSYSTEM IMPACT

Employees of successful companies often reinvest the expertise they have gathered into new entrepreneurial ventures. For instance, alumni from companies like Bolt (Estonia) and UiPath (Romania) have **initiated spin-offs and angel investments**. In 2021, these leaders established the EU Unicorns Group to propel Europe to the forefront of green and digital transitions. Another notable example is Telerik and its impact on the Bulgarian startup ecosystem. After its 2014 acquisition by Progress Software, Telerik sparked the creation of over 50 ventures by former employees, such as Payhawk, the country's first unicorn. Payhawk is **boosting Bulgaria's global tech reputation and attracting international investment**.^{26 27}

Companies like Wise (Estonia) and Grammarly (Ukraine) have also **enhanced the CEE's international visibility**, attracting **significant foreign investments** and strengthening the region's reputation.

"Before UiPath became a hugely successful public company, we had a lot of explaining to do and many investors didn't even know where Romania or Bulgaria are. But now, there is an awareness that something interesting is happening in both countries. That is an amazing accomplishment for the Payhawk team and the entire venture ecosystem."

-Bogomil Balkansky

As a consequence, foreign investment in CEE tech has quadrupled since 2019, reflecting the region's growing appeal stimulated by the visibility of its unicorns.²⁸

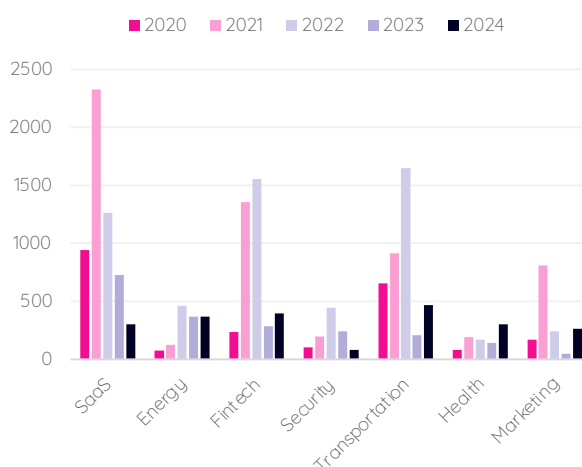
INDUSTRIES ANALYSIS

With a combined enterprise value of €80 billion in 2022, the **Enterprise Software sector dominates the startup landscape in CEE**. This is followed by Fintech (€30B), Transportation (€19B), E-commerce (€19B), and Security (€15B).²⁹

KEY INVESTMENT SECTORS

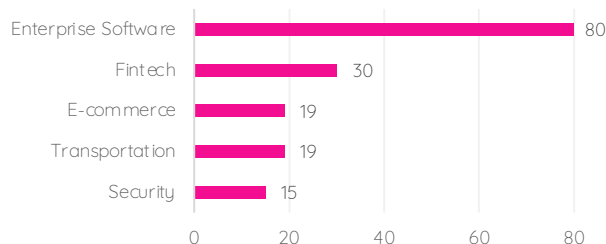
- The strong presence of SaaS reflects the **region's startup emphasis on B2B solutions and digital transformation**, especially in cloud computing, automation, and cybersecurity.
- **Fintech thrives** on the rise of **digital banking, blockchain innovations, and progressive regulatory changes**.
- The **Health industry is projected to grow** from €93 billion to €215 billion by 2030, with HealthTech in the CEE region playing a crucial role in this expansion.
- **HealthTech has significantly grown**, with investment peaking at €300 million in 2024, driven by innovations like AI-powered diagnostics and telemedicine.
- Additionally, the **Energy and Transportation sectors have received increasing attention** from investors, aligning with the EU's Green Deal policies introduced in 2020.³⁰

Exhibit 8: Combined Enterprise Value (Millions of Euros)



Source: Dealroom Database

Exhibit 9: Combined Enterprise Value (Billions of Euros)



Source: Dealroom Database

AI STARTUP ACTIVITY

The CEE region has seen **a remarkable surge in AI startup activity** since the mid-2010s. In 2023 alone, total funding for AI startups in the region was €850 million, while between January and August of 2024, the region raised around €593 million. Poland, Croatia, and Bulgaria have emerged as leaders in AI investment across the region. From 2018-2023, **AI startups attracted 15% of total CEE VC investments**, driven by increasing global demand for AI solutions and the region's competitive advantages in technical talent and cost-effectiveness. AI's future in the CEE remains promising, with growth expected from generative AI and advancements in healthcare, cybersecurity, and finance. However, challenges like underdeveloped capital markets, skill shortages, and demographic pressures remain. Overcoming them will require strong education, focused R&D, and supportive policies.³¹

INDUSTRIES ANALYSIS

SHIFTS IN THE ENERGY SECTOR

The energy industry in Central and Eastern Europe is undergoing a significant transformation as it balances the **urgent need for energy security with ambitious green transition goals**. Over the past two decades, **Central and Eastern Europe's Russian gas dependency has shifted dramatically**. Following the EU's 2004 enlargement, reliance increased from 25% to 35% of EU consumption by 2019 due to inherited Soviet infrastructure. While the 2009 gas crisis revealed **supply vulnerabilities**, Russia's 2022 Ukraine invasion caused the decisive shift, with Russian gas exports dropping to 15% by 2023, accelerating regional **energy diversification** and **decarbonization**.³²

57%

Percentage Drop in Russian
Gas as Share of EU
Consumption (2019-2023)

46%

CEOs Committed to
Investing in Alternative
Energy Source

- This environment has created opportunities for **investments in renewable technologies**, into notable startups such as InoBat, Solektra, and Moduly.
- **46% of CEOs are committed to alternative energy sources**, leading to a growing climate tech ecosystem.
- Investment in this field is growing rapidly, reflecting a **strong commitment to sustainable solutions**.
- The **convergence of geopolitical challenges** with **supportive regulations** has created ideal conditions for startups to innovate toward a more resilient, sustainable energy future in CEE.

DYNAMICS IN THE E-COMMERCE SECTOR

In the **e-commerce sector**, the CEE has consistently outpaced Western Europe in growth rates. Over the last five years, the region has experienced a CAGR of approximately 14%, far exceeding the Western European average of 8.4%. This rapid growth reflects the region's increasing digitalization and the acceleration of online retail.³³

The region still faces **various logistical inefficiencies** and **persistent infrastructure challenges** that limit its economic potential. Regulatory inconsistencies, complex tax regulations, and underdeveloped delivery networks, along with inefficient e-payment systems, create substantial hurdles that negatively affect the customer experience. These ongoing barriers slow the widespread adoption of cross-border online shopping in the region.

However, with the **increased number of internet users and the percentage of the population who use e-commerce** (57% in 2024 vs 38% in 2019 in Eastern Europe, respectively 71% and 59% in Central Europe), the region holds immense growth potential. With **strategic investments and alignment with EU standards** (such as the Digital Services Act and the Digital Markets Act), CEE countries can enhance their e-commerce capabilities significantly. Demonstrating growth, some notable startups in this sector are Rohlik Group and Packeta.³⁴

INDUSTRIES ANALYSIS

The CEE region's startup ecosystem is driven by cultural strengths, specialized expertise, and increasing investment. Each country has **cultivated distinct industry clusters**, drawing on historical legacies, strong academic institutions, and government support to fuel innovation.

For example, **Poland and the Czech Republic have developed major gaming startup clusters** driven by a history of successful studios such as CD Projekt Red and a robust university system specializing in game development. The **gaming industry is one of the Czech Republic's most significant cultural exports**, valued at €250 million, with over 135 game development studios and 2,300 employees contributing to the sector. This dominance is rooted in the country's rich artistic and animation heritage, fostering a strong talent pipeline.³⁵

COUNTRY SPECIFIC CLUSTERS

Furthermore, some successful industries in certain CEE countries include **AI**, driving automation and innovation; **cybersecurity**, strengthening digital protection; and **healthtech**, advancing telemedicine and digital health:

Poland

Poland has positioned itself as the AI industry leader in the CEE, accounting for 23.4% of the regional AI startup landscape and over 20% of overall AI funding. This success can be attributed to a combination of **government-backed research initiatives**, which have fostered **innovation**, and a high concentration of **AI talent**, supported by strong academic and technical institutions. Additionally, Poland has a robust network of AI-focused startups and investors, creating a thriving ecosystem that fuels further growth.³⁶

Czech Republic

The Czech Republic is **a prominent player in cybersecurity**, hosting industry leaders like Avast. Its strong position in the field is supported by a well-developed cybersecurity ecosystem driven by **technical expertise**, a **highly skilled workforce**, and **government-backed digital initiatives**. With a strong emphasis on cybersecurity education, along with rising demand for advanced security solutions, the country has firmly established itself as a hub of cybersecurity excellence.³⁷

Hungary

The **HealthTech sector in the CEE is experiencing rapid expansion**, driven by an aging population, increasing demand for telemedicine, and advancements in AI-powered solutions. **Hungary has emerged as a key player in the healthcare solutions space**, leveraging its strong research institutions and public funding to support innovation and the development of new technologies while also fostering collaborations with industry leaders to enhance its healthcare ecosystem.³⁸

VALUE DRIVERS AND CONSTRAINTS

GENERAL EFFICIENCY

The **CEE startup ecosystem is rapidly evolving**, driven by startup growth, rising enterprise value, and investment shifts, all shaped by **economic conditions, regulation, talent access, and investor sentiment**.



Startups in the region tend to have lower cash burn rates, leading to lower operational costs and a strong presence of software development companies.. Therefore, in some sectors, CEE startups often show stronger financial efficiency compared to Western peers. The COVID-19 pandemic also accelerated digital adoption, reinforcing the region's strength in software-driven business models.³⁹



This financial efficiency also results in a **higher job creation rate per investment**. Due to lower wages and increasing funding, CEE startups create close to 40 jobs per million euros invested, significantly outperforming the European average of 25. This trend, combined with growing investor interest, has contributed to a declining unemployment rate in the sector, outpacing the EU average.⁴⁰

RESILIENCE IN THE CEE

The **CEE region's entrepreneurial mindset**, rooted in pragmatism, resilience, and financial discipline, is now driving its **ability to catch up with Western Europe in startup success**, as founders turn early profitability, adaptability, and efficient growth into tangible results.

"[CEE founders] tend to be focused on **surviving rather than winning**. Even investment firms from 10 years ago would not believe that you can build significant companies out of Eastern Europe."

- Bogdan Iordache

In 2018, a report by Entrepreneur UK tackled the idea that **entrepreneurs in CEE tend to adopt a more pragmatic mindset**. They focus on creating fully developed products that can generate immediate revenue, leading to **quicker market entry, early profitability, and quicker adaptability**, giving them a competitive edge. This contrasts with Western European startups, which emphasize visionary ideas and long-term strategies, even if the product is still in development. **Balancing pragmatism with bold vision** will be the key to long-term success for CEE entrepreneurs.

A key strength of the CEE region lies in the ability of entrepreneurs to **create opportunities in resource-constrained and challenging environments**, fostering a culture of **resilience and pragmatism**. While trends evolving globally may gradually influence the founders' mindset, the region's emphasis on **financial efficiency, adaptability, and early profitability** is likely to remain a defining characteristic in the coming years.⁴¹

VALUE DRIVERS AND CONSTRAINTS

REGULATORY TRENDS

The regulatory landscape in the CEE region has seen **increasing alignment with EU-wide initiatives** aimed at fostering startup growth. These measures create a conducive environment for startups, helping them scale within the region and beyond.

However, **CEE faces hurdles due to inconsistent government practices** and frequent changes in regulations, complicating compliance and long-term planning. For instance, the GDPR in 2018 destabilized many startups, resulting in additional costs and operational challenges. Nevertheless, CEE countries continue to **employ supportive policies**:

EU Startups Nations Standard	Provides a framework for simplifying regulations, improving access to finance, and attracting talent , which many CEE countries have committed to adopting. ⁴²
Digital Innovation & Scale-Up	Launched in 2019 by the European Commission, DISC focuses on supporting digital startups by boosting investments and enabling cross-border scaling opportunities , addressing funding and technical assistance gaps. ⁴³
EU Artificial Intelligence Act	The regulation began taking effect in February 2025 , with initial rules now in force and more requirements to follow through 2027. It is already influencing the AI sector establishing clear standards for responsible development .
Digital Nomad Visas	Countries in the CEE region offer these visas to attract talent and position themselves as entrepreneurial hubs, counteracting challenges like brain drain and enhancing the region's global appeal to founders and investors. ^{44 45}

HEADQUARTERS RELOCATION

Many startups from the CEE **relocate their headquarters** to countries like the US to access larger markets, as local late-stage funding availability is limited.⁴⁶ Approximately **one-fifth of CEE startups that have raised over €1 million have made this move**, citing better positioning with enterprise customers and a more stable legal framework. International investors often favor companies based in familiar jurisdictions, highlighting the **credibility gap for CEE startups**, as their region is viewed as less reliable. Despite higher operational costs and increased competition, founders see relocation as crucial for scaling effectively.^{47 48 49}

"Instability of rules on IP, tax, deals, shareholding in Poland — it all gave us a headache from the very beginning. We wanted to have an international outreach, international investors, and we heard from [investors] that it's a problem, that they don't trust Poland"

- Adam Wiśniewski, Co-founder of AI Clearing

However, **relocated companies often remain active in their origin countries**. The generated funds frequently circulate back into domestic economies, as seen with Skype's founders, who created a successful investment fund after selling their company to Microsoft in 2011.⁵⁰

CEE STARTUP SUPPORT ECOSYSTEM

There is a network of **support structures, organizations, and resources** that enable startups to grow and thrive. The CEE ecosystem has seen the emergence of several successful **accelerators** and **incubators** that play a pivotal role in nurturing innovative companies. These organizations, along with various **incentives and strategies**, provide essential resources, mentorship, and networking opportunities to **help startups grow**.

ACCELERATORS

According to the Harvard Business Review, “*startups participating in an accelerator raised 50% to 170% more from investors and were more likely to be alive or acquired than similar startups that applied to the accelerators but were not accepted.*”⁵¹ That is because **accelerators typically advance beyond the early stages**, which are usually supported by incubators. They provide growing companies with mentorship, investment opportunities, technical resources, and access to peer networks for learning. Programs typically last 2–6 months, **helping companies become self-sufficient**. Some successful accelerators are:

- **StartupYard**: Based in Prague, it is the **CEE’s oldest deep tech accelerator**, specializing in robotics, IoT, AI, and more. Since 2011, it has **supported over 110 startups** with a 3-month program, offering up to €100K, €1M+ in benefits, expert mentorship, and investor access.
- **Startmart**: A CEE accelerator co-funded by the EU **supports high-growth startups and SMEs** with mentorship, funding, and industry connections. Since its inception, it has accelerated 300+ startups, strengthening the CEE entrepreneurial ecosystem.⁵²
- **ReaktorX**: Based in Poland, it supports early-stage tech startups, aiming **to position itself as a hub for future successful companies**. It offers €25K in funding, €75K in perks, expert mentorship, and a vast network to refine product-market fit and go-to-market strategies.

INCUBATORS

For incubators, a study conducted by the International Business Innovation Association revealed that businesses **supported by incubators have a five-year survival rate of 87%**, compared to 44% for those without such support. According to the same organization, “*business incubators nurture the development of entrepreneurial companies, helping them survive and grow during the start-up period when they are most vulnerable.*” Despite their **diverse specializations**, incubators have so far been advantageous in CEE, as the number of startups has surged in the region. An example of a notable incubator is: ^{53 54}

Zagreb Innovation Centre: ZICER provides essential support to startups through office spaces, labs, and its Startup Factory program. Launched by the City of Zagreb, the program specifically **targets SMEs struggling to access financial support due to a weak venture capital market**. By offering entrepreneurial training, mentoring, and financial grants, ZICER helps these startups navigate funding challenges, fostering growth and innovation within Zagreb’s local ecosystem.⁵⁵

CEE STARTUP SUPPORT ECOSYSTEM

INITIATIVES

Diverse incentives and strategies introduced at the European Union and national levels shape the growth and development of startups in the CEE region. These **initiatives aim to enhance innovation**, increase competitiveness, and facilitate access to funding, thereby fostering a robust startup ecosystem.

European Institute of Innovation and Technology

- Europe's **largest manufacturing innovation initiative**, EIT Manufacturing, an EU co-founded initiative, plays a key role in accelerating the transition to resilient and sustainable manufacturing.
- Since 2020, it **has invested over €15 million in collaborative projects**, fostering partnerships among startups, SMEs, technology centers, and universities to drive innovation.
- **105 high-impact innovation projects**, and 80 market-ready innovations have come to fruition. Other initiatives like Horizon Europe and Connecting Europe Facility (CEF) further drive the region towards innovation and sustainable progress.⁵⁶

Bulgarian Entrepreneurial Association

- **Impactful founder-led organizations**, such as the Bulgarian Startup Association, a non-governmental organization established in 2017 advocates for policy changes, working to improve the regulatory environment for entrepreneurs in Bulgaria.
- They **serve as a bridge** between startups, investors, government entities, and other stakeholders within Bulgaria's innovation ecosystem, facilitating collaboration and supporting the growth of entrepreneurial ventures.
- Some **successful legislative reforms include the Startup Visa**, which attracts foreign entrepreneurs, and the creation of a Variable Capital Company legal structure to offer flexibility for emerging businesses.⁵⁷

European Innovation Council

- The European Innovation Council, set to launch in May 2025, **will allocate €20 million specifically to support startups in widening countries** (which mainly covers CEE countries).
- This initiative seeks to **bridge the research and innovation gap** by providing essential funding to help startups refine their business cases and attract additional investment through EIC Accelerator programs.
- Successful applicants will have the **opportunity to receive funding** ranging between €300,000 and €500,000, covering up to 70% of their costs—a critical resource for startups looking to scale their operations effectively.⁵⁸



VENTURE CAPITAL ANALYSIS

The venture capital landscape in Central and Eastern Europe (CEE) offers valuable insights into the region's broader innovation potential, shaped by economic cycles, evolving investor behaviors, and diverse funding conditions. Characterized by a strong early-stage investment culture, the CEE ecosystem has demonstrated resilience and adaptability, consistently attracting international interest due to favorable valuations, cost-efficient operations, and increasing alignment with global trends in sectors such as enterprise software, climate technology, and artificial intelligence.

The region also highlights important structural challenges, including fluctuating availability of capital, significant dependence on public funding, and varying degrees of investor-founder alignment. These dynamics provide a balanced view of opportunities and hurdles, underscoring CEE's evolving position within the global venture capital and startup ecosystems.

VC ACTIVITY GLOBALLY AND IN EUROPE

In 2023, the Venture Capital sector witnessed a global ‘cooldown’ as venture funding fell to €248.8 billion in 2023, the lowest figure since 2017. Globally, the 2023 VC ‘cooldown’ is likely to have **partly resulted from investors and VCs adopting a more cautious attitude** rather than the “fear of missing out” phenomenon that the industry experienced in 2021 and 2022, largely in tech. The post-pandemic over-excitement, together with an abundance of capital, led to the general overvaluation of companies.⁵⁹

CHALLENGES IN THE VC LANDSCAPE

Bridge Rounds

In the past two years, **challenging market conditions have driven companies to raise bridge rounds**, temporary unpriced funding between priced rounds often from existing investors. This was done in an effort to improve their financial stability and avoid setting lower valuations, as demonstrated by the fact that in Q1’24, 42% of all seed-stage investments were bridge rounds. **This trend spanned all funding stages**, as primary funding became harder to secure, and companies aimed to achieve key milestones before larger raises.⁶⁰

Liquidity Issues

The 2021 VC boom, fueled by cheap liquidity, drove 44% growth in EU investment and 49% in the U.S., but rising interest rates triggered a sharp correction from 2022, leading to a 17% year-over-year decline in European VC funding, which continued into 2023. Liquidity constraints remained a challenge, with **60% of VCs in a 2024 survey citing insufficient IPO market liquidity**, alongside a weak M&A landscape and few large-ticket buyers. A 2024 study found **VC market liquidity is closely tied to economic size and money supply**, while interest rates show a strong inverse relationship over time. The EIB confirms that monetary policy shifts have significantly impacted venture capital investment, making accessing funding more difficult.^{61 62 63}

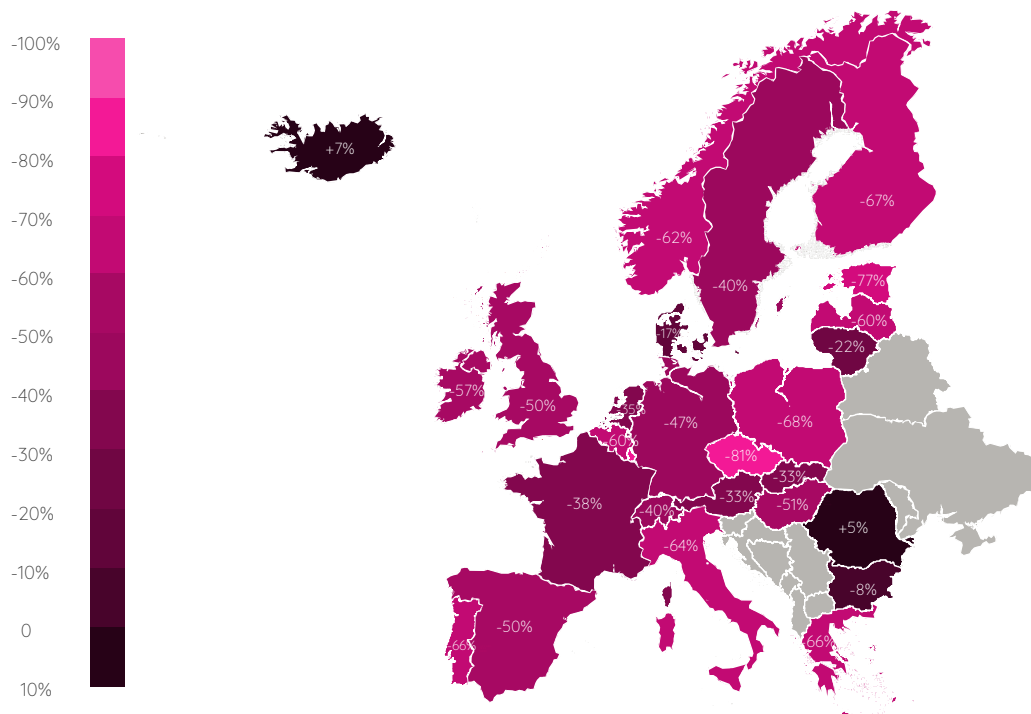
Few Co-investors

The **decline in competition for deals has made it harder for VCs to find co-investors**, leading to smaller funding rounds and lower valuations. Mirroring global trends, the CEE region also faces challenges in co-investor availability. As fewer investors are willing to commit capital, startups face **greater difficulty securing sufficient funding, particularly in later-stage rounds** where larger deal sizes require collaboration between multiple investors.⁶⁴

All of these factors collectively contributed to a significant downturn in VC investment, ultimately **driving the accumulation of ‘dry powder’** (capital committed to private investment firms that remains unallocated) in Europe to €53 billion by the end of 2023.⁶⁵

VC ACTIVITY IN CENTRAL AND EASTERN EUROPE

Exhibit 10: Year over year change in VC investing in Europe from 2022 to 2023



Source: Pitchbook

COUNTRY SPECIFIC FLUCTUATIONS

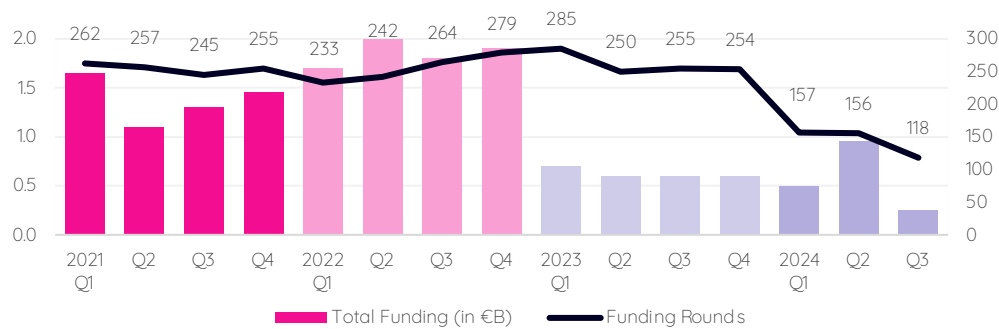
Apart from Romania, which witnessed a growth of 4.6%, all CEE countries featured registered a decline. Since most CEE countries experience economic trends similar to those of other European nations, it follows that the factors identified to be contributing to the slowdown in VC activity across Europe are **largely applicable to the CEE region** as well.⁶⁶

In 2021 and 2022, driven by high expectations for technological innovation, abundant liquidity from low interest rates, and a strong economic recovery following the pandemic, the CEE region experienced a ‘boom’ in VC funding. However, over the past two years, rising interest rates tightened financial conditions, and a recalibration of valuations has led many to believe **that the ecosystem has reverted to a more sustainable, normalized state**. As expected, the CEE venture capital landscape has continued to experience notable fluctuations. From Q3 2023 to Q3 2024, **the total funding value dropped 35% from €560 million to €360 million**, while the number of rounds fell by 54%, from 255 to just 118.⁶⁷

However, the **CEE markets proved to be comparably more resilient than those in Western Europe**, with a 15% decline in deal volume in 2023 versus 35%, respectively. For context, there are over 2400 active VCs in Europe, with 350 of them operating in the CEE in 2024.^{68 69}

VC ACTIVITY IN CENTRAL AND EASTERN EUROPE

Exhibit 11: Evolution of Funding in CEE



Source: Vestbee

The declining funding and fewer deals suggest ecosystem-wide stagnation, widening the gap with more developed markets. So far, **public funding helped maintain stability** in CEE, but its decreasing availability poses a challenge for startups seeking capital. This return to pre-2021 figures reflects a broader trend of the CEE venture capital **ecosystem adjusting to more traditional investment levels** after a period of heightened activity.⁷⁰

VALUATIONS OVER TIME

The **median early-stage and pre-seed valuations in Europe increased** from €0.9 and €1.4 million in 2020 to €1.8 and €4.4 million in 2024, driven by rising speculation where **startups are often priced based on their future potential rather than their current worth**. This resulted in a decrease in median equity ownership sold by round from 2019 to 2023, ranging from 23% to 19.9% in seed rounds, 24% to 20% in Series A rounds, and 21% to 16.3% in Series B rounds, as illustrated by the chart below.⁷¹

Exhibit 12: Median Stage Valuations (Millions of Euros)

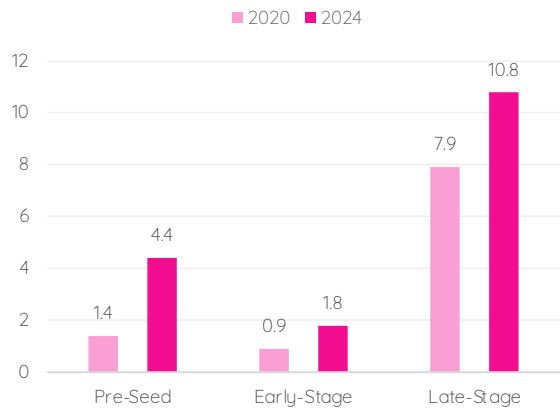
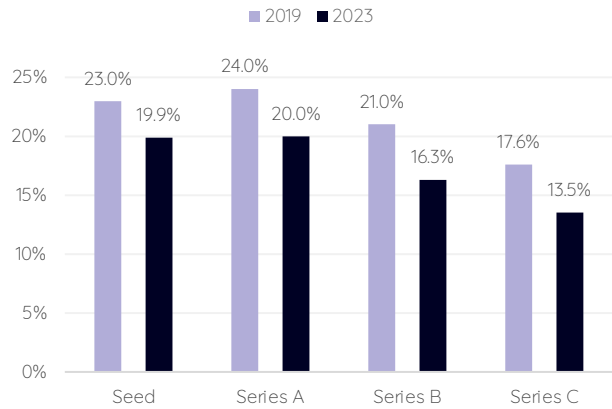


Exhibit 13: Median Equity Ownership sold by Round



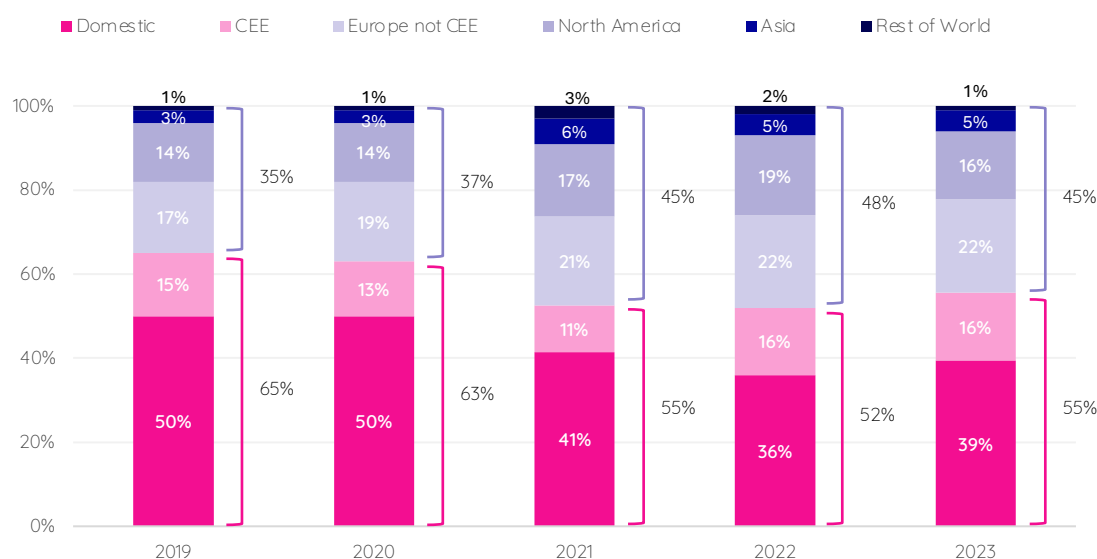
Source: Pitchbook

Sources: 70. Vestbee; 71. Chronograph

VC ACTIVITY IN CENTRAL AND EASTERN EUROPE

Despite the previously mentioned declines, **international investors outside Europe increased their share of total fundraising** from 9% in 2022 to 21% in 2023, even though their absolute contributions grew only slightly from €162M to €174M. Specifically in the CEE, non-European investors, particularly from the U.S., have become a more significant part of the funding landscape. For example, the proportion of international investors has increased significantly, rising from 35% to 45%, as shown below over five years.^{72 73}

Exhibit 14: Distribution of VC Investment in CEE by Investor provenance Within CEE vs. International



Source: Dealroom

FUTURE FUNDING UNCERTAINTIES

However, there remains uncertainty about the future of some local VC investors, as many CEE VC funds have historically relied on public funding sources that are now running out: “In recent years, many **VCs active in CEE countries have benefited from public funds**. These funds are now running out, and it is unclear when new funds will be available. In this situation, a big question mark is the future of many local VC investors once they are disconnected from the drip of public money.”⁷⁴

The ability of the region’s VC market to sustain itself independently of these funds remains a critical question moving forward. Maciej Ćwikiewicz, CEO of PFR Ventures, stated that **low investment in VC “should change as soon as we unlock the assets of other public investors**, such as pension funds, and divert this money towards VC funds.” If no such alternative sources of capital step in, the **decline in public funding could significantly impact the launch of new VC funds** and the ability of existing ones to support early-stage startups. Given that CEE’s VC ecosystem is still in development, a funding gap may impede growth, reduce deal flow, and make the region more dependent on foreign investors in the long term.

EARLY-STAGE DOMINANCE AND FUTURE OUTLOOK IN CEE

Early-stage funding has long been the backbone of the CEE VC ecosystem, fostering a dynamic startup landscape by providing crucial capital for emerging companies. This strong foundation has historically supported innovation and growth across the region. However, in recent years, there has been a broader decline in venture capital activity: *“The average VC investment per company in the CEE region was €0.95 million in 2023, marking a year-on-year decrease of 40%, and remained below the European average of €2.7 million.”* As of 2023, CEE startups raised **over €900 million in early-stage funding**. The region recorded 611 Pre-Seed and 144 Seed-stage deals, the two **making up 92% of all VC-backed deals in CEE**.⁷⁵

Although the funding environment appears more constrained for startups, there remain opportunities for founders who adapt to evolving investment trends. As venture capital dynamics shift, **founders are exploring alternative financing options to help sustain innovation in the region**. This is particularly relevant given the changing role of public funding, a key pillar of early-stage investment, whose future direction is uncertain.

CEE’s focus on early-stage funding contrasts that of Western Europe, where late-stage and buyout investments dominate. In 2020, only 15.4% of European funds were allocated to early-stage investments, while 69.3% went to buyouts.⁷⁶ By contrast, just 18.4% of CEE funds were allocated to buyouts, reflecting a stronger emphasis on fostering early-stage innovation.

THE ROLE OF PUBLIC INVESTMENT AND ITS IMPACT

Public funding has been crucial for early-stage VC investment in CEE, compensating for private investors’ reluctance due to the significant risks and uncertain returns associated with early-stage deals. In 2020, the share of public capital in CEE VC funds was over 40%, compared to just 6-7% in Western Europe. The current funding mix has supported early-stage innovation while the ecosystem develops pathways for larger growth-stage investments.⁷⁷

81%

Government-backed VC Rounds in Poland (2013-2023)

70%

VC-backed startups that received national or EU public funding (2021)

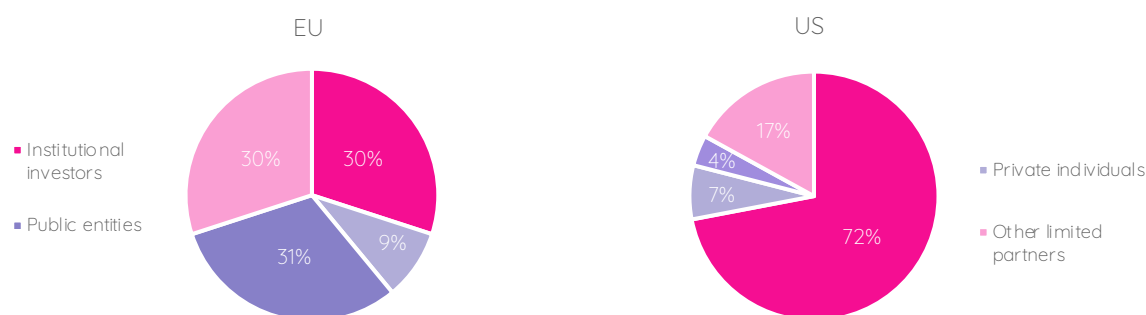
For example, Hungary’s 2023 **public investment plunged by 60%**, dropping from €180 million to €65 million. This decline resulted from the suspension of EU funding, imposed as a financial penalty for Hungary’s non-compliance with EU rule-of-law and governance standards. One of the most affected VC firms was HiVentures, Hungary’s state-backed fund, which had been a major recipient of public funding. As a result of Hungary’s reduction in funding, **HiVentures had to halt their early-stage investments**.⁷⁸

EARLY-STAGE DOMINANCE AND FUTURE OUTLOOK IN CEE

CHALLENGES IN EARLY-STAGE INVESTING

While early-stage investment remains a focal point in the CEE region, its sustainability is uncertain due to challenges such as **the lack of private-sector involvement**. CEE private investors typically prefer later-stage or buyout funds for more predictable returns, **creating a startup funding gap**. To address this, the EU is working to reduce reliance on public financing by **promoting institutional investor participation, especially from pension funds**, and easing barriers to private investment. The inefficiencies of public capital, such as the lack of market-driven selection and the crowding out of potential investors, likely caused this shift. The EU seeks to create a more self-sustaining VC ecosystem by enhancing regulatory frameworks and reducing capital market fragmentation.⁷⁹

Exhibit 15: 2013 – 2023 Source of VC Funds by Investor Type (EU vs US)



Source: International Monetary Fund

The charts above indicate the greater reliance of the CEE on public funds, compared to the US, through the total VC-raised funds during the 2013–2023 decade. Furthermore, the European Investment Fund and other EU initiatives are actively working to bridge the VC stages funding gap, while new government-backed programs, such as those from the European Investment Bank and the Polish Development Fund, aim to increase access to financing for promising early-stage ventures. These efforts will **promote further investment and reduce the risks posed by declining public capital availability**.⁸⁰

FUTURE OUTLOOK AND OPPORTUNITIES

Over time, **investor priorities are shifting towards startups with strong financials and sustainable business models** rather than prioritizing rapid expansion.

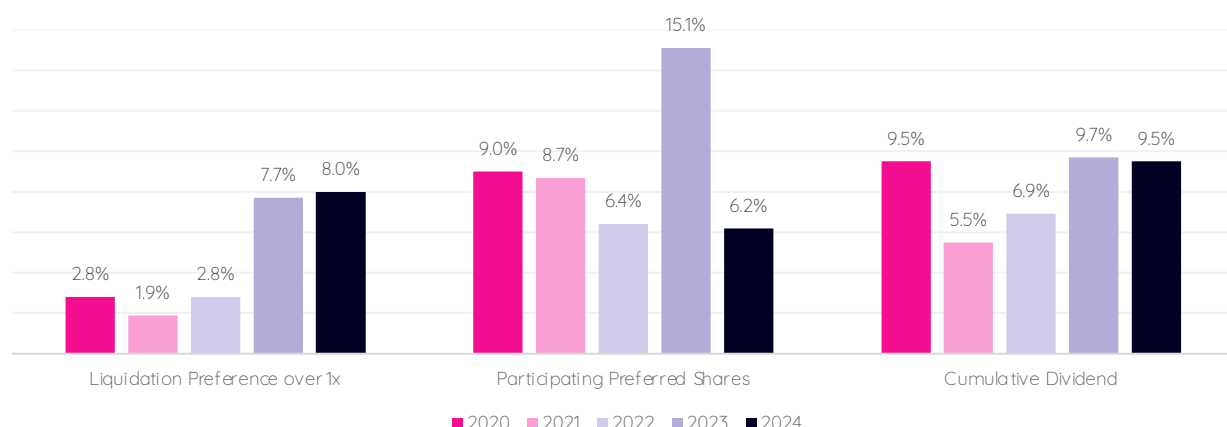
On one hand, the increased scrutiny of financial fundamentals continues to **push founders to focus on long-term resilience** resulting in late-stage funding becoming even more selective, with stricter terms and heightened scrutiny of key performance metrics. Additionally, founders also further prioritize securing early-stage funding to establish solid foundations and possibly explore alternative funding sources to meet their capital needs, such as venture debt.⁸¹

EARLY-STAGE DOMINANCE AND FUTURE OUTLOOK IN CEE

INVESTMENT SAFEGUARDS

On the other hand, **venture capital investors remain focused on downside protection and return maximization**, increasingly relying on mechanisms such as liquidation preferences and participating preferred shares to secure their investment ahead of common shareholders. As seen in the deal terms by quarter, there is an **evident rise in liquidation preferences in deals**, which grew from 2.8% in Q1 2020 to 8% in Q1 2024, signaling a stronger emphasis on investor safeguards. At the same time, **cumulative dividend preferences have remained steady** at 9.5%, reflecting continued demand for guaranteed returns regardless of a company's profitability. Together, these measures ensure that investors can recover their capital even in uncertain market conditions. Additionally, the continued use of redemption rights provides a critical exit option when companies fail to go public or get acquired. As VCs shift towards risk-averse strategies, they are prioritizing financial security in an uncertain funding environment.⁸²

Exhibit 16: 2020-2024 Percentage of Deals with Specific Investor Preferences by Q1



Source: Carta

ATTRACTIVE INVESTMENT LANDSCAPE

As VCs adopt more risk-averse investment strategies, the changing deal terms reflect a broader shift in how capital is allocated, presenting opportunities for international investors. With the **average Series A valuations in CEE being 30% to 40% below those in Western Europe**, investors can acquire more equity with the same amount of capital. Additionally, CEE startups demonstrate strong capital efficiency, reaching **similar revenue milestones with 40% less funding than their Western counterparts**. Therefore, the region has high potential, offering attractive investment opportunities.⁸³

At the same time, even though startups in CEE currently face challenges in raising capital, **the region's growing credibility is fostering stronger alignment with global standards**. Driven by a strong foundation of innovation, deep talent pools, and cost-efficient operations continue to enhance CEE's appeal to global investors. Furthermore, funding accessibility is expected to improve, positioning CEE startups for a more competitive and globally integrated future.⁸⁴

INFLUENCING FACTORS AND EMERGING TRENDS

Venture capital investment is driven by multiple factors that determine investor decisions and startup success. Strong leadership is essential, as investors prioritize teams with the ability to scale and navigate uncertainty, while tighter funding conditions and shifting risk appetite pose challenges, increasing market maturity and global interest point to a promising future.⁸⁵

One of the biggest contributors to the success of a startup that VCs examine is selecting a **CEO with the right qualities, as it is essential for a company's growth and long-term success**. According on S&P 1500 studies:



Leaders who exhibit strong conscientiousness levels typically see an average of 3.83% increase in returns, whereas CEOs with lower levels often face a 1.70% decline in returns.



Firms with more neurotic **CEOs experienced 2.04% higher stock risk on average**. However, in cases of less neurotic CEOs it increased returns by 2.68% in firms led by more emotionally stable leaders.

Vcs value strong leaders with decision-making capabilities, adaptability, and communication skills, boosting the chances of scaling a business. They also emphasize social proof, often favoring executives with a proven track record in successful companies. For instance, founders like Daniel Dines of UiPath and Tomaž Lanišek of 3fs have shown exceptional leadership in scaling their businesses. This focus **on effective leadership is particularly crucial in the CEE region**, where visionary and flexible founders like these are shaping the growing startup ecosystem.⁸⁶

CURRENT CHALLENGES

Vcs also acknowledge regional challenges, particularly the war in Ukraine's impact on trade. The Black Sea trade halt increased shipping costs, pushing the U.S. as an alternative, leading to a 17% rise in EU exports in 2021. Landlocked countries suffered most, with Hungary's export price index peaking at 129.2 in 2022 due to reliance on transatlantic trade, **raising costs for startups in the region**. To mitigate this, nations shifted to land routes like Romania, bringing the index down to 102.7 by 2024.⁸⁷ Additionally, **Vcs could also lose confidence in investing in CEE startups due to the lower graduation rates** in comparison to global and European averages. Notably, at the Seed funding stage, the graduation rate in CEE stands at 29%, whereas the global and European averages are 53% and 48%, respectively.

Despite these challenges, currently 40% of capital in CEE-focused funds is now coming from international investors, up from just 20% in 2018. This clearly outlines the increasing confidence in the CEE region's venture ecosystem, **successfully attracting international limited partners**.⁸⁸

INFLUENCING FACTORS AND EMERGING TRENDS

Recently, **venture capital investment in the CEE region has been concentrated in a few key sectors**, aligning with broader global trends.

Enterprise software emerged as a key driver, attracting over €655 million in investments in 2023, while SaaS companies raised an impressive €1.2 billion across industries, underscoring significant investor appeal. Additionally, the energy sector gained prominence by securing one-third of total VC investments amid rising demand for clean energy. AI startups also rose from 15% of VC investments over five years to 45% in Q1 2024, with climate tech increasing from 20% to 26% in early 2024. These **trends demonstrate the region's growing emphasis on technology-driven innovation**, positioning CEE startups as strong contenders in the global investment landscape.⁸⁹

Exhibit 17: 2024 Percentage of Total Investment in CEE



Source: Dealroom

GLOBAL INVESTMENT SOURCES

The CEE region is **attracting more diverse investors, reflecting its growing global startup integration**. While European funds remain dominant, international investors such as TASARU Mobility Investments, backed by Saudi Arabia's public investment fund, and Y Combinator have expanded their presence, supporting startups like Croatia's Verne Mobility and Pythagora. This trend is evident in a series of high-profile deals, including Point Nine Capital's investment in Romania's Creatopy, which secured €54 million to advance its AI-driven design automation platform, and Pythagora's €3.3 million round for AI app development.⁹⁰

Additionally, **climate tech has continued to attract substantial VC investment in the region**. Over the last few years, funding levels have indicated sustained growth, rising from €102.5 million in 2018 to over €163.8 million in the first quarter of 2024. Moreover, the average size of deals in the industry is constantly increasing, with two recent mega-funding rounds seen in Rimac (Croatia) and Vinted (Lithuania), which secured €500 million from Softbank and €250 million from EQT Growth, respectively.⁹¹

INVESTOR-FOUNDER RELATIONSHIP

Understanding the funding landscape in Central and Eastern Europe requires looking beyond just investment fluctuations. While macroeconomic and financial factors are pivotal, founders and investors also encounter deeper structural challenges influencing their financial decisions.

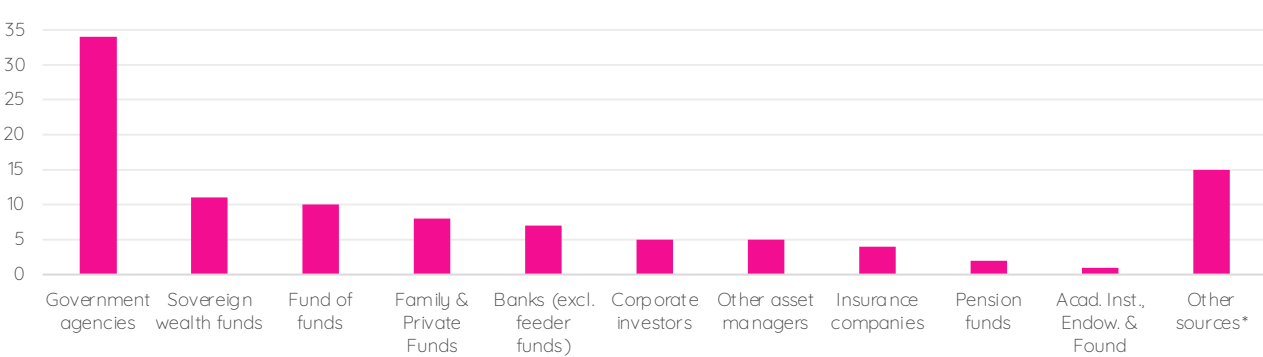
INCLINATION TOWARDS BOOTSTRAPPING

Bootstrapping remains a more widely chosen funding option for the CEE region, compared to Western Europe, with 31% of unicorns in the region relying on it, compared to just 7% in the rest of Europe. This stems from a historically weaker investment landscape and limited access to external funding, which may be due to a **branding problem**. The region is not able to showcase its true potential from an investor’s point of view, as admitted also by a VC executive: “[US investor] told me that if she invests in CEE and doesn’t show a fast return, she can lose her job. This wouldn’t happen if the investment is made in the West, even if returns are not showing.” However, with more and more **unicorns boosting the region’s reputation**, international prejudice regarding the region is bound to start changing.⁹²

INCREASE IN EXTERNAL FUNDING

Although external funding was not prominent in the region, it has now become a viable option due to an influx of funds and expertise in the region. There is an **increasing number of startups now actively seeking venture capital and grant funding**. In 2021, CEE-born startups raised more than €6 billion, exceeding both the sums for 2019 and 2020 combined, showing an x2.44 growth rate. This shift is driven by the realization that VC funding offers accelerated growth, access to expertise, and market validation, making it an attractive alternative to bootstrapping alongside other external sources. Recent data indicates that many **startups in the CEE region prefer government funding** due to its accessibility and supportive framework, facilitating capital access for early-stage companies facing challenges in securing private investment.^{93 94}

Exhibit 18: External Funding Sources in the CEE in 2023 (%)



Source: Invest Europe CEE Activity Report 2024

Sources: 92. The Recursive; 93. Dealroom; 94. Accountancy Cloud

INVESTOR-FOUNDER RELATIONSHIP

Unlike venture capital, government funding places less emphasis on immediate returns, enabling founders to focus on long-term growth and innovation. **In 2023, public funding accounted for approximately 34% of total capital raised by startups**, highlighting the region’s reliance on state support. Additionally, CEE governments have introduced grants and subsidies to further encourage entrepreneurship, while EU funding programs continue to incentivize startups to seek public financial backing.⁹⁵

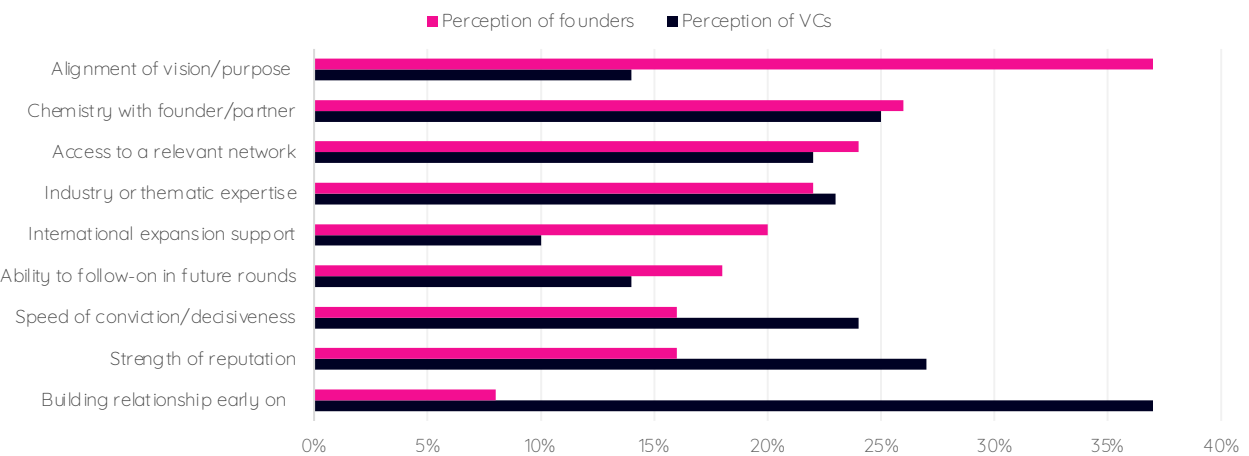
GENERAL CONCERNS REGARDING VC FUNDING

Beyond financial concerns, **founders report psychological stress, investor pressure, and misalignment of long-term goals** as significant challenges in VC-backed growth. Surveys reveal that many founders struggle with investor expectations for rapid profitability, which can conflict with their vision for sustainable business development. At the same time, VCs are beginning to acknowledge these concerns, though their response is still evolving. While structural challenges persist, **investors are exploring alternative financing models to make VC funding more appealing**. This section examines these dynamics, highlighting the growing awareness among VCs and the steps being taken to foster a more founder-friendly ecosystem.

MISALIGNMENT ISSUES

In another recent survey, founders were asked to identify the most important factor when choosing an investor, while VCs were asked what they consider the key determinant for a company to secure investment. The **chart below illustrates the percentage of respondents who agreed on a specific factor** and the ranking difference between them. A clear discrepancy in priorities can be identified: investors put more emphasis on their reputation and chemistry with founders rather than offering the support companies seek.⁹⁶

Exhibit 19: The most important considerations: when selecting an investor (Founders) / to win a competitive deal situation (VCs)



Source: State of European Tech 2024 Survey

Sources: 95. OECD; 96. State of European Tech

THE ROLE OF LPs IN VC INVESTMENT

TYPES OF LPs AND THEIR CONTRIBUTIONS

Limited Partners (LPs) form the critical financial foundation of the venture capital industry in CEE. Today, the LP landscape is increasingly diverse, including government-backed entities, international financial institutions, family offices, corporates, and private investors.

Prominent among these is the European Investment Fund (EIF), which has anchored over 670 VC funds across Europe since 2015, significantly impacting the CEE market by providing foundational capital and boosting regional investor confidence. Additionally, development banks like the European Bank for Reconstruction and Development (EBRD) actively participate, having recently invested approximately €15 million into a notable Polish technology-focused fund. National governmental funds such as Poland's PFR Ventures have substantially influenced local ecosystems, investing PLN 1.1 billion (€240 million) into 32 domestic VC funds between 2017 and 2023, benefiting nearly 380 startups. Private capital from family offices and wealthy individuals is also rising notably, complemented by corporate venture investors, like Hungary's MOL Group, which co-launched a €100 million fund dedicated to innovation alongside state investors.⁹⁷

European Institutions

The EIF anchored over 670 VC funds since 2015, significantly **fueling regional VC growth**. This provided credibility and foundational capital, encouraging private-sector involvement.

Development Banks

The EBRD recently committed approximately €15 million to prominent Polish tech-focused VC funds, **playing a crucial role in mitigating investment risks and attracting additional private investors**.

Government-Backed Funds

PRF Ventures, invested PLN 1.1 billion (€240 million) into 32 local VC funds from 2017 to 2023, **directly contributed to financing nearly 380 startups**, spurring significant economic growth.

Corporates & Family Offices

MOL Group, co-launched a €100 million innovation fund focusing on strategic sectors alongside state LPs, **enabling investments in specific and ESG-driven sectors**, boosting niche industries.⁹⁸

CHANGING PERCEPTIONS OF LPs TOWARDS VC FUNDS

In the last decade, **LP perceptions toward venture capital in the CEE region have notably shifted from skepticism toward greater enthusiasm** and strategic acceptance. Initially perceived as a high-risk, emerging investment category, regional VC struggled to attract significant private capital, heavily relying instead on governmental or EU-backed funding. However, a series of high-profile successes transformed this narrative, significantly improving LP confidence. These successes include UiPath's landmark IPO in 2021, which significantly boosted regional credibility or the €1 billion exit of Czech cybersecurity company Avast.⁹⁹

THE ROLE OF LPs IN VC INVESTMENT

These successes attracted increased international attention, with foreign investors now accounting for about 40% of all capital invested in CEE-focused VC funds, double the share from 2018. Consequently, nearly 30% of surveyed LPs recently expressed increased interest in European venture capital investments compared to prior years, reflecting this improved regional credibility and reduced perception of risk.

LPS REACTION TO EVOLVING PERCEPTIONS

In response to their evolving perceptions, LPs have notably adjusted their portfolio construction strategies, significantly increasing both their capital allocation and their willingness to engage earlier with venture funds.¹⁰⁰

€1.3

Billions Raised by
Venture Capital Funds
in 2024

45

Venture Capital Funds
Launched between
2021 and 2023

In 2024 alone, CEE-based venture capital funds raised approximately €1.3 billion, marking the region's second-highest annual fundraising total on record. This capital influx signifies a deliberate strategic shift among LPs, who now commit more substantial resources earlier in a fund's lifecycle, frequently supporting first-time or emerging fund managers. Over 45 new venture funds have launched across the region between 2021 and 2023, reflecting LP readiness to back innovative teams from inception. Additionally, LPs increasingly favor specialized or thematic funds, driven by global trends towards ESG and impact investments.

More than 15 dedicated sustainability-oriented VC funds have emerged in recent years, targeting high-potential sectors like fintech, climate tech, AI, and green energy. Even traditional funds have begun integrating these targeted strategies, exemplified by Hungary's Lead Ventures launching a second €100 million fund specifically focusing on sustainability and circular economy solutions. These adjustments in LP portfolio strategies underline a more sophisticated, mature approach, as CEE venture capital solidifies its place as a stable and strategically valuable asset class.¹⁰¹

These developments reflect a broader shift in LP perceptions, as confidence has grown substantially due to landmark achievements by regional startups. High-profile exits, including UiPath's IPO and Avast's billion-dollar acquisition, coupled with international expansions of firms like Bolt, have decisively improved the perceived investment value of CEE. In response, LPs have proactively adapted their portfolio strategies—allocating larger commitments, entering investments at earlier fund stages, and favoring sector-specific and impact-driven approaches. This evolution in LP investment strategy underscores the maturation of the region's VC industry, indicating sustained growth and stability. Ultimately, the increased sophistication and deliberate strategy demonstrated by LPs signify not only the current robustness of the CEE venture capital market but also its promising trajectory.¹⁰²



DEEP DIVES

Poland and the Czech Republic

Poland and the Czech Republic were chosen for their leading roles in the CEE startup ecosystem, driven by strong economic growth, rising digitalization, and well-developed entrepreneurial hubs like Warsaw, Kraków, and Prague. Their dynamic labor markets and industry diversification make them key innovation hotspots in the region.

Both countries also stand out due to their strategic regional positioning, market size, and growing appeal to international investors. Their relatively advanced infrastructure, access to EU funding, and increasing integration into global value chains make them ideal representatives of the broader CEE startup potential. Additionally, their ecosystems offer a balanced view of both emerging opportunities and structural challenges typical of the region.

POLAND DEEP DIVE

Poland has emerged as a **powerhouse in Central and Eastern Europe's startup and investment landscape**, combining rapid economic growth with a thriving entrepreneurial ecosystem. With a GDP of €874 billion and a 3.5% real GDP growth rate, Poland offers a strong foundation for innovation-driven businesses. The country leads the region in startup creation and unicorn development, with 13 unicorns to date—more than any other CEE country.

Poland's **competitive edge lies in its pro-business reforms**, such as the Prosta Spółka Akcyjna (PSA) legal framework, and its strategic government initiatives like the Startup Visa, which attract both local and international founders. Additionally, Poland is at the forefront of AI innovation in the region, exemplified by PLLuM, a national large-language AI model. These factors, along with its specialization in AI, gaming, and MedTech, make Poland an attractive destination for venture capital, securing 26% of all CEE investments in 2023. The country's startup scene is characterized by global ambition, with over 90% of startups planning international expansion, solidifying Poland's role as a **regional leader in technology and investment**.¹⁰³

STARTUP ANALYSIS

Poland's startup ecosystem has expanded rapidly in recent years, solidifying its position as a key innovation hub in the CEE region. Poland is currently home to over 5,773 startups, with a total enterprise value of €49 billion, marking a 2.4x growth over the last five years.¹⁰⁴

43%

Founders are aged 26-35

77%

Startups employ <10 people

76%

Startups <5 years old

The **country leads in unicorn creation**, boasting 13 unicorns to date, the highest in the region. Among them, ElevenLabs, specialized in text-to-speech and voice synthesis technology, stands out as Poland's most recent (2024) and youngest unicorn (founded in 2022), reflecting the country's rising AI influence and growing tech sector. This momentum underscores Poland's ability to foster startups and attract investment.

Globally, **Poland ranks 34th in StartupBlink's 2024 Global Startup Ecosystem Index** and 21st in Europe, showcasing steady improvements in its entrepreneurial environment. StartupBlink ranks startup ecosystems based on three key factors: Quantity (number of startups, investors, and coworking spaces), Quality (size of investments, unicorns, and startup traction), and Business Environment (ease of doing business, funding availability, and supportive policies). The **country has developed specialized industry clusters**, positioning its major cities as sectoral leaders—Warsaw in gaming, Kraków in digital marketing, Wrocław in MedTech, and Poznań in PropTech.¹⁰⁵

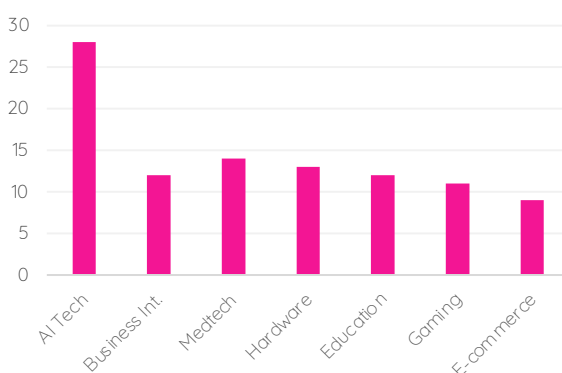
POLAND DEEP DIVE

INDUSTRY ANALYSIS

Poland has established itself as a **regional leader in AI and gaming**, two of its most dynamic and high-growth industries. The country is the top AI hub in CEE, accounting for 23.3% of all AI startups in the region and hosting the largest AI workforce. In 2024, Poland also saw the biggest AI funding in CEE (€171M), further cementing its position as a key player in artificial intelligence development.¹⁰⁶

Alongside AI, **gaming remains one of Poland's strongest industries**, being recognized as one of the largest gaming markets worldwide. The country is home to at least 494 game publishers, including 16 companies with over 500 employees. Additionally, it generated €1.286 billion in revenue in 2022. With its growing expertise in AI and a well-established gaming sector, Poland continues to be a hub for technological innovation and digital entertainment in Europe, solidifying its position as a leader in the industry.

Exhibit 20: Startups by Industry (%)



Source: Polish Startups 2024 Report

Additionally, **Poland's e-commerce sector is rapidly growing**, with a projected increase from €21B to €33.3B by 2029, with customers spending the equivalent of approximately €1,400 per year. It ranks among the fastest-growing CEE markets, with a 21.9% annual growth rate in 2022. Leading platforms include Allegro, a Polish-born unicorn that accounts for a third of sales.¹⁰⁷

INSIGHTS

Looking at the big picture, **expanding beyond national borders is also a clear goal for many startups**, with 91% intending to expand in Europe and 60% targeting North America. Events like the annual Carpathian Startup Fest in Rzeszów are further strengthening Poland's startup network by providing a platform for funding and exposure.¹⁰⁸

The **"flywheel effect" is also shaping the ecosystem**, where past successful entrepreneurs are reinvesting into new ventures, accelerating the overall growth of the Polish startup scene. Despite this progress, Polish founders tend to be more conservative in equity distribution than their US counterparts, showing lower adoption rates of Employee Stock Option Plans (ESOPs).

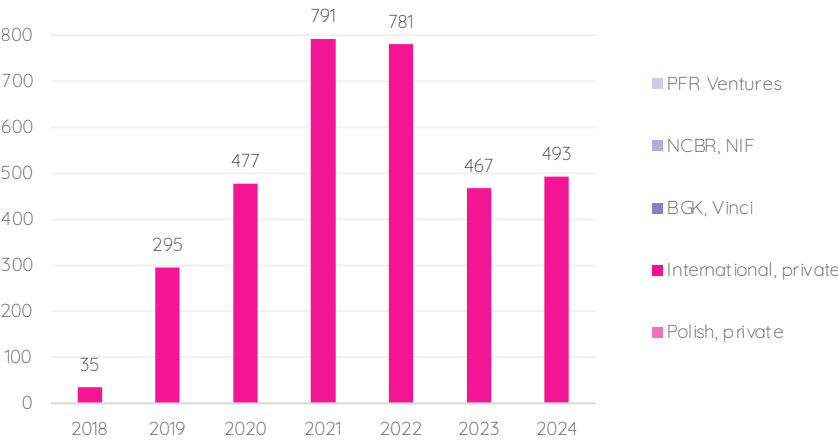
Additionally, the **OMGKRK Foundation**, created in 2016, **plays a pivotal role in fostering Poland's innovation ecosystem**, particularly in Kraków. The organization facilitates collaboration and knowledge exchange within the local tech scene by bringing together startups, tech enthusiasts, and entrepreneurs.¹⁰⁹

POLAND DEEP DIVE

VENTURE CAPITAL ANALYSIS

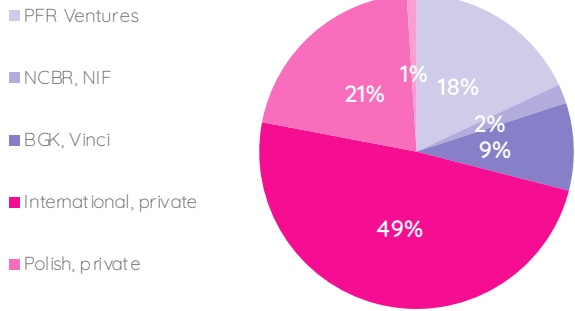
Poland remains a significant player in Central and Eastern Europe’s venture capital ecosystem, receiving **26% of all CEE investment** in 2023. The country has dominated pre-seed investment, though 2024 saw a decline in seed-stage funding as many seed funds backed by PFR Ventures completed their cycles. Despite that, “the outlook for the coming years appears much more promising, given that entrepreneurs who have already achieved success, such as Mati Staniszewski of ElevenLabs or Konrad Howard of Booksy, are becoming increasingly active as business angels”, as put by Maciej Małysz – partner at Inovo.

Exhibit 21: VC investment in Poland (Millions of Euros)



Source: Polish VC Market Overlook 2024¹¹⁰

Exhibit 22: Public programmes/private capital (value, 2024)



INSIGHTS

While the **total number of transactions has decreased**, their **average value has reached its highest level since 2019**, as seen in exhibit 22, signaling a shift towards fewer but larger deals. In Q2 2024, the average transaction value was €3.3 million; the same statistic never exceeded €1.1 million in 2023, showing an impressive growth of 300%.

Poland’s venture capital ecosystem relies heavily on public funding, which accounted for almost 30% of all VC investments in 2024.¹¹⁰ Key initiatives like the €7.9 billion FENG program support R&D, Industry 4.0, and green technologies. Additionally, NCBR, PARP, and PFR Ventures fund a significant share of startups.¹¹¹ However, this dependence on state capital raises concerns about long-term sustainability. As the private VC sector grows, a shift toward more diverse and global funding sources is expected.

At the same time, the Polish VC ecosystem is shaped by a **combination of public programs and private capital**, with PFR (government-owned) and Inovo VC leading the regional market. Out of a total of 90 private venture capital firms in Poland, some other notable ones are Innovation Nest, OTB Ventures, Black Pearls VC, Smok Ventures, and Sunfish Partners.¹¹²

POLAND DEEP DIVE

INDUSTRY ANALYSIS

Poland's 2024 **venture capital landscape reflects growing investment in key industries**, with Food & Beverage, Data & Analytics, Cybersecurity, and Education seeing the most significant year-over-year growth, demonstrating investor confidence in sectors that combine technological innovation with scalable business models.¹¹³

Finance Tech

Despite FinTech's momentum across Europe, Poland's **FinTech sector saw a steep decline in investment**, dropping from €16M in 2023 to just €4M in 2024. This is a stark contrast to its peak of €128M in 2022 when Ramp & Vodeno secured major funding rounds. This discrepancy can be attributed to a number of factors, such as companies focusing on profitability rather than seeking investment or the slow growth associated with companies in this sector, but it's most likely that the industry is consolidating after the mega rounds a few years prior. Investors are increasingly targeting cash-flow-positive FinTech startups with high growth potential and above-average returns.

Climate Tech

ClimateTech investments totaled €35M in 2024, down from €73M in 2023 and significantly lower than the €97M peak in 2022. Despite the decline, the sector is expected to gain traction following Poland's implementation of the CSRD directive, which mandates carbon footprint measurement and reporting for more companies. The sector is home to numerous early-stage startups that are positioned to scale, with Envirly emerging as a leading indicator of rising investor interest.

AI

Artificial Intelligence remains Poland's strongest sector in terms of investment, with €255M allocated to companies developing or leveraging AI, accounting for over 50% of all VC transactions in 2024.⁵⁰ The country's AI ecosystem is expanding rapidly, with 96,500 professionals working in AI, a 15% increase in ICT employment from 2022 to 2023, and 49% of funded AI companies being at the seed stage.

Health Tech

The **HealthTech sector in Poland saw €46M in VC investments in 2024**, up from €39M in 2023, though still far from the peak of €130M in 2021, largely driven by DocPlanner's funding round. The overall CAGR from 2019 to 2024 is, however, a negative one at approximately -11.8% per year. Investors remain cautious in this space due to longer timelines for profitability and high regulatory hurdles, particularly in the proof-of-concept phase. However, AI integration into healthcare solutions has renewed interest, with initiatives like the Healthcare Investment Hub (supported by EIT Health) playing a key role in funding early-stage startups.

CZECH REPUBLIC DEEP DIVE

The Czech Republic stands out in the CEE region as a **high-tech startup and investment hub**, leveraging its deep-rooted expertise in cybersecurity, AI, and gaming. Despite a relatively small population of 10.7 million, the country boasts a GDP of €344 billion and maintains the lowest unemployment rate in the EU (2.6%), providing a **stable economic environment for entrepreneurship**. The country's industrial and export-driven economy complements its growing tech sector, enabling startups to scale efficiently.^{114 115}

The Czech Republic ranks **32nd in the global startup ecosystem index**, surpassing regional competitors, including Poland, which ranks two positions lower. Furthermore, in 2023, the country reported three unicorns, namely Mews, Rohlik Group, and Productboard.¹¹⁶ However, **3.1% of Czech startups receiving over €1 million in funding achieve unicorn status**, below the CEE average of 3.2%.¹¹⁷

While Prague serves as the nation's primary innovation hub, Brno is a secondary center benefiting from a technical university pipeline. The government plays a proactive role in fostering investment, offering initiatives such as the Startup Visa and CzechInvest programs.¹¹⁸ With rising VC interest and increasing cross-border funding, the **Czech Republic is becoming a premier destination for startup growth in the heart of Europe**.

STARTUP ANALYSIS

Between 2018 and 2022, the number of startups in the Czech Republic grew by one-third. As of 2023, the Czech Republic has over **3,855 startups**, with a combined worth of over €23 billion, marking a 2.3x growth over the last five years.¹¹⁹

67%

Startups
located in Prague

60%

Funded by local and
European investors

2%

CZ share of European
startup transactions

Additionally, the **average deal size in the region was approximately €3.67 million**.¹²⁰

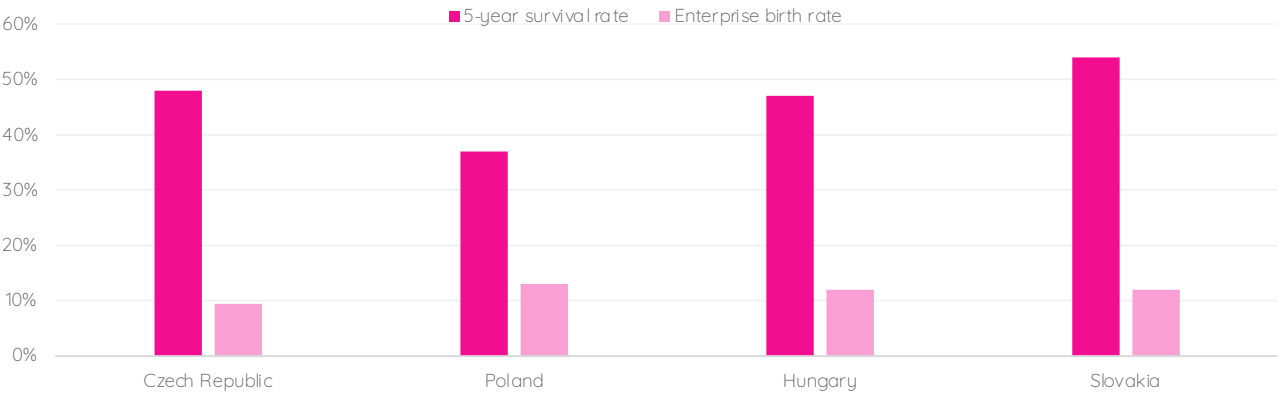
Various financing methods were used, including equity, debt, hybrid instruments, and exits.¹²¹ Furthermore, over 60% of CEE and Czech startups were funded by local and European investors, of which 30% received U.S. backing. For example, Goldman Sachs co-led a \$185 million Series C round in Mews.¹²²

Between 2022 and 2023, **startup funding in the Czech Republic decreased by over 50%**, and **the number of deals dropped by about 30%**. This decline strongly mirrors the decrease in global VC investments that occurred in 2022. However, as of early 2025, **€24.8 million has been raised across five equity rounds**. By the same period in 2024, €15.5 million had been raised across five rounds, marking a 61% increase in startup funding compared to the previous year.¹²³

CZECH REPUBLIC DEEP DIVE

Prague is ranked fourth among startup ecosystems in Eastern Europe. While Prague and Brno remain the primary hubs, the rest of the Czech Republic also shows a relatively balanced distribution of startups, with a slightly higher concentration in North Moravia. This regional pattern closely **reflects the overall distribution of businesses in the country**, with Prague serving as the dominant center, hosting over 40% of all Czech companies.¹²⁴

Exhibit 23: Czech Republic within the broader ecosystem (in terms of startup survival and birth rate)



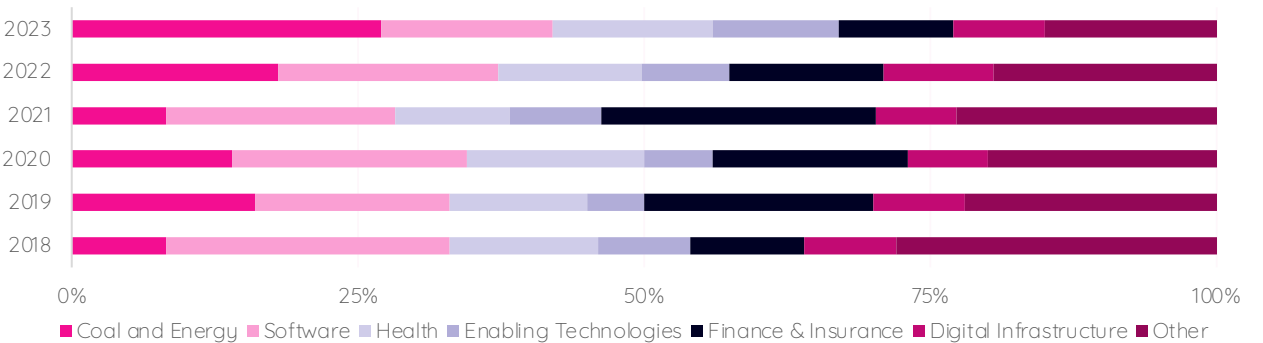
Source: Institute for Politics and Society Czech Republic Report

The high survival rate and low birth rate of startups in the Czech Republic indicate a **stable but less dynamic entrepreneurial ecosystem**. While businesses in the country have a strong chance of sustaining operations long-term, with nearly 50% surviving for five years, the relatively low enterprise birth rate implies a preference for business stability over rapid entrepreneurial expansion.

INDUSTRY ANALYSIS

The Czech startup landscape is dominant in the **coal and energy, software, and health tech sectors**, with over 50% of the capital being distributed to those areas in 2023.

Exhibit 24: Distribution of capital by sector in the Czech Republic



Source: Smart Market Report 2024

CZECH REPUBLIC DEEP DIVE

Virtual Reality

In particular, the Czech Republic **has a strong presence in high-tech industries, including gaming and cybersecurity.**¹²⁵ It is rapidly emerging as a **key player in the AR/VR industry**, driven by a strong tech sector, a skilled workforce, and increasing consumer demand. The market is projected to reach \$148.7 million by 2025, with a 7.7% CAGR leading to \$199.7 million by 2029. AR software is the dominant segment, expected to generate \$45.8 million in 2025, reflecting the country's innovation in immersive digital experiences. With user penetration expected to rise to 61.3% by 2029 and industries like corporate training adopting AR/VR solutions, Czechia is solidifying its role in the global market.¹²⁶

Cyber Security

Beyond VR, the **Czech Republic is a leader in cybersecurity** and home to global firms such as Avast. With over 435 million users worldwide, Avast exemplifies the country's global influence in the cybersecurity sector. The Czech government has been proactive in enhancing cybersecurity legislation and was the first EU country to draft a legal framework for protecting Critical Information Infrastructure. It was also the first to sign agreements such as the NATO Memorandum on Cyber Defence.¹²⁷

CZECH STARTUPS SUPPORT SYSTEMS

The Czech startup ecosystem benefits from a strong technical talent pipeline, with STEM graduates comprising 31% of the workforce, a critical factor driving innovation across more than 470 startups based in Prague. By 2022, startups in the country employed about 150,000 people, **equal to 4% of the total workforce**. Furthermore, based on labor market data, **startups are estimated to contribute approximately 5% to the Czech economy.**¹²⁸

Most Czech startups are micro or early-stage enterprises rather than small or medium-sized businesses. Approximately **half of all startups in the Czech Republic have five or fewer employees**, while companies with fewer than 20 employees make up three-quarters of all startups. SMEs play a crucial role in employment, with the **average startup employing nearly 40 people**. Despite comprising only 6% of startups, medium-sized companies with 100-500 employees account for more than a third of all startup jobs.¹²⁹

Moreover, government initiatives supporting startups include the JIC, a Brno-based organization that leads the Regional Innovation Strategy, fostering innovation through collaborations between businesses, academia, and government entities.¹³⁰ Other initiatives include the African-European Innovation Partnership, which promotes business opportunities between the Czech Republic and South African incubators, and Business Support Programs that offer mentorship, startup acceleration, and scale-up assistance.¹³¹ Additionally, **CzechInvest, a government agency founded in 1992, plays a key role in funding startups and supporting their development.**¹³²

CZECH REPUBLIC DEEP DIVE

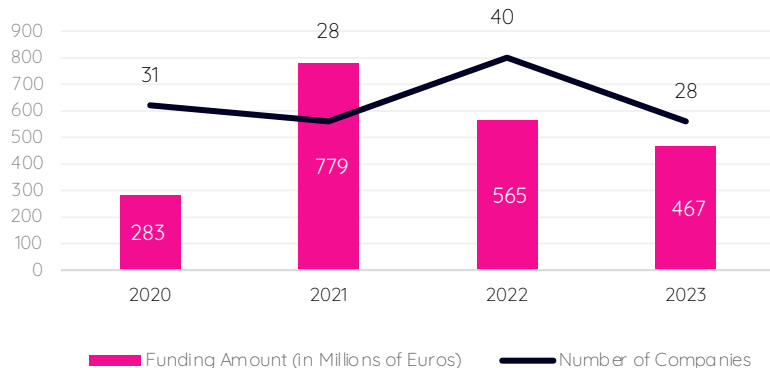
More tangibly, the government has **introduced a Startup Visa to attract foreign entrepreneurs and offers a Digital Nomad Visa to remote workers** from select countries, with an expansion planned for 2025.¹³³ A public-sector initiative launched in collaboration with the European Investment Fund and the RRF Czechia Fund of Funds provides €55 million in venture capital for pre-seed and fintech startups.¹³⁴ The government has also **committed to increasing public investment in innovation** and technology, aiming to position the Czech Republic as a global innovation leader within the next decade. To further attract startups, the Czech government offers a 10-year tax relief program for newly established companies.¹³⁵

VENTURE CAPITAL ANALYSIS

In 2024, Czech startups **raised a total of €264.5 million**, with the majority of the funding, approximately €217 million, secured in the first half of the year. This surge was partly driven by a significant funding round led by Rohlinik, marking the largest funding deal for a Czech company at €160 million. The second half of 2024 saw a decrease, with only €47.5 million raised, largely due to a focus on late-seed rounds for startups looking to expand.

The **growth in funding rounds in the Czech market has attracted global investors**, including major players like Index Ventures, the European Investment Bank, and Sofina Ventures. This is complemented by smaller investments, such as the €200,000 funding for Mewery from the Czech government, highlighting the market's increasing appeal.¹³⁶

Exhibit 25: Funding Amount for the Czech Republic



Source: Invest Europe 2023 CEE Private Equity Statistics

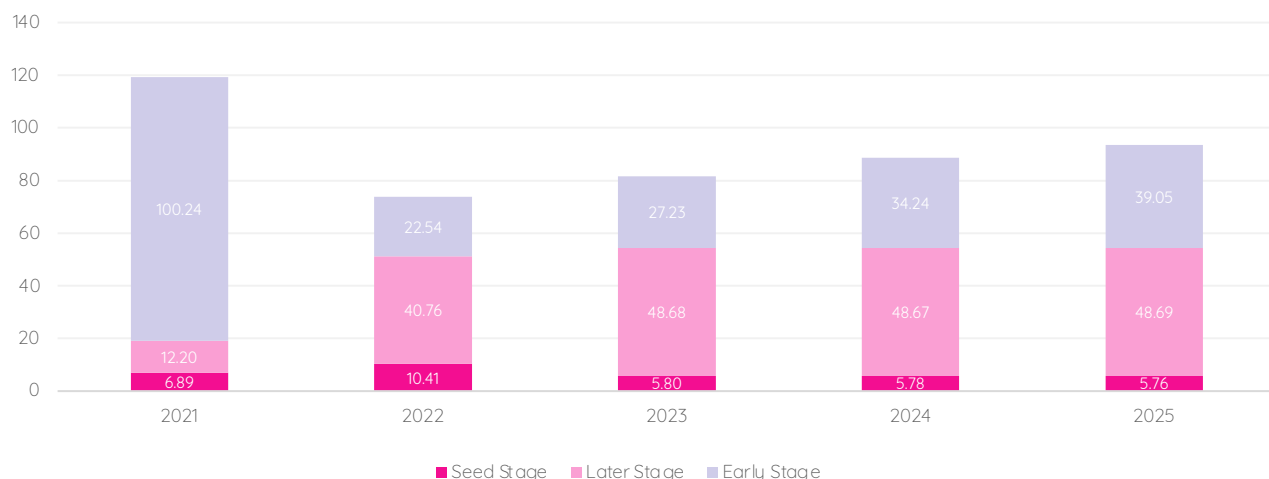
In 2022, despite global headwinds such as inflation, rising interest rates, and geopolitical uncertainty from events like the war in Ukraine, the **Czech VC ecosystem demonstrated remarkable resilience**.

While the broader global VC market saw a steep 30% decline in investments, the Czech ecosystem experienced an 8% increase in VC funding. This **stability was driven by a robust foundation of seed funding**, which is less susceptible to public market volatility and short-term fluctuations. Czech VCs remained steadfast in their confidence, continuing to back local startups with a steady flow of investment. Their commitment reinforced the sector's ability to withstand external shocks and solidified its position as a promising hub for innovation and long-term growth.¹³⁷

CZECH REPUBLIC DEEP DIVE

Projections for 2025 suggest that the VC market in the Czech Republic will reach €93.5 million, **representing a 5.4% increase, with later-stage investments expected to dominate the market.** The capital raised by later-stage investments is expected to be around €48.69 million, with seed-stage investments averaging €5.76 million.¹³⁸

Exhibit 26: VC Capital Raised in the Czech Republic (Millions of Euros)



Source: Statista

Established funds such as Credo Ventures, ZAKA Ventures, J&T Ventures, and Presto Ventures continue to play a key role in supporting the Czech startup ecosystem. They focus on various industries, such as IT, healthcare, and AI, with investment sizes ranging from seed to Series B. These **firms actively support startups in their expansion efforts**, including into global markets like the US, reflecting the increasing internationalization of Czech startups.¹³⁹

SUSTAINABLE INVESTMENT TREND

A notable trend in the Czech VC ecosystem is **the rise of sustainable and socially responsible investments**.¹⁴⁰ Funds like Tilia Impact Ventures and Soulmates Ventures are leading the way in supporting ESG initiatives.¹⁴¹ The Czech government is also actively promoting these areas, with **new initiatives aimed at attracting investments** in electromobility, decarbonization, and renewable technologies. For example, the Ministry of Industry and Trade approved a new program (2025-2033) to support at least €4.18 billion in investments in green technology during the time period, requiring a minimum investment of €110 million per project. Additionally, €1 billion will be raised from public funds for the program.¹⁴²

Furthermore, the Czech Republic's goal **to increase renewable energy usage** to 28% by 2030 is fuelling demand for innovative solutions in energy, propelling investments in startups that focus on clean technologies.¹⁴³



DEEP DIVES

Notable Deals

This section highlights the successes of the CEE region by showcasing key deals that reflect its economic growth and innovation. Our goal is to provide a fair representation of the region's development, highlighting a deal from each of the main countries in Central and Eastern Europe and demonstrating how various industries are attracting investment and strengthening their global presence.

We selected deals based on multiple criteria, including funding size, country of origin, industry, and notable trends, to ensure a diverse and balanced perspective. By covering a range of sectors, we aim to present a clear picture of the CEE market's momentum, from established players to emerging opportunities.

OXLA

ABOUT THE DEAL

Oxla is a **Polish deep-tech startup revolutionizing data infrastructure** with a highly efficient analytical database. The company's approach maximizes data potential while minimizing hardware resource consumption, allowing businesses to run large-scale data queries at unprecedented speed and lower costs.

In its latest **€10 million seed round**, the company secured investment from TQ Ventures, Lead Ventures, Warsaw Equity Group, and 4growth VC. Interestingly, this is a **notably high figure for a seed-stage company**, highlighting the increasing confidence in CEE-based deep-tech startups.



MONEY RAISED: €10M

Seed round in October 2024,
led by TQ Ventures



EXECUTION RATE: 10×

Faster query execution
compared to competition

Furthermore, Balázs Haszonics, CEO of Lead Ventures, believes Oxla is poised to *"become a new standard in the field, redefining how businesses manage and leverage data."* Reinforcing this perspective, Jan Nalbert, an Investment Manager at Warsaw Equity Group, highlighted his team's excitement to invest in Oxla for a second time, further underscoring the robust investor confidence.¹⁴⁴

ABOUT THE COMPANY

Founded in 2022 by Adam Szymański and Kacper Szcześniak, Oxla has quickly grown to 49 employees, establishing itself as a disruptor in the data space. Unlike legacy databases, Oxla's system was built from the ground up, **enabling ultra-fast performance and radical cost efficiency**—two key differentiators that have drawn the attention of high-profile investors.

The problem: Modern analytics faces **a fundamental challenge of the rising cost and inefficiency of large-scale data processing**. Traditional platforms like Snowflake and Databricks require substantial infrastructure investments, making data-driven insights expensive and complex for many businesses. As data volumes grow, companies struggle with scalability, performance bottlenecks, and escalating costs.¹⁴⁵

The solution: Oxla addresses this challenge with a **high-performance data processing system that delivers up to 10 times faster query execution** while reducing costs by up to 85%. By offering a scalable and cost-effective alternative to industry giants, the company is redefining data infrastructure. Additionally, its innovative approach has gained strong investor backing, particularly in the CEE region, where deep-tech innovation is accelerating. The success of Oxla's funding round highlights both its industry leadership and the growing influence of CEE-based startups in global technology markets.

UPHEAL

ABOUT THE DEAL

In February 2024, **Upheal secured a €3 million seed round led by Credo Ventures**, allowing the startup to expand its therapy note transcription capabilities beyond the 25,000 therapy and psychiatry sessions already hosted on its platform. Following this investment, Upheal nearly tripled its user base to over 36,000 professionals—each saving more than 40 hours of administrative work per month.

Initially planning to raise a Series A within two years, the company surprised the market by closing a **€9.52 million Series A round just nine months after their seed round**. Headline served as the primary investor, with continued support from Credo Ventures, reflecting ongoing confidence in Upheal. This funding has helped the company to expand its platform among psychiatrists and mental health physicians, underscoring its commitment to delivering efficient AI solutions to help professionals.^{146 147}

€3.0M

Seed round in February 2024,
led by Credo Ventures

€9.5M

Series A round in November 2024,
led by Headline

ABOUT THE COMPANY

Founded in the Czech Republic in 2023, **Upheal leverages advanced AI to transcribe clinicians' consult notes and provide impartial assessments based on speech analysis**. Furthermore, Upheal's two Slovak co-founders, Juraj Chrappa and Martin Horvath, bring extensive expertise in both technology and mental health. They met while working together as engineering leaders at Avast, where they gained a deep understanding of online services. Their backgrounds also include roles in software companies and clinical therapy, giving them the insight needed to identify and address the administrative challenges that contribute to clinician burnout.

The problem: According to the American Psychological Association (APA), **nearly half of therapists reported experienced burnout in 2022**. Following this statement, Chrappa commented on how they *"...believe every mental health provider should have access to tools that bring better balance to their lives."* A key contributor is that clinicians spend approximately 20% of their time on paperwork, distracting experts from patient care.¹⁴⁸

The solution: By automating session transcription using advanced AI technologies, **Upheal cuts note-taking time from 15 to just 7 minutes per session**. Additionally, the software utilizes sophisticated algorithms to evaluate speech cadences, talking ratios, and moments of silence, delivering unbiased insights. This not only improves clinical productivity but also enhances the overall quality of care, allowing mental health professionals to focus more on patient interaction.

DRONAMICS

ABOUT THE DEAL

Dronamics, the world's first licensed cargo drone airline in Europe, secured a total of **\$40 million in pre-Series A funding** in 2023. This investment came from venture capital firms and angel investors across 12 countries.

The funding included contributions from **Founders Factory, Speedinvest, SeedBlink, Eleven Ventures,** and the **Strategic Development Fund (SDF)**, the investment arm of the Tawazun Council in Abu Dhabi, United Arab Emirates. With a mission to “democratize cargo aviation”, the startup achieved one of the biggest rounds in early-stage VC funding in the history of the Central and Eastern European region.



Pre-Series A funding 2023

\$40M



Equity funding 2024

\$10M

In March of 2024, the company announced the signing of an investment agreement of **€10 million with the European Innovation Council** and the SMEs Executive Agency (EISMEA). This follows from the earlier funding that the EIC had made into Dronamics, **a grant for 2.5 million euros under the Accelerator program** in November 2022.

Eleven Ventures originally decided to invest in Dronamics in 2014 because the Rangelov brothers identified a **significant gap in mid-mile cargo delivery** and demonstrated a visionary, scalable solution with strong market potential.^{149 150}

ABOUT THE COMPANY

Dronamics was founded in 2014 by Bulgarian brothers Svilen and Konstantin Rangelov, with **academic backgrounds in Economics and Aviation**, who now serve as the company's CEO and CTO, respectively. They sought guidance from professors, refined their concept, and **established a cost-effective and scalable model**. With this vision, they entered a startup accelerator and turned their idea into reality.

The problem: Traditional cargo transport is costly, slow, and inefficient, especially for time-sensitive shipments. **Existing solutions rely on expensive cargo planes or slow ground transport**, failing to meet the growing demand for faster, more flexible logistics.

The solution: Dronamics has developed the *Black Swan*, **an autonomous cargo drone designed to bridge the gap between traditional freight and last-mile delivery**. Capable of carrying up to 800 pounds and covering distances of 1,550 miles on a single flight, the *Black Swan* provides **a cost-effective, fast, and scalable alternative to conventional cargo aircraft**. By enabling same-day delivery across Europe and nearly every U.S. state from centralized hubs, Dronamics is transforming middle-mile logistics, offering businesses a more efficient and flexible shipping solution.¹⁵¹

FILMCHAIN

ABOUT THE DEAL

In April 2024, **FilmChain raised a €2.8 million seed funding round led by Holt IntersXion Fund**. Romanian investors Roca X, DeBa Ventures, TechAngels Romania, and returning investor HearstLab also participated in the round, demonstrating strong the local support for the name. Following its success in the UK market, FilmChain is now on target to expand into the North American market by mid 2024.

ABOUT THE COMPANY

Founded in 2018, FilmChain is a **Romanian-founded fintech startup that combines digital banking and blockchain technologies to streamline payment processes** in the film and television industries. In 2022, the startup decided to relocate their headquarters to the UK to tackle the second-biggest film content market. Its core product, the Digital Collection Account Manager (CAM), automates revenue distribution and royalty management for large-scale film and television enterprises. By providing real-time transparency and secure transactions, FilmChain seeks to tackle the costly inefficiencies that plague traditional payment processes, where *“up to 30% of participants’ money can be lost,”* according to the founders.^{152 143}

€2.8M

Seed round in April 2024,
led by Holt IntersXion

30%

Money lost in traditional
payment processes

7%

Revenues spent on
financial software

FilmChain was co-founded by Maria Tanjala and Irina Albita, two visionary female leaders who previously ran Big Couch, a company based on a “crewfunding” model that allowed filmmakers to co-invest in projects. Their experience gave them a unique perspective on the film industry and inspired them to create a more efficient, transparent, and automated system for managing and distributing revenues. With their leadership, they **aimed to revolutionize the industry’s financial workflows**.

The problem: Despite advancements in digital finance, **the entertainment industry suffers from slow, opaque payment structures**. These inefficiencies often result in high-profile talent lawsuits and significant revenue leakage, *“up to 7% of profits can be spent on accounting and financial software alone.”* Filmmakers, financiers, and other stakeholders endure delayed and inaccurate payments, leading to widespread dissatisfaction and lost revenue.

The solution: FilmChain’s Digital Collection Account Manager (CAM) leverages blockchain to enable real-time, secure, and automated financial flows. By **reducing administrative overhead and preventing revenue leakage**, the platform ensures faster, more transparent payouts. This approach not only cuts operational costs but also mitigates legal and financial risks, empowering film and television companies to retain more of their earnings and focus on creating content.¹⁵⁴

GREENSTIC

ABOUT THE DEAL

Founded in 2019, Greenstic is a **climate startup that provides sustainable packaging solutions for the food service industry**. Operating in Hungary, Romania, and Slovakia, it distributes and manufactures eco-friendly restaurant materials, such as degradable glasses, plates, and cutlery. In 2023, Greenstic raised **approximately €1.4 million from Hiventures in a seed round**. As one of the biggest VCs in Hungary, Hiventures is a firm dedicated solely and exclusively to the local startup ecosystem with around €258 million under management. The funding will support Greenstic's regional expansion, as well as its manufacturing capacity, product range, and customer base across its target markets.^{155 156}



Greenstic was founded in 2019 to offer **sustainable alternatives to single-use plastics** in the food service industry.



In 2022, Greenstic carried out an expansion in CEE into **Romania and Slovakia to grow its regional presence**.



In 2023, Greenstic **raised €1.4 million in a seed round from Hiventures** to support its growth.

ABOUT THE COMPANY

Greenstic was founded by Marton Bati and Mark Csonka, both with a strong background in business and sustainability, who had the vision of **transforming the food packaging industry through eco-conscious alternatives**. Márton Bati, CEO of Greenstic Europe, emphasizes: *"It is time for everyone to take this issue seriously, not just due to regulations but also shifting customer expectations. Many of our clients report that their guests actively monitor packaging materials and prefer more sustainable solutions."*¹⁵⁷

The problem: The plastic crisis, worsened by the extensive use of single-use plastic restaurant utensils, is a major environmental challenge. The food service industry generates massive amounts of single-use plastic waste, contributing significantly to environmental pollution. In Hungary, following a 2019 European Parliament directive, a 2021 government **decree restricted the sale of certain plastic takeaway boxes, straws, plates, and cutlery**.

The solution: Greenstic manufactures biodegradable, recyclable food packaging, offering a **cost-efficient, eco-friendly alternative to plastic**. Expanding internationally in 2022, it established a Romanian subsidiary and a Slovak franchise. Since 2023, it has launched strategic initiatives to scale operations, aiming to become Central Europe's leading eco-conscious packaging supplier.¹⁵⁸

MOVEO.AI

ABOUT THE DEAL

Moveo.AI is a Greek **conversational AI startup that focuses on enhancing customer experience through large language models (LLMs)** for enterprises. Their unique approach, characterised by boosted performance in latency, data privacy, and reliability compared to third-party models, allowed them to become an emerging key player in the industry.



In 2021, Moveo.AI secured a **€360 thousand pre-seed round**, led by a strategic angel investors who later reinvested.



In 2022, Moveo.AI **expanded its global presence by opening a new branch in São Paulo** to enter the Latin American market.



In 2024, **Moveo.AI secured a €2.3 million seed round led by Eleven Ventures**, with participation from Uni.Fund and Charge.vc.¹⁵⁹

ABOUT THE COMPANY

Moveo.AI was founded by Panos Karagiannis and George Karagiannis with the **vision of transforming enterprise customer interactions through AI-driven automation**. Svetozar Georgiev, Partner at Eleven Ventures, highlighted Moveo.AI's potential, stating: *"We identified Moveo as a top contender to radically improve the way businesses interact with customers. Their impressive client roster, including big banks and retailers, speaks to their potential."*¹⁶⁰

The problem: Enterprises face challenges delivering seamless and efficient customer interactions due to limitations in traditional chatbot technology, which often fails to deliver accurate and context-aware responses. **Existing AI solutions frequently depend on external models**, leading to latency issues, data privacy concerns, and lack of customization. To scale effectively and improve customer satisfaction, businesses needed AI-driven solutions that were faster, more secure, and tailored to each enterprise's specific needs.

The solution: Moveo.AI is tackling this challenge by **using its recent funding to advance its proprietary LLMs**, ensuring lower latency, higher reliability, and improved data security compared to third-party alternatives. By integrating workflow automation with generative AI capabilities, Moveo.AI enables enterprises to introduce intelligent virtual agents that deliver instant, context-aware interactions. With this innovative approach, the company is **setting a new benchmark for AI-powered customer engagement**, making enterprise communication more efficient and personalized.¹⁶¹

SENSIBLE BIOTECHNOLOGIES

ABOUT THE DEAL

Sensible Biotechnologies is a Slovakian biotechnology company that is **pioneering a new method for producing high-quality messenger RNA (mRNA)** using synthetic biology. Their novel approach seeks to lower costs and accelerate mRNA manufacturing, a crucial breakthrough for applications like vaccines and therapeutics.¹⁶²



VENTURE CAPITAL

BlueYard Capital & Others



ACCELERATOR

Y Combinator



ANGEL INVESTOR

Florian Schuster,
Jason C. Foster & co.

Founded in 2021, Sensible Biotechnologies **secured a \$3.9 million pre-seed round in 2023**, attracting a diverse group of international investors. The pre-seed round was led by Berlin-based VC firm BlueYard Capital, with participation from U.S. accelerator Y Combinator, Germany's early-stage investor Amino Collective, California-based VCs Civilization Ventures and Recode Health Ventures, and Czech-based ZAKA VC. Prominent angel investors, including Florian Schuster, Jason C. Foster, and other life science executives, also participated.

Y Combinator's participation is a significant endorsement, given its reputation as one of the world's most selective startup accelerators, with an acceptance rate of just 2%. This highlights the **growing investor confidence in CEE healthcare startups** and strengthens the region's position as an emerging hub for biotech innovation.¹⁶³

ABOUT THE COMPANY

Sensible Biotechnologies was founded by Miroslav Gasperek and Marian Kupculak, combining **expertise in bioengineering and molecular biology**. Gasperek, the CEO, has a background in computational modelling of biological systems and bioengineering. Kupculak, the Chief Scientific Officer, holds a PhD in Biochemistry and has over nine years of experience in cellular engineering, focusing on optimizing the production of proteins and nucleic acids.¹⁶⁴

The problem: The current **production of high-quality mRNA relies on enzyme-based synthesis**, which is costly, inefficient, and difficult to scale. These constraints pose major obstacles to the advancement of mRNA-based vaccines and therapeutics. These challenges highlight the urgent need for greater accessibility and affordability.

The solution: Sensible Biotechnologies is addressing this challenge by **developing a cell-based platform for mRNA production**. Rather than relying on costly enzymes, their technology leverages engineered cells to autonomously synthesize mRNA, replicating biological processes for superior quality, reduced costs, and enhanced scalability. This innovative approach has the potential to revolutionize mRNA manufacturing.

CONCLUSION AND FUTURE OUTLOOK

CURRENT STATE ASSESSMENT

The Central and Eastern European startup and venture capital ecosystem has demonstrated remarkable progress over the past decade, **evolving from a peripheral player to a significant contributor** to Europe's innovation landscape. The region's unique combination of **technical talent, cost advantages, and growing entrepreneurial ambition** has created a distinct model that differs in important ways from Western European and American approaches.

IMPLICATIONS FOR KEY STAKEHOLDERS

Investors

The CEE region offers **compelling opportunities**, particularly in **AI, enterprise software, and climate tech**. With average Series A valuations 30-40% below Western European levels and startups demonstrating strong capital efficiency, the region presents **attractive investment prospects** despite evolving risk landscapes.

Entrepreneurs

Technical excellence and **capital efficiency** are regional strengths, with CEE startups generating approximately 40 jobs per million euros invested compared to the European average of 25, though only 29% of seed-stage startups successfully raise Series A funding compared to European and global averages of 48% and 53%.

Policymakers

Supporting the transition from public to private funding mechanisms is critical for **long-term ecosystem sustainability**. Developing **late-stage financing instruments**, improving **cross-border regulation harmonization**, and enhancing educational systems will strengthen the region's competitive position.

SECTOR LEADERSHIP

The CEE region is poised to solidify its leadership across several high-growth sectors in the coming years. **AI and Deep Tech** will maintain their momentum, powered by the **region's exceptional technical talent pool**. Meanwhile, **Health Tech** represents a **significant growth vector** as the region's **aging population** drives demand for digital health solutions. **Climate Tech**, which already attracted **26% of total investment in early 2024**, will continue gaining traction as **energy security concerns** create both regulatory necessity and **market opportunity**.

CONCLUSION AND FUTURE OUTLOOK

EMERGING HUBS TO KEEP AN EYE ON

Poland and the **Czech Republic** have firmly established themselves as the **CEE's innovation powerhouses**. Poland leads with **13 unicorns**, €49 billion in enterprise value, and **dominates the regional AI landscape** with 23.4% of all CEE AI startups. The Czech Republic has leveraged specialized **expertise in cybersecurity** and **gaming** (generating €250 million in gaming revenue across 135 studios) to achieve **€23 billion in enterprise value**, demonstrating quality over quantity in company building. However, four other **emerging hubs are rapidly gaining prominence**:

- **Romania**: With the **second-lowest hourly labor costs in Europe** and UiPath's global success elevating its profile, Romania was the **only CEE country to show VC funding growth in 2023** (4.6% increase). This momentum positions it as an **increasingly attractive scale-up destination**.
- **Bulgaria**: With **one of the highest VC investment per capita** in CEE and the growing role of Sofia as one of the **entrepreneurial hubs** the region, Bulgaria is receiving more and more attention from VCs. With an enterprise value of **€9B** and a **tech-savvy workforce**, the country is continuously fueling its startup ecosystem.
- **Hungary**: The country has cultivated **strong technical talent in the HealthTech sector**, building upon a tradition of medical technology innovation and development. It has established itself as a hub for **specialized medical technology expertise**, with several Hungarian companies achieving international recognition.
- **Estonia**: Despite its small population, Estonia has amassed **€28 billion in enterprise value** through its **fintech leadership**. Companies like **Wise** have created a **powerful entrepreneurial network effect**, establishing repeatable success patterns that new ventures can follow.

FINAL OUTLOOK

The CEE region is evolving toward a **more balanced funding ecosystem**, with **international investors** outside Europe **increasing their share of total fundraising** from 9% in 2022 to 21% in 2023, **complementing the existing public funding** infrastructure.

By developing **robust funding infrastructure**, sustaining **investment in technical education**, and strengthening global market connections, the CEE could become **Europe's most dynamic technology startup region** by 2030. Success requires preserving the unique advantages that have driven progress while addressing structural limitations to its potential.

GLOSSARY

Angel Investor: High-net-worth individuals who provide capital for startups, typically in exchange for equity ownership or convertible debt. They often invest at the earliest stages.

AUM (Assets Under Management): The total market value of investments that a venture capital firm or financial institution manages on behalf of its clients.

Bootstrap/Bootstrapping: Building a company without external capital, using personal savings and revenue from the business to fund growth.

Bridge Round: An interim, often unpriced funding round between larger priced rounds, typically provided by existing investors to extend a company's financial runway.

CAGR (Compound Annual Growth Rate): A measure of the annualized growth rate of an investment over a specified time period longer than one year.

Capital Efficiency: A measure of how effectively a startup uses its financial resources to drive growth and value creation, often expressed as key metrics generated per euro invested.

Corporate Venture Capital (CVC): Investment funds set up by corporations that make strategic investments in startups relevant to their core business.

Dry Powder: Committed but uninvested capital that venture capital and private equity firms have available for future investments.

Early-Stage: Refers to companies in their initial phases of development, typically covering pre-seed, seed, and Series A rounds.

Enterprise Value: The estimated worth of a business, calculated by adding market capitalization and total debt, then subtracting cash and cash equivalents.

ESG (Environmental, Social, and Governance): A set of standards used by investors to evaluate a company's operations and determine its sustainability and ethical impact.

Exit: The method by which investors and founders realize returns from their investment in a company, typically through an acquisition, IPO, or secondary sale.

Fund-of-Funds: An investment strategy where a fund invests in other investment funds rather than directly in startups or securities.

Growth Stage: The phase where startups have proven their business model and are scaling operations, typically corresponding to Series B, C, and later financing rounds.

IPO (Initial Public Offering): The process through which a private company offers shares to the public for the first time, enabling it to raise capital from public investors.

Late-Stage: Refers to more mature startups that have established business models and significant revenue, typically raising Series C rounds and beyond.

Lead Investor: The venture capital firm or investor that sets the terms and typically contributes the largest amount in a funding round.

GLOSSARY

Liquidation Preference: A contractual term that determines the order and amount in which investors get paid in the event of a company sale or liquidation.

M&A (Mergers and Acquisitions): The consolidation of companies through various financial transactions, including mergers, acquisitions, and takeovers.

Participating Preferred Shares: A type of preferred stock that entitles investors to receive their investment back plus dividends before common shareholders, and then participate in the remaining proceeds proportionally.

Pre-Money Valuation: The valuation of a company prior to receiving external funding.

Post-Money Valuation: The valuation of a company after it has received external funding (pre-money valuation plus the new investment amount).

Pre-Seed Round: The earliest stage of funding, typically used to develop a prototype or proof of concept before seeking a formal seed round.

Redemption Rights: A provision that allows investors to force a company to repurchase their shares after a specified period, providing an exit option if the company hasn't achieved a liquidity event.

ROI (Return on Investment): A performance measure used to evaluate the efficiency or profitability of an investment, calculated by dividing the benefit (return) by the cost of the investment.

Runway: The amount of time a startup can remain operational before running out of cash, assuming current income and expense levels remain constant.

Scale-Up: A company that has validated its business model and is experiencing rapid growth, typically with annual revenue growth of 20% or more over at least three years.

Seed Round: An early investment stage aimed at helping a startup validate its business model, develop its product, and prepare for scaling.

Series A/B/C: Progressive funding rounds that correspond to different stages of a startup's growth, with increasing investment amounts and valuations.

Syndicate: A group of investors who pool their capital to make a joint investment in a startup, typically led by a lead investor.

Term Sheet: A non-binding agreement outlining the basic terms and conditions under which an investment will be made.

Unicorn: A privately held startup valued at over \$1 billion.

Venture Debt: A type of debt financing provided to venture-backed companies that complements equity financing.

BIBLIOGRAPHY

1. "GDP ranked by country" *World Population Review*, 2024, <https://worldpopulationreview.com/countries/by-gdp>
2. "Countries in the EU by Population" *Worldometer*, 2025, <https://www.worldometers.info/population/countries-in-the-eu-by-population>
3. "Foreign direct investment, net inflows" *World Bank*, 2023, <https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD>
4. "World Bank Open Data" *World Bank*, 2017, <https://data.worldbank.org/?locations=BG-CZ>
5. "EU budget: Who pays the most into the EU, and who gains the most?" *Euronews*, *Yanata*, S., 2024, [https://www.euronews.com/business/2024/12/09/eu-budget-who-pays-the-most-into-the-eu-and-who-gains-the-most#:~:text=EU%20contributors%20and%20beneficiaries%20\(2023\)*&text=Poland%20was%20the%20top%20net,Greece%20\(%E2%82%AC3.9bn\)](https://www.euronews.com/business/2024/12/09/eu-budget-who-pays-the-most-into-the-eu-and-who-gains-the-most#:~:text=EU%20contributors%20and%20beneficiaries%20(2023)*&text=Poland%20was%20the%20top%20net,Greece%20(%E2%82%AC3.9bn))
6. "The state of regions and cities" *SOTEU Local*, N/A, <https://cor.europa.eu/sites/default/files/2024-09/Report-state-regions-and-cities-EN.pdf>
7. "Software Development in Eastern Europe" *Intellectsoft*, 2022, <https://www.intellectsoft.net/blog/software-development-in-eastern-europe/>
8. "ICT students in CEE" *Statista*, 2022, <https://www.statista.com/statistics/1388276/cee-number-of-ict-students/>
9. "Which Country Would Win in the Programming Olympics?" *HackerRank Blog*, 2016, <https://www.hackerrank.com/blog/which-country-would-win-in-the-programming-olympics/>
10. "Number of CS, IT and CE graduates" *Statista*, 2022, <https://www.statista.com/statistics/1472971/new-cs-ce-it-graduates-europe-by-country/>
11. "Hourly labour costs" *Eurostat*, 2024, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Hourly_labour_costs
12. "Europe: Cost of Living Index by Country" *Numbeo*, year, https://www.numbeo.com/cost-of-living/rankings_by_country.jsp?title=2024®ion=150
13. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniga-Cogito.pdf>
14. "Number of Venture Capital Funds in Poland 2016 - 2024" *Statista*, 2024, www.statista.com/statistics/1127088/number-of-venture-capital-funds-poland/
15. "Number of startups in selected CEE countries" *Statista*, 2023, <https://www.statista.com/statistics/1398345/number-of-startups-in-cee-countries/>
16. "Hungarian Startup Ecosystem has High Potential with Room for Improvement" *Budapest Business Journal*, 2023, <https://bbj.hu/business/startups/ecosystem/hungarian-startup-ecosystem-has-high-potential-with-room-for-improvement/>
17. "Enhancing Hungary's Innovation Ecosystem: Strategic Initiatives and Financial Instruments" *Interreg Central Europe*, 2024, <https://www.interreg-central.eu/news/enhancing-hungarys-innovation-ecosystem-strategic-initiatives-and-financial-instruments/>
18. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniga-Cogito.pdf>
19. "Emerging Startup Ecosystems in Central & Eastern Europe" *StartupBlink Blog*, 2023, www.startupblink.com/blog/emerging-startup-ecosystems-in-central-and-eastern-europe/
20. "Central Eastern Europe's Innovation Engines" *Wired*, 2022, www.wired.com/sponsored/story/google-for-startups-eastern-europe/
21. "Central and Eastern European Startups Are Raking in the Money" *Sifted*, 2022, <https://sifted.eu/articles/cee-vc-booming-report>
22. "European Startup Ecosystem - Best CEE Accelerators and Incubators" *Vestbee*, 2022, www.vestbee.com/blog/articles/round-up-of-the-best-accelerators-in-the-cee-region
23. "Dealroom Unicorns Database" *Dealroom Unicorns Database*, N/A, https://app.dealroom.co/unicorns/t/founding_or_hq_regions/anyof_Central%20Eastern%20Europe/tags/allof_verified%20unicorns%20and%20%241b%20exits/year_became_unicorn_min/anyof_2022
24. "Europe's 'soonicons': Who will reach a €1B valuation in 2024?" *Source*, 2023, <https://finance.yahoo.com/news/europes-soonicons-reach-1b-valuation-000000353.html?guccounter=1>
25. "Central and Eastern European startups - 2022" *Dealroom*, 2022, <https://dealroom.co/reports/central-and-eastern-european-startups-2022>
26. "After its first unicorn, will Bulgaria shine brighter on the global tech map?" *Ivanova, E.*, 2022, <https://therecursive.com/after-its-first-unicorn-will-bulgaria-shine-brighter-on-the-global-tech-map/>
27. "Estonian Bolt and Skeleton, together with other European unicorns, founded the EU Unicorns Group to accelerate Europe's green transformation and tech innovation - Invest in Estonia" *Andero*, 2024, <https://investinestonia.com/estonian-bolt-and-skeleton-together-with-other-european-unicorns-founded-the-eu-unicorns-group-to-accelerate-europes-green-transformation-and-tech-innovation/>
28. "Central and European startups 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniga-Cogito.pdf>
29. "CEE Report 2022" *Dealroom*, 2022, <https://dealroom.co/uploaded/2022/11/Dealroom-GoogleAtomicCredo-CEE-2022.pdf?x30228>
30. "Europe Digital Health Market - Share Size & Industry Analysis" *Mordor Intelligence*, 2024, <https://www.mordorintelligence.com/industry-reports/europe-digital-health-market>
31. "State of AI in CEE Report" *The Recursive*, 2024, https://drive.google.com/file/d/19Jm5FFHWerWtNovixGYihopK0A8mPpAV/view?_hstc=210673418.1d1db89a6f1b067f6aa951e864878eb4.1732029629562.1736075490218.1736082255911.10&_hssc=210673418.1736082255911&_hsfp=130792607&submissionGuid=bf1c5e61-143b-4562-a767-84d29c22c1af

BIBLIOGRAPHY

32. "Two decades of changing dependency on Russian gas in Central and Eastern Europe" *Weiner, C., Kotek, P., Takácsné Tóth, B.*, 2024, <https://www.tandfonline.com/doi/epdf/10.1080/14782804.2024.2385978?needAccess=true>
33. "Key findings from the CEE E-commerce Survey Report 2023" *Ecommerce Europe*, 2023, <https://ecommerce-europe.eu/news-item/key-findings-from-the-cee-ecommerce-survey-report-2023/>
34. "CEE's evolving e-commerce landscape" *CET Editor*, 2024, <https://centraleuropeantimes.com/2024/10/cees-evolving-e-commerce-landscape/>
35. "The Game Industry on Poland" *Polish Agency for Enterprise Development*, 2023, [https://jemebocconi.sharepoint.com/sites/projects/Shared%20Documents/01 Active%20Projects/PROJ_24_31 Eleven%20Ventures/03 Startups Analysis/Polish%20Agency%20for%20Enterprise%20Development%20\(2023\)%20The%20Game%20Industry%20of%20Poland](https://jemebocconi.sharepoint.com/sites/projects/Shared%20Documents/01%20Active%20Projects/PROJ_24_31_Eleven%20Ventures/03_Startups_Analysis/Polish%20Agency%20for%20Enterprise%20Development%20(2023)%20The%20Game%20Industry%20of%20Poland)
36. "State of AI in CEE Report" *The Recursive*, 2024, <https://drive.google.com/file/d/19Jm5FFHWerwWtnovixGYihopK0A8mpAV/view?hstc=210673418.1d1db89a6f1b067f6aa951e864878eb4.1732029629562.1736075490218.1736082255911.10&hssc=210673418.11736082255911&hsfp=130792607&submissionGuid=bf1c5e61-143b-4562-a767-84d29c22c1af>
37. "Czech Republic's startup scene: 10 promising startups you must keep an eye on in 2024" *Tea Vrcic, EU-Startups*, 2024, <https://www.eu-startups.com/2024/01/czech-republics-startup-scene-10-promising-startups-you-must-keep-an-eye-on-in-2024/>
38. "Medical Technology in Hungary" *Statista*, 2024, <https://www.statista.com/outlook/hmo/medical-technology/hungary#analyst-opinion>
39. "Polish and CEE tech ecosystem outlook" *Dealroom*, 2020, <https://dealroom.co/uploaded/2020/07/Polish-and-CEE-tech-ecosystem-outlook-Final-rev1.pdf>
40. "CEE: Unemployment rate" *Statista*, 2023, <https://www.statista.com/statistics/1072993/cee-unemployment-rate/>
41. "The Hidden Psychology Shaping Eastern European Startups" *Fortech Investments*, 2025, <https://www.linkedin.com/pulse/hidden-psychology-shaping-eastern-european-startups-xsmif/>
42. "EU Startup Nations Standard" *Startup Nations*, N/A, <https://startupnationsstandard.eu/about.html>
43. "Startup Europe" *European Commission*, N/A, <https://digital-strategy.ec.europa.eu/en/policies/startup-europe>
44. "Startup Visa" *Czech Startups*, N/A, <https://www.czechstartups.org/en/start-up-visa/>
45. "Startup Visa" *Polish Government*, N/A, <https://www.gov.pl/web/poland-businessharbour-en/startup>
46. "Poor knowledge of EU data and digital laws impacts Central and Eastern European start-ups" *ScienceBusiness*, 2019, <https://sciencebusiness.net/widening/news/Start-ups/poor-knowledge-eu-data-and-digital-laws-impacts-central-and-eastern-european-start>
47. "European Startup Monitor" *European Startup Monitor*, 2020, https://www.europeanstartupmonitor2019.eu/EuropeanStartupMonitor2019_2020_21_02_2020-1.pdf
48. "Why CEE Startups Relocate: The Story Behind the Great HQ Migration" *Ivanova, E., The Recursive*, 2022, <https://therecursive.com/why-cee-startups-relocate-the-story-behind-the-great-hq-migration/>
49. "What's behind CEE startups' American dream" *Wanat, Z., Sifted*, 2023, <https://sifted.eu/articles/whats-behind-cee-startups-american-dream>
50. "All eyes east: The rise of Central and Eastern Europe's tech scene" *Egusa, C., TheNextWeb*, 2017, <https://thenextweb.com/news/eyes-east-rise-central-eastern-europes-tech-scene>
51. "What sets successful startup accelerators apart" *Cohen, S., Hallen, B., Bingham, C., Harvard Business Review*, 2024, <https://hbr.org/2024/03/what-sets-successful-startup-accelerators-apart>
52. "StartSmart" *StartSmart*, 2024, <https://startsmartcee.org/>
53. "Incubators heat up chances of Small Business Survival" *Smith, N., Business News Daily*, 2023, <https://www.businessnewsdaily.com/272-incubators-increase-small-business-success.html>
54. "Business incubation definitions and principles" *World Bank*, N/A, <https://documents1.worldbank.org/curated/pt/717091562157862660/pdf/BIM-Module-1-Business-Incubation-Definitions-and-Principles.pdf>
55. "Policy brief on business incubators – from startup to scaleup" *Schmerber, L., Interreg Europe*, 2024, <https://www.interregeurope.eu/sites/default/files/2024-04/Policy%20brief%20on%20business%20incubators%20from%20start-up%20to%20scaleup.pdf>
56. "Call for proposals 2025" *EIT Manufacturing*, 2024, <https://www.eitmanufacturing.eu/news-events/news/call-for-proposals-2025/>
57. "BESCO" *BESCO*, N/A, <https://besco.bg/initiatives>
58. "EU to announce €20M for Widening start-ups in 2025" *Zubascu, E., ScienceBusiness*, 2024, <https://sciencebusiness.net/news/research-and-innovation-gap/eu-announce-eu20m-widening-start-ups-2025>
59. "State of Venture 2023 Report" *CBInsights*, 2024, <https://www.cbinsights.com/research/report/venture-trends-2023/>
60. "Bridge rounds remain high in Q1 2024" *Dowd, K., Carta*, 2025, <https://carta.com/data/bridge-rounds-q1-2024/>
61. "The scale-up gap – financial market constraints holding back innovative firms in the European Union" *Fratta, C., Gatti, M., Kivernuk, A., EIB*, 2024, https://www.eib.org/attachments/lucalli/20240130_the_scale_up_gap_en.pdf
62. "Venture Capital Survey 2024" *Invest Europe*, 2024, <https://www.investeurope.eu/news/newsroom/vc-and-growth-focused-firms-see-exit-and-fundraising-environment-improving-in-2025-eif-and-invest-europe-survey-finds/#:~:text=More%20than%2060%25%20of%20VCs,infrastructure%20for%20IPOs%20in%20Europe>
63. "Macroeconomic factors and venture capital market liquidity: evidence from Europe" *Frimpong, F. A., Cogent*, 2024, <https://www.tandfonline.com/doi/10.1080/23322039.2024.2401477#abstract>

BIBLIOGRAPHY

64. "State of venture capital in CEE in 2024" *Eleven*, 2024, <https://www.11.vc/the-state-of-venture-capital-in-cee-2024/>
65. "2023 Central & Eastern Europe Private Equity Statistics" *Invest Europe*, 2024, <https://www.investeurope.eu/media/apemo3bx/2023-cee-activity-report-june-2024-final.pdf>
66. "Hot or not: Where European VC funding went in 2023" *Hodgson, L.*, 2023, <https://pitchbook.com/news/articles/2023-europe-venture-capital-funding-breakdown>
67. "VC Funding in CEE Report" *VestBee*, 2024, <https://www.vestbee.com/blog/articles/vc-funding-in-cee-report-q3-2024>
68. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
69. "Inside the see VC Network: History, trends, and VC funds" *Seedblink*, 2024 <https://seedblink.com/2024-03-07-inside-the-see-vc-network-history-trends-and-vc-funds?utm>
70. "VC funding in CEE report - Q1 2024" *Koncerewicz, K, VestBee*, N/A, <https://www.vestbee.com/blog/articles/vc-funding-in-cee-report-q1-2024?utm>
71. "The evolution of Venture Capital Fund sizes" *O'Leary, K, Chronograph*, 2024, <https://www.chronograph.pe/the-evolution-of-venture-capital-fund-sizes/>
72. "2023 Central & Eastern Europe Private Equity Statistics" *Invest Europe*, 2024, <https://www.investeurope.eu/media/apemo3bx/2023-cee-activity-report-june-2024-final.pdf>
73. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
74. "Why is Cee a VC funding hotspot right now?" *Cezary, I, Hubraum*, 2022, https://www.hubraum.com/Resources/Persistent/7/5/4/1/754105981461c9df744ea4d170459c4bdbc38371/Why_is_CEE_a_VC_funding_hotspot_right_now.pdf
75. "2023 Central & Eastern Europe Private Equity Statistics" *Invest Europe*, 2024, <https://www.investeurope.eu/media/apemo3bx/2023-cee-activity-report-june-2024-final.pdf>
76. "CEE's active early stage VCs" *Sifted*, 2024, <https://sifted.eu/articles/cee-most-active-early-stage-vcs>
77. "Development of VC in CEE and Europe" *Econstor*, N/A, <https://www.econstor.eu/bitstream/10419/282244/1/WP202323.pdf>
78. "European VCs' reliance on governments" *Financial Times*, 2024, <https://www.ft.com/content/131c424c-1320-449b-adf4-50aa67710b1f>
79. "Europe ventures forward: Getting the scaleup of cleantech right" *Hertie School*, 2024, <https://www.delorscentre.eu/en/publications/detail/publication/venture-capital-getting-the-scaleup-of-cleantech-right>
80. "Development of VC in CEE and Europe" *Econstor*, N/A, <https://www.econstor.eu/bitstream/10419/282244/1/WP202323.pdf>
81. "2025 expectations" *AI/Nr.*, <https://en.ain.ua/2025/01/16/insights-from-cee-investors-on-2025-trends/>
82. "Structure remains persistent in VC rounds in '24" *Kevin Dowd Kevin, Carta*, 2025, <https://carta.com/data/deal-terms-q1-2024/>
83. "State of venture capital in CEE in 2024" *Eleven*, 2024, <https://www.11.vc/the-state-of-venture-capital-in-cee-2024/>
84. "Hungarian Startup Report 2023" *Startup Hungary*, 2023, https://assets-global.website-files.com/648192c742437e3bb535b994/6626228837e38bd70e273b60_Startup-Hungary-Startup-Report-2023.pdf?utm_campaign=Sifted%20Daily%20Newsletter&utm_source=hs_email&utm_medium=email&hsenc=p2ANqtz-37Fh3dKykp7mqMaDOu6bD2HzlwCLs3Zl7geNbeEMTuxYUW2-odxim8gsalufmnlRfLkrb
85. "What do VCs look for in a CEO?" *DigitalDefund*, 2025, <https://digitaldefund.com/IQ/what-vcs-look-for-in-a-ceo/>
86. "How a CEO's personality affects their company's stock price" *Harvard Business Review*, 2019, <https://hbr.org/2019/10/how-a-ceos-personality-affects-their-companys-stock-price>
87. "International Trade, United States Census Bureau" *USCB*, 2024, <https://www.census.gov/foreign-trade/balance/c0003.html>
88. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
89. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
90. "The Recursive's state of AI in CEE 2024: Why investors, founders and governments have #allaisoncee" *Ghinita, E, The Recursive*, 2024, <https://therecursive.com/the-recursive-s-state-of-ai-in-cee-2024-why-investors-founders-and-governments-have-allaisoncee/#:~:text=Since%202021%2C%20%E2%82%AC5B%20has,exced%20last%20year's%20%E2%82%AC850M>
91. "How cee can build the next generation of climate tech unicorns" *PwC*, 2023, <https://cee.pwc.com/cee-in-the-spotlight/how-cee-can-build-the-next-generation-of-climate-tech-unicorns.html#:~:text=In%20the%20last%20five%20years,tech%20start%20Dups%20since%202018>
92. "Why CEE Is Overlooked by International Investors and What's the Fix" *Ghinita, E, The Recursive*, 2024, <https://therecursive.com/why-cee-is-overlooked-by-international-investors-and-what-s-the-fix/>
93. "CEE Report 2022" *Dealroom*, 2022, <https://dealroom.co/uploaded/2022/11/Dealroom-GoogleAtomicCredo-CEE-2022.pdf?x30228>
94. "Bootstrapped vs. VC: Which is Easier for Startups?" *Accountancy Cloud*, 2024, <https://accountancycloud.com/blogs/bootstrapped-vs-vc-which-is-easier-for-startups>
95. "State of European Tech Survey 2024" *State of European Tech*, 2024, <https://www.stateofeuropeantech.com/reading-tracks/readingtrack-survey>
96. "Poland" *International Monetary Fund*, N/A, https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/POL?zoom=POL&highlight=POL

BIBLIOGRAPHY

97. Most Active LPs in Europe, 2025, <https://sifted.eu/articles/most-active-lps-europe>
98. Opportunities and promising sectors in the CEE, 2025, <https://therecursive.com/vc-opportunities-promising-sectors-investment-trends-strategy-CEE-europe-2025/>
99. Vestbee article. Lead Ventures 100m, 2024 <https://www.vestbee.com/blog/articles/interview-with-lead-ventures-on-its-100-m-fund>
100. Most Active LPs in Europe, 2025, <https://sifted.eu/articles/most-active-lps-europe>
101. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
102. The state of venture capital in the CEE, 2024, <https://www.eu.vc/p/the-state-of-venture-capital-in-CEE>
103. "Startup Visa" *Polish Government*, N/A, <https://www.gov.pl/web/poland-businessharbour-en/startup>
104. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
105. "Startup Ecosystem Report 2024" *StartupBlink*, 2024, <https://www.startupblink.com/startupecosystemreport>
106. "State of AI in CEE" *The Recursive*, 2024, <https://drive.google.com/file/d/19Jm5FFHWerwWtnovixGYihopK0A8mPpAV/view?hstc=2106734181d1db89a6f1b067f6aa951e864878eb4.173202962956217360754902181736082255911.10&hssc=2106734181.1736082255911&hsfp=130792607&submissionGuid=bffc5e61-143b-4562-a767-84d29c22c1af>
107. "The Game Industry of Poland – Report 2023" *Polish Agency for Enterprise Development*, 2023, https://en.parp.gov.pl/storage/publications/pdf/The_Game_Industry_Poland_2023_12_07.pdf
108. "E-commerce in Poland: Booming market full of opportunities" *SaleSupply*, 2024, <https://www.sale supply.com/blog/e-commerce-in-poland-booming-market-full-of-opportunities/#:~:text=Allegro.pl%2C%20Poland's%20largest%20online,percent%20of%20Polish%20online%20shoppers.>
109. "OMGKRK" *OMFKRK*, N/A, <https://www.omgkrk.com/>
110. "2023 Central & Eastern Europe Private Equity Statistics" *Invest Europe*, 2024, <https://www.investeurope.eu/media/apemo3bx/2023-CEE-activity-report-june-2024-final.pdf>
111. "Polish VC Market Outlook 2024" *PFR Ventures*, 2024, <https://pfrventures.pl/en/document/2210>
112. "Ecosystem Compass: Poland 2023" *VCLeaders*, 2023, [https://cdn.prod.website-files.com/64fac3c5a06923120928b226/657f37488331325e70b25119_Ecosystem%20Guide%20to%20Poland%202023%20\(revised%20as%20of%204th%20December%2C%202023\).pdf](https://cdn.prod.website-files.com/64fac3c5a06923120928b226/657f37488331325e70b25119_Ecosystem%20Guide%20to%20Poland%202023%20(revised%20as%20of%204th%20December%2C%202023).pdf)
113. "Polish VC Market Outlook 2024" *PFR Ventures*, 2024, <https://pfrventures.pl/en/document/2210>
114. "Annual National Accounts" *Czech Statistical Office*, N/A, https://european-union.europa.eu/principles-countries-history/eu-countries/czechia_en
115. "Labour productivity and unit labour cost" *Eurostat*, 2025, https://ec.europa.eu/eurostat/databrowser/view/namq_10_lp_ulc/de-fault/table?lang=en
116. "Startup Ecosystem Report 2024" *StartupBlink*, 2024, <https://www.startupblink.com/startupecosystemreport>
117. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
118. "Czech Industry Revs Up for Growth" *The Embassy of the Czech Republic in Pretoria*, 2025, https://mzv.gov.cz/pretoria/en/economic_and_commercial_information/czech_industry_revs_up_for_growth_1.html
119. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
120. "CEE Report 2024" *Dealroom*, 2024, <https://dealroom.co/uploaded/2024/03/Dealroom-CEE-Report-2024-Uniqa-Cogito.pdf>
121. "SmartMarket Report 2024" *StartupJobs*, 2024, <https://smartmarketreport.cz/>
122. "CEE Region funding tops €1.15B in H1 2024: Czech Republic leads the way" *Dobrea, L, The Recursive*, 2024, <https://therecursive.com/CEE-region-funding-tops-e1-15b-in-h1-2024-czech-republic-is-leading-the-way/>
123. "Tracxn Czech Republic" *Startup Ecosystem*, N/A, https://tracxn.com/d/geographies/czech-republic/_MaqTYQpms3Zdt99rMUzq_GX4kZaxwb2oWfJsYr_lvK0
124. "SmartMarket Report 2024" *StartupJobs*, 2024, <https://smartmarketreport.cz/>
125. "Startup Ecosystem Report 2024" *StartupBlink*, 2024, <https://www.startupblink.com/startupecosystemreport>
126. "AR & VR Market in Czech Republic" *Statista*, 2025, <https://www.statista.com/outlook/amo/ar-vr/czechia>
127. "What makes Czech Republic a software talent hotspot?" *Zinnov*, 2023, <https://zinnov.com/global-talent/what-makes-czech-republic-a-key-global-software-talent-hotspot-blog/>
128. "Czech Republic's top 10 startups that tech professionals should watch out for in 2025" *Nucamp*, 2025, <https://www.nucamp.co/blog/coding-bootcamp-czech-republic-czech-republics-top-10-startups-that-tech-professionals-should-watch-out-for-in-2025>
129. "SmartMarket Report 2024" *StartupJobs*, 2024, <https://smartmarketreport.cz/>
130. "RIS JMK" *Ris Jmk*, N/A, <https://www.risjmk.cz/>
131. "Podnikání Dává Smysl." *JIC*, N/A, <https://www.jic.cz/en/about-us/ecosystem>

BIBLIOGRAPHY

132. "About Us" *Czech Invest*, N/A, <https://czechinvest.gov.cz/en/About-CzechInvest/About-Us>
133. "Startup Ecosystem Report 2024" *StartupBlink*, 2024, <https://www.startupblink.com/startupecosystemreport>
134. "RRF Czechia Funds of Funds" *RRF*, 2023, https://www.eif.org/what_we_do/resources/rrf-czech-republic/index.htm
135. "VC scene in CEE: Top VC funds in Czech Republic" *Mikhalchyk-Kananenka, I.*, *VestBEE*, N/A, <https://www.vestbee.com/blog/articles/top-vc-funds-in-czech-republic-to-finance-your-startup>
136. "CEE Region funding tops €1.15B in H1 2024: Czech Republic leads the way" *Dobrea, L.*, *The Recursive*, 2024, <https://therecursive.com/cee-region-funding-tops-e1-15b-in-h1-2024-czech-republic-is-leading-the-way/>
137. "Private Equity Report Deal Activity in 2022" *CVCA*, 2022, <https://www2.deloitte.com/content/dam/Deloitte/cz/Documents/pres/s/CVCA-Activity-Report-2022.pdf>
138. "Czechia: Statista market forecast" *Statista*, N/A, <https://www.statista.com/outlook/fmo/capital-raising/traditional-capital-raising/venture-capital/czechia>
139. "VC scene in CEE: Top VC funds in Czech Republic" *Mikhalchyk-Kananenka, I.*, *VestBee*, 2023, <https://www.vestbee.com/blog/articles/top-vc-funds-in-czech-republic-to-finance-your-startup>
140. "Czechia: Statista market forecast" *Statista*, N/A, <https://www.statista.com/outlook/fmo/capital-raising/traditional-capital-raising/venture-capital/czechia>
141. "Inside Tilia, the €32m Czech Impact Fund that empowers CEE companies with ESG Solutions," *Stojkovski, B.*, *The Recursive*, 2023, <https://therecursive.com/inside-tilia-the-e32m-czech-impact-fund-that-empowers-cee-companies-with-esg-solutions/>
142. "The Czech government has approved a new programme to support Strategic Investments" *CzechTrade*, N/A, <https://www.czechtradeoffices.com/se/news/the-czech-government-has-approved-a-new-programme-to-support-strategic-investments>
143. "Czech energy plan focuses on renewables and nuclear" *World Nuclear News*, N/A, <https://www.world-nuclear-news.org/articles/czech-energy-plan-focuses-on-renewables-and-nuclear>
144. "€10m seed funding to transform Data Processing Landscape" *Atanasova, T.*, *The Recursive*, 2024, <https://therecursive.com/11-million-seed-funding-to-transform-data-processing-landscape/>
145. "Warsaw-based Osla bags €10.15 million to redefine high-volume analytical data processing" *Marzo, S.D.*, *EU Startups*, 2024, <https://www.eu-startups.com/2024/10/warsaw-based-oxla-bags-e10-15-million-to-redefine-high-volume-analytical-data-processing/>
146. "UPHEAL raises \$3.25m to revolutionize mental health with AI therapy notes transcription" *Atanasova, T.*, *The Recursive*, 2024, <https://therecursive.com/upheal-raises-3-25-m-revolutionize-mental-health-with-ai-therapy-notes-transcription/>
147. "Upheal" *Upheal*, N/A, <https://www.upheal.io/>
148. "Czech-US mental health platform for clinicians upheal secures \$10M. headline led the round" *Laoun, J.*, *VestBee*, 2024, <https://www.vestbee.com/blog/articles/upheal-secures-10-m/>
149. "Dronamics raises \$40 million in pre-series A funding" *Dronamics*, 2023, <https://www.dronamics.com/post/dronamics-raises-40-million-in-pre-series-a-funding>
150. "Our Companies" *Eleven*, N/A, <https://www.11.vc/companies/>
151. "Autonomous Cargo Drone Airline Dronamics reveals it's raised \$40m, pre-series A" *Butcher, M.*, *TechCrunch*, 2023, <https://techcrunch.com/2023/02/17/autonomous-cargo-drone-airline-dronamics-reveals-its-raised-40m-pre-series-a/>
152. "Filmchain with \$3M boost to Innovate Film Finance" *Atanasova, T.*, *The Recursive*, 2024, <https://therecursive.com/filmchain-with-3m-boost-to-innovate-film-finance-with-blockchain-integration/>
153. "London-based FilmChain raises €2.8 million to bring automation to payments in film and TV" *Marzo, S.D.*, *EU Startups*, 2024, <https://www.eu-startups.com/2024/04/london-based-filmchain-raises-e2-8-million-to-bring-automation-to-payments-in-film-and-tv/>
154. "FilmChain" *FilmChain*, N/A, <https://filmchain.co/>
155. "HiVentures" *Vestbee*, 2025, <https://www.vestbee.com/vc-list/hiventures>
156. "Hungarian startup Greenstic obtains investment from Hiventures for Green Gastronomy Reform" *Hiventures Venture Capital Fund management PLC*, 2023, <https://www.prnewswire.com/news-releases/hungarian-startup-greenstic-obtains-investment-from-hiventures-for-green-gastronomy-reform-301842424.html>
157. "Megkérdeztük a fogyasztók véleményét AZ éttermi csomagolásról" *Greenstic*, 2024, <https://greenstic.hu/blogs/news/megkerdeztuk-a-fogyasztok-velemenyet-az-ettermi-csomagolasrol>
158. "Hungarian startup Greenstic obtains investment from Hiventures for Green Gastronomy Reform" *Hiventures Venture Capital Fund management PLC*, 2023, <https://www.prnewswire.com/news-releases/hungarian-startup-greenstic-obtains-investment-from-hiventures-for-green-gastronomy-reform-301842424.html>
159. "MoveoAI" *MoveoAI*, N/A, <https://moveo.ai/about-us?utm>
160. "Greece-based Conversational AI startup Moveo.AI raises over €2.3 million to accelerate its mission" *Escárzaga, A.L.*, *EU Startups*, 2024, <https://www.eu-startups.com/2024/08/greece-based-conversational-ai-startup-moveo-ai-raises-over-e2-3-million-for-global-expansion/>
161. "Moveo.AI secures €2.3M from Eleven Ventures to enable enterprises build personalized LLM Agents" *Kostanic, A.M.*, *The Recursive*, 2024, <https://therecursive.com/moveo-ai-seed-2-3m-eleven-ventures-llm-agents-enterprise/>
162. "Sensible biotechnologies raises \$4.2MN in a pre-seed financing round to revolutionize mrna manufacturing, PR Newswire: press release distribution, targeting, monitoring and marketing" *Biotechnologies*, 2023, <https://www.prnewswire.com/news-releases/sensible-biotechnologies-raises-4-2mn-in-a-pre-seed-financing-round-to-revolutionize-mrna-manufacturing-301791515.html>

BIBLIOGRAPHY

163. "Ranging from biotech and mobility to gaming and complex AI Solutions - meet the top CEE startups that closed investment rounds in April 2023" *Skoneczna, K., VestBee*, 2023, <https://www.vestbee.com/blog/articles/top-cee-funding-rounds-closed-in-april-2023>

164. "Sensible biotechnologies: Unlocking the next generation of mrna medicines" *Y Combinator*, 2023, <https://www.ycombinator.com/companies/sensible-biotechnologies>

164. "The Fintech Landscape in Lithuania." *InvestLithuania*, 2024 <https://investlithuania.com/wp-content/uploads/LT-fintech-report-2024-2025.pdf>

165. "Medical Technology: a well-established sector in Hungary" *Blue Europe*, 2022, <https://www.blue-europe.eu/analysis-en/short-analysis/medical-technology-a-well-established-sector-in-hungary/>