Coming of age: Central and Eastern European startups

Google for Startups

atomico°

dealroom.co

October 2021
Google’s initiative to help startups thrive across every corner of the world.

At their best, startups solve complex problems. When they succeed, they move us all forward.

That’s why Google for Startups supports a global network of top tech hubs, accelerators, and diversity-focused organizations across 125 countries. Since 2015, we’ve supported Central and Eastern European startups and can’t wait to see what comes next.

We partner with Europe’s most ambitious tech founders at Series A & beyond.

Built by founders for founders, every single aspect of our firm, every part of our culture and every decision we take is designed with the sole ambition of helping our partners succeed. Because it’s through these pioneers that change happens. Rewiring our world to be a fundamentally better place. One entrepreneur at a time.

Global startup & venture capital intelligence platform.

Dealroom.co is the foremost data provider on startup, early-stage and growth company ecosystems in Europe and around the globe.

Founded in Amsterdam in 2013, we now work with many of the world’s most prominent investors, entrepreneurs and government organizations to provide transparency, analysis and insights on venture capital activity.
The CEE ecosystem has come of age.

Companies founded in CEE have now a combined enterprise value of over €186 billion, up 19x since 2010. But it has not been an overnight success.

Tech giants such as AVG, Avast, Skype, Allegro, LogMeIn attracted the attention of international investors and activated the positive flywheel, posing the base for the next generation of successes such as Bolt, Rohlik, Zego.

Record venture capital investment.

Venture capital investment in CEE founded companies has already smashed previous records with €4.0B already raised in 2021. At this pace, 2021 would see a growth of 2.3x from previous all-time-high in 2019.

This is not only driven by megarounds, early stage investing is also booming. Pre-series B funding grew 2.1x in the first half of 2021 compared to last year.

CEE tech has strong fundamentals.

The CEE region has created huge success stories, especially in enterprise software thanks to some of the best tech developers in the world.

However, many of these successes have been bootstrapped for a long time and the region still lacks a strong VC scene, especially at later stages beyond series A.
I strongly believe that CEE has a massive potential to become a cradle of Europe's most valuable companies.”

“Ever since our early days with Skype, at Atomico we've been watching technology transform every industry and region in Europe and CEE is no exception.

Specifically, as someone who was born in Moldova, I strongly believe that CEE has a massive potential to become a cradle of Europe's most valuable companies. Most of the ingredients are already there - determined founders, skilled talent and clockwork execution. We have historically seen it through many of our investments, such Skype, Supercell and Aiven among others, and one can also clearly see that through the data presented in this report.

Personally, I am thrilled to continue supporting companies close to my home, and help breed the next generation of global game changers.”
Central and Eastern Europe - a scaling tech ecosystem

Venture Capital investment and exits

Ecosystem fundamentals and attention points
Central and Eastern Europe - a scaling tech ecosystem
Central and Eastern Europe has produced global market-leading unicorns - a startup ecosystem that has come of age.

<table>
<thead>
<tr>
<th>Name</th>
<th>Current HQ</th>
<th>Founding location</th>
<th>Founded</th>
<th>Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 UiPath</td>
<td>US</td>
<td>Romania</td>
<td>2005</td>
<td>€25B</td>
</tr>
<tr>
<td>#2 Wise</td>
<td>UK</td>
<td>Estonia</td>
<td>2011</td>
<td>€14B</td>
</tr>
<tr>
<td>#3 InPost</td>
<td>Poland</td>
<td>Poland</td>
<td>2006</td>
<td>€8.4B</td>
</tr>
<tr>
<td>#4 Skype</td>
<td>US</td>
<td>Estonia</td>
<td>2003</td>
<td>€7.6B</td>
</tr>
<tr>
<td>#5 JetBrains</td>
<td>Czech Republic</td>
<td>Czech Republic</td>
<td>2000</td>
<td>€6.4B</td>
</tr>
<tr>
<td>#6 GitLab</td>
<td>US</td>
<td>Ukraine</td>
<td>2014</td>
<td>€6.0B</td>
</tr>
<tr>
<td>#7 CD Projekt</td>
<td>Poland</td>
<td>Poland</td>
<td>2002</td>
<td>€4.5B</td>
</tr>
<tr>
<td>#8 Bolt</td>
<td>Estonia</td>
<td>Estonia</td>
<td>2013</td>
<td>€4.0B</td>
</tr>
<tr>
<td>#9 LogMeIn</td>
<td>US</td>
<td>Hungary</td>
<td>2003</td>
<td>€3.9B</td>
</tr>
<tr>
<td>#10 Vinted</td>
<td>US</td>
<td>Lithuania</td>
<td>2008</td>
<td>€3.8B</td>
</tr>
</tbody>
</table>

Most valuable tech companies founded in CEE after 2000

Source: Dealroom.co and Google Finance.
Using estimated valuations based on most recent VC rounds, public markets and publicly disclosed valuations as of July 31, 2021.
Successful CEE tech startups are attracting the attention of international investors and activating the positive flywheel, providing a base for the next generation of successes."

“Back in 2019, before the Covid-19 pandemic hit, we made an effort to compile better data about how the tech ecosystem in Central and Eastern Europe has developed. In the first edition of our report, we showcased a dozen unicorns that had sprung out of the region, investment in CEE companies that reached €0.7 billion, and overseas VCs just beginning to invest more in local startups.

“The world is a different place now. Some industries experienced drastic slowdown, while others saw a significant increase in demand for their products and services. CEE region withstood many of the turbulences. This edition of the report shows another record-breaking year for the region. Companies founded in CEE now have a combined enterprise value of over €186 billion (up 19x since 2010), VC investment soared to €4.0B in the first nine months of 2021, projected €5.4B by the end of the year and we have now 34 unicorns born in CEE.”
The CEE startup ecosystem is no overnight success, but built on the shoulders of homegrown global software companies, back to the 80s.

Combined enterprise value of CEE-born companies by cohort

Year founded

  - avast
  - epam
  - AVG
  - eobuwie.pl
- 1995-1999: €23B
  - allegro
  - WP
- 2000-2004: €28B
  - Skype
  - CD Projekt
  - Swarovski
  - LogMeIn
  - EMAG
- 2005-2009: €48B
  - UiPath
  - OUTfit7
  - Grammarly
  - Infobip
  - InPost
- 2010-2015: €46B
  - GitLab
  - PipeDrive
  - PRINTFUL
  - BitFury
- 2016-now: €13B
  - Bolt
  - HooVee
  - Rohluk
  - PlayWay
  - Wise
  - Zego
  - people.ai

Source: Dealroom.co
Today, the combined enterprise value of CEE startups is €186 billion, up 19x since 2010.

Combined enterprise value of CEE-born tech companies by launch year

Combined enterprise value of CEE-born tech companies by country

Source: Dealroom.co
Estonia, Romania and Poland have created the most startup value since 2000, though Romania’s ecosystem is predominantly driven by UiPath.

Combined enterprise value of CEE tech companies founded after 2000

- Estonia: €32B
- Romania: €27B
- Poland: €25B
- Ukraine: €12B
- Czech Republic: €10B
- Rest of CEE: €25B

Cumulative number of unicorns and $1B+ exits

- Poland: 8
- Rest of CEE: 8
- Estonia: 6
- Czech Republic: 4
- Ukraine: 4
- Romania: 2

Source: Dealroom.co Unicorns and $1B+ exits by country: [link](#). A unicorn is defined as a rapidly scaling company (and tech enabled) that has reached a $1 billion valuation, on the basis of a funding round (unrealised), acquisition or IPO (realised). Further details can be found at this [link](#).
34 unicorns have been created in CEE to date, up from just 6 in 2015.

Source: Dealroom.co. A unicorn is defined as a rapidly scaling company (and tech enabled) that has reached a $1 billion valuation, on the basis of a funding round (unrealised), acquisition or IPO (realised). Further details can be found at this link. Playway is publicly listed. Now trading below $1B but crossed it some months ago.
The positive flywheel is going into full effect, with startup success driving continued ecosystem growth.

- More quality startups → Experienced and skilled talent. Angels supporting early stage startups
- High profile exits → Attracting global venture capital
- More local VC firms emerge, with global quality standards → More capital and bigger more ambitious companies
- Bigger outcomes → Attracting global venture capital
The region’s biggest successes have a snowball effect, producing talent that go on to found the next generation of startups.
CEE-born startups now have a combined value of €186B, driven by unicorns and decacorns.
Aside from the big exits and known unicorns, there is a strong pipeline of rising stars & future unicorns in CEE.
Venture Capital in CEE
CEE-founded companies have already raised record investment in 2021.

Combined venture capital investment into CEE

- CEE HQ
- CEE-born (relocated)*

€4.0B

€2.3B

2.3x


Top rounds in 2021: » view online

<table>
<thead>
<tr>
<th>NAME</th>
<th>INVESTORS</th>
<th>MARKET</th>
<th>LOCATION</th>
<th>VALUATION</th>
<th>LAST ROUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>UiPath</td>
<td>Softbank Capital, Anbang Insurance Group, Sequoia Capital, Temasek Holdings</td>
<td>Enterprise software</td>
<td>New York, United States</td>
<td>€11.1B</td>
<td>Series F</td>
</tr>
<tr>
<td>Bolt</td>
<td>Softbank Vision Fund, S F Partners, Digital Partners, TPG</td>
<td>Food transportation</td>
<td>Tallinn, Estonia</td>
<td>€4.4B</td>
<td>Late VC</td>
</tr>
<tr>
<td>Vinted</td>
<td>Rocket Internet, Founders Fund, Point Nine Capital</td>
<td>Retail</td>
<td>Vilnius, Lithuania</td>
<td>€3.1B</td>
<td>Series F</td>
</tr>
<tr>
<td>Rohlik</td>
<td>Point Nine Capital, Target Global, Lightspeed Venture Partners</td>
<td>Food delivery</td>
<td>Prague, Czech Republic</td>
<td>€1.1B</td>
<td>Series B</td>
</tr>
<tr>
<td>Zego</td>
<td>B Capital, Siris Capital, Target Global</td>
<td>Insurance</td>
<td>London, United Kingdom</td>
<td>€1B</td>
<td>Series C</td>
</tr>
<tr>
<td>Printful</td>
<td>SBI Group, F4F, Global Founders Capital</td>
<td>E-commerce</td>
<td>Charlotte, United States</td>
<td>$1B</td>
<td>Series C</td>
</tr>
<tr>
<td>Eobuwie.pl</td>
<td>Orange, Lightspeed Venture Partners</td>
<td>E-commerce</td>
<td>Zielona Góra, Poland</td>
<td>€1.4B</td>
<td>Series C</td>
</tr>
<tr>
<td>Rohlik</td>
<td>Point Nine Capital, E-ventures, Lux Capital</td>
<td>Food delivery</td>
<td>Prague, Czech Republic</td>
<td>€1.1B</td>
<td>Series C</td>
</tr>
<tr>
<td>People.ai</td>
<td>Lightspeed Venture Partners, TPG Capital, KKR</td>
<td>Software</td>
<td>San Francisco, United States</td>
<td>€1B</td>
<td>Series D</td>
</tr>
</tbody>
</table>

Source: Dealroom.co  *Refer to methodology
Startups founded in Estonia, Romania, Poland, Ukraine and Lithuania have all raised over €1B in VC funding since 2015.

Venture capital investment (2015-2021)

- Estonia: €2.62B
- Romania: €2.25B
- Poland: €1.82B
- Ukraine: €1.47B
- Lithuania: €1.00B
- Czech Republic: €852M
- Croatia: €541M
- Hungary: €438M
- Bulgaria: €415M
- Latvia: €323M
- Slovakia: €159M
- Belarus: €142M
- Serbia: €140M
- Slovenia: €87M
- Albania: €10M
- Rest of Balkans*: €4M
- Moldova: €2M

Source: Dealroom.co  *North Macedonia, Kosovo, Montenegro, Bosnia and Herzegovina  For the definition of relocation please have a look at the methodology slide
Estonia has raised the most investment per capita of any country in Europe.

### VC funding per capita by country

<table>
<thead>
<tr>
<th>Country</th>
<th>CEE</th>
<th>Rest of Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>€1,967</td>
<td>€1,769</td>
</tr>
<tr>
<td>Sweden</td>
<td>€1,769</td>
<td>€1,414</td>
</tr>
<tr>
<td>Switzerland</td>
<td>€1,414</td>
<td>€1,127</td>
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<tr>
<td>UK</td>
<td>€1,127</td>
<td>€854</td>
</tr>
<tr>
<td>Finland</td>
<td>€854</td>
<td>€614</td>
</tr>
<tr>
<td>Netherlands</td>
<td>€614</td>
<td>€470</td>
</tr>
<tr>
<td>France</td>
<td>€470</td>
<td>€440</td>
</tr>
<tr>
<td>Germany</td>
<td>€440</td>
<td>€361</td>
</tr>
<tr>
<td>Lithuania</td>
<td>€361</td>
<td>€250</td>
</tr>
<tr>
<td>Austria</td>
<td>€250</td>
<td>€204</td>
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<tr>
<td>Spain</td>
<td>€204</td>
<td>€170</td>
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<tr>
<td>Latvia</td>
<td>€170</td>
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<td>Croatia</td>
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<td>€116</td>
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<tr>
<td>Romania</td>
<td>€116</td>
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<td>Czech Republic</td>
<td>€80</td>
<td>€60</td>
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<td>Bulgaria</td>
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<td>Poland</td>
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<td>Hungary</td>
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<tr>
<td>Slovenia</td>
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<td>Ukraine</td>
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<tr>
<td>Slovakia</td>
<td>€29</td>
<td>€23</td>
</tr>
<tr>
<td>Serbia</td>
<td>€23</td>
<td>€15</td>
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<tr>
<td>Belarus</td>
<td>€15</td>
<td>€4</td>
</tr>
<tr>
<td>Albania</td>
<td>€4</td>
<td>€1</td>
</tr>
<tr>
<td>Moldova</td>
<td>€1</td>
<td>€0</td>
</tr>
<tr>
<td>Rest of the Balkans</td>
<td>€0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Dealroom.co  *Belarus, Albania, Serbia, North Macedonia, Kosovo, Montenegro, Bosnia and Herzegovina, Moldova  For the definition of relocation please have a look at the methodology slide.
Megarounds started appearing in CEE starting in 2017, and now account for 55% of the funding in 2021.

VC investment in CEE founded startups by round size » view online
CEE startups raised record levels of early-stage investment in the first half of 2021, with €733M raised at pre-Seed to Series B.

Venture capital investment into CEE founded companies (pre)seed-series B

Explore 269 early-stage rounds in CEE in the first half of 2021 » view online

Source: Dealroom.co
Investment growth in CEE has been driven mostly by foreign investors, who account for 90% of the funding since 2017.

Source: Dealroom.co
Local investors underpin the early-stage investment landscape, but at later-stage, companies look overseas for bigger cheques.

VC funding in CEE founded companies (2015-2021) by source and round size

- Seed €1-4M
- Series A €4-15M
- Series B €15-40M
- Series C €40-100M
- Megarounds €100M+

Source: Dealroom.co
Due to the lack of late-stage domestic capital, CEE is more reliant on international investors than all major European ecosystems.

Source: Dealroom.co
International investors have started to ramp up their activity in CEE in recent years, with 2021 already reaching record levels.

Investment into CEE-born companies by selected tier 1 international investors*

<table>
<thead>
<tr>
<th>Year</th>
<th>€0-1M (pre-seed)</th>
<th>€1-4M (seed)</th>
<th>€4-15M (series A)</th>
<th>€15-40M (series B)</th>
<th>€40-100M (series C)</th>
<th>€100-250M</th>
<th>€250M+</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>0</td>
<td>0</td>
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<td>2011</td>
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<td>0</td>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>0</td>
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<tr>
<td>2014</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
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<td>2015</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>2016</td>
<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>2018</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2019</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2020</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2021YTD*</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Dealroom.co *Index Ventures, Accel, Atomico, Insight Partners, Bessemer Venture Partners, Draper Esprit, EarlyBird, Partech, Balderton Capital, Gradient Ventures, Creandum, Hoxton Ventures, Sequoia Capital, Andreessen Horowitz, Kleiner Perkins, Softbank Capital
Several international investors have built strong portfolios in CEE in just the last 3 years.

Investments into CEE founded companies by selected International investors (2018-2021)

Source: Dealroom.co
CEE’s particular strength lies in enterprise software, which attracts more than 2x the share of VC funding than in the rest of Europe.

Source: Dealroom.co
Process automation, developer and collaboration tools, software development, cybersecurity and marketing & sales have created €90B of the €96B of Enterprise software and B2B software value in the CEE region.

Source: Dealroom.co. Only startups with valuation >€50M are shown
Gaming companies in CEE, Poland especially, are exiting fast and staying in the region. They also do not rely much on VC funding.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Exits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3</td>
</tr>
<tr>
<td>2016</td>
<td>5</td>
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<td>2017</td>
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<tr>
<td>2018</td>
<td>7</td>
</tr>
<tr>
<td>2019</td>
<td>9</td>
</tr>
<tr>
<td>2020</td>
<td>15</td>
</tr>
<tr>
<td>2021</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total VC funding (2010-2021):** €12.4B

**Combined enterprise value:** €81M

Listed on Warsaw Stock Exchange:
- **€6.8B**:
  - Outfit7
  - PlayWay
  - HooHGE

Listed on exchanges out of CEE:
- **€3.7B**:
  - Evolution Gaming
  - Playtech
  - G5

International acquisitions:
- **€1.9B**:
  - OUTFIT7
  - HooHGE

*Includes both Acquisitions and IPOs

*Source: Dealroom.co*
CEE VC funds continue to raise new funds ready to deploy into the early-stage CEE ecosystem.

Source: Dealroom.co  Only VC funds with active funds >= €10M have been included. The funds are classified by country based on their HQ location. Their investment focus is often broader than their HQ country.
“The local VC investor ecosystem has dramatically improved over the past years.”

“Though still trailing its Western counterparts, the CEE ecosystem is maturing nicely. Deal sizes and volumes are generally rising. The local VC investor ecosystem has dramatically improved over the past years, with less reliance on public sources for funding (and more on commercial LPs), a more founder friendly approach and more competition between funds.

Founders have become more ambitious, often creating regional or global businesses from the start, as opposed to strictly local ones. Repeat founders have become more and more prevalent.

This year’s IPO of Romania-founded UiPath on the NYSE at a valuation of over $30 billion was a landmark transaction for the region. As a result, we also see that CEE is getting more attention from Western investors.”
3 The CEE ecosystem fundamentals
A common narrative is that CEE-born startups tend to relocate overseas, but some of the region’s biggest ecosystems are retaining their startups.
Most CEE-born companies which have relocated, also still retain a large proportion of their employees in CEE, usually around 50-90%.

Country of relocation by % of companies

- **US**: 54%
- **UK**: 24%
- **Rest of Europe**: 19%
- **Rest of the world**: 4%

Relocated companies count by % of employees still in CEE

- **>90%**: "Fake relocated"
- **70-90%**: "Sales in NY, dev in CEE"
- **50-70%**: "Truly relocated"
- **30-50%**: 1C3YE
- **10-30%**: ZEGO
- **<10%**:

Source: Dealroom.co  *Sample size at the time of the analysis: 146 relocated startups with >1M funding.
VC funding is not everything: 31% of CEE-founded unicorns have been bootstrapped, compared with only 7% in the rest of Europe.

<table>
<thead>
<tr>
<th>% of bootstrapped unicorns</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
</tr>
<tr>
<td>7%</td>
</tr>
</tbody>
</table>

CEE    | Rest of Europe

Bootstrapped (9)
- Evolution Gaming
- grammarly
- CD PROJEKT
- allegro
- infobip
- JET BRAINS
- Playtika
- playtech
- PRINTFUL

Almost bootstrapped (5)*
- Wirtualna Polska
- OUTFIT7
- ten square games

VC-backed (20)
- ZEGO
- AVG
- Bolt
- Skype
- WISE
- pipedrive
- Vinted
- GitLab
- BITFURY
- UiPath
- LogMeIn
- epam
- rohlik group
- HUUUGE
- InPost
- LiveChat
- avast
- people.ai
- Docplanner Group
- PandaDoc

Source: Dealroom.co  *Edge cases excluded from the bootstrapping analysis.
Scaling is accelerating in CEE. Startups born in the last 10 years took almost 1/3 of the time to hit unicorn status compared to the first generation.

Average years to become a unicorn by launch year

- 1990-2000: 19 years
- 2001-2010: 12 years
- 2011-2020: 7 years

Average private funding raised to become a unicorn by launch year

- 1990-2000: €60M
- 2001-2010: €70M
- 2011-2020: €131M

Source: Dealroom.co
The Baltics are an entrepreneurial region, with more than 1 startup per 1,000 people in Estonia.

<table>
<thead>
<tr>
<th>Country</th>
<th>Startups per 1M inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>1048</td>
</tr>
<tr>
<td>Israel</td>
<td>904</td>
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<tr>
<td>US</td>
<td>724</td>
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<tr>
<td>Lithuania</td>
<td>706</td>
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<tr>
<td>Netherlands</td>
<td>601</td>
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<tr>
<td>Finland</td>
<td>587</td>
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<tr>
<td>Switzerland</td>
<td>568</td>
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<tr>
<td>Sweden</td>
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<tr>
<td>UK</td>
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<tr>
<td>Germany</td>
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<tr>
<td>France</td>
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<tr>
<td>Latvia</td>
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<td>Spain</td>
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<td>Hungary</td>
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<td>Poland</td>
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<td>Serbia</td>
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<td>Ukraine</td>
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</tr>
<tr>
<td>Rest of CEE*</td>
<td>29</td>
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<tr>
<td>Rest of Balkans</td>
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<tr>
<td>Belarus</td>
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<tr>
<td>Albania</td>
<td>22</td>
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<tr>
<td>Rest of CEE</td>
<td>25</td>
</tr>
<tr>
<td>Rest of CEE</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Dealroom.co  *Belarus, Albania, Serbia, North Macedonia, Kosovo, Montenegro, Bosnia and Herzegovina, Moldova
More bang for the buck. Startups in Central and Eastern Europe have significantly lower costs.

Source: Numbeo cost of Living Index 2020

- Low cost of living (20-40)
- Medium cost of living (40-60)
- High cost of living (60-80)
- Very-High cost of living (80-120)
Unlike in the 90s and 2000s, founders now think internationally from day one.”

“The biggest challenge for startups based in Poland and CEE historically, has been growing internationally. There have been several reasons for that, but recently there has been marked improvement in these areas.

“Access to capital has been a challenge in the past, with a funding gap particularly noticeable at later stages, but there has also been a lack of the competences and capabilities necessary to grow.

This is changing. With the increasing presence of international funds, who provide not only capital, but knowhow and network, internationalization is easier than ever before. But local funds are also increasingly building their international connections and experience in foreign expansion very fast.”
Visit [poland.dealroom.co](poland.dealroom.co) to explore Poland’s tech ecosystem in greater depth.

The only open digital database covering startups, scaleups and funding in Poland.

The platform catalogues the collective regional tech ecosystem, covering areas such as newly founded and scaling companies, funding, investors, accelerators, and job opportunities.

**Initiated by**

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**Data partners**

Google, STARTUP POLAND, dealroom.co
From MTIP's side we've added some more comments to the report, mostly in line with what Thijs has commented. Below are the key points:

1. Personalized Care (page 7): Personalized care, in our view, includes two levels:
   - the molecular level
   - the system level: The system level is both about treatment selection and treatment optimization. Personalized drug dosing for example would be included here.

2. Decentralized Care (page 7): Decentralized care goes beyond telemedicine, as Thijs mentioned.
   - Data management is critical, getting the right information at the right time to the right professional.
   - Data analysis will play a role when figuring out when patients need high touch (involvement of care professionals) and when patients can rely on tech for virtual care.

3. Regarding Telemedicine and regulatory changes due to COVID-19 (page 14): For the US, good to mention the release of HHS's information blocking and interoperability rules earlier this year, which marked an industry-wide shift toward patient empowerment and accessibility.
   - Also good to highlight the cost benefit of telehealth in the US, where a lower number of testing have been seen as a result of telehealth.
   - HSS is making efforts to keep reimbursement on Telehealth also for after the emergency situation and to make more of the regulation flexibilities permanent, such as HIPAA flexibility that allowed care providers to use Facetime and Skype.
Venture capital methodology and definitions.

**Startups, scaleups, grownups and tech**

Companies designed to grow fast. Generally, such companies are VC-investable businesses. Sometimes they can become very big (e.g. $1B+ valuation).

When startups are successful, they develop into scaleups (>50 people), grownups (>500 people) and result in big companies, like Avast or UiPath.

A unicorn is defined as a rapidly scaling company (and tech enabled) that has reached a $1 billion valuation, on the basis of a funding round (unrealised), acquisition or IPO (realised).

**Venture capital investment**

Investment numbers refer to rounds such as Seed, Series A, B, C, …. late stage, and growth equity rounds.

Venture capital investment figures exclude debt or other non-equity funding, lending capital, grants and ICOs.

Buyouts, M&A, secondary rounds, and IPOs are treated as exits: excluded from funding data.

Investment rounds are sourced from public disclosures including press releases, news, filings and verified user-submitted information.

**Report focus**

This report focuses, unless specified, on companies in the information age, i.e. after 1990.

This report focuses on the following countries considered as CEE: Estonia, Lithuania, Latvia, Poland, Czech Republic, Hungary, Slovakia, Croatia, Romania, Serbia, Bulgaria, Montenegro, Slovenia, North Macedonia, Bosnia and Herzegovina, Albania, Kosovo, Moldova, Ukraine, Belarus.

**Definition of headquartered and founded**

A company has been considered as founded in CEE based on two main criteria: 1) founding location and founders (nationality, education, first ) 2) employees distribution Another supporting criteria has been whether the company received support from investors or other entities in CEE. A degree of arbitrariness still remains in the choice, here is the dataset.

A company has been considered as headquartered in CEE if the company indicates a city in CEE as its current headquarters.