### atomico°

# STATE OF EUROPEAN TECH 24.

1 TH

Anniversary Edition

Proudly supported by







### **Europe's definitive tech report**

# **Anniversary Edition**

Proudly supported by









# STATE OF TECH 24.

# The definitive take on European tech

O	Our Partners	04
1	Executive summary	23
2	Investment levels	47
<b>3</b>	Themes	102
4.	Talent	143
5	Investors	184
6	Outcomes	217



# Our **Partners**

The State of European Tech could not happen without the contributions of our valued partners. Here's what they have to say about the past decade of growth in European tech.









# atomico°

### **About Atomico**

Atomico is the founder-built European venture capital firm. We partner with the most ambitious entrepreneurs using technology to rewire the world, better.

Skype co-founder Niklas Zennström launched Atomico in 2006 with the belief that entrepreneurs are the ultimate gamechangers for positive transformation across the most critical aspects of our society and economy. Starting in Europe, the firm's mission is to further their global progress, with a platform offering unmatched support from the early stage to scale.

155 of Europe's most ambitious founders have partnered with Atomico, including Aiven, Bird (formerly MessageBird), DeepL, Hinge Health, Jobandtalent, Klarna, Pipedrive, Stripe, Supercell and Wellhub. Atomico's team of investors and operational leaders are drawn from some of the most successful technology companies in the world, including Skype, Google, Twitter and Wise.







# The tenth anniversary of the State of European Tech presents us with a paradox

The last decade has been transformational for our ecosystem - the developments are vast. Yet, despite this progress, the mood in 2024 has been flat. A year of political and regulatory turmoil with concerns over the EU's Al Act, the challenges identified by Mario Draghi's report and Europe's ability to support breakthrough companies to commercialisation.

It's easy to lose sight of the whole picture. We saw an opportunity with our tenth report to look further than the last twelve months, and instead to bring a longer-term perspective, from which we can learn to navigate the challenges we face.

Over the decade, Europe's ability to attract and grow talent, unlock capital and raise our ambition level has been transformed. There's been a 10x increase in the pool of capital available, we've built a world class talent pool in which to invest, and, crucially, we've seen our first major shift in mindset. There is a greater public understanding of entrepreneurship, the attractiveness of the start-up career path, and more ambition.

We're seeing more start-ups, more ambitious ideas, built to solve harder problems. The overall universe of companies has grown 4.7x in the last decade, with as many early stage companies as any other region and an 8x increase in growth stage firms.

# This has given Europe world class returns and - over the long-term - a growing track record of exits.

Cumulatively, we've seen close to \$1 trillion in realised value from IPOs and M&A over the past ten years.

Europe is building a differentiated position, not just in nurturing world leading talent from its many universities, but in then allocating its resources to solve the needs of future generations. We demonstrate a focus on solving the hardest problems from renewable energy to carbon removal and preventive care. And we're showing leadership in a number of clusters from Al to fintech to SaaS and chipmaking.

Yet despite this incredible progress over the decade, we have to acknowledge there's real concern across the ecosystem about the way forward today.

Our survey records frustrations about the continued challenges we all face. We've organised these barriers to success under 'six keys' to unlock the future European tech deserves. These span from unlocking capital at scale, to liquidity, to customers, to regulatory dynamism, global talent competitiveness and commercialising R&D.





This lookback should encourage everyone in the ecosystem as to how far we've come and how much further we can go.

The next step for Europe now is to develop its growth-stage ecosystem. To do this, we need more pension fund and government LPs, so that European later-stage companies can build a better world.

### **Sarah Guemouri** Principal at Atomico, Co-Author of the report

# None of these individually are insurmountable, but bold, positive action is needed

We must support those who are finding new ways to tackle old problems. An example is the '28th Regime' or EU Inc, as it's sensibly been rebranded, an EU legal framework that would allow businesses to operate in a single market. This would scale back bureaucracy and scale up ease of doing business across European borders.

There are fears that these challenges could erode the future success the ecosystem has set itself up for.

Bold, positive action is needed. And, to make that action stick, confidence is essential. We must support those who are finding new ways to tackle old problems. An example is the '28th Regime' or EU Inc, as it's sensibly been rebranded, an EU legal framework that would allow businesses to operate in a single market.

# A key issue which consistently hampers Europe's scale up ambitions, is the growth funding gap

Over the past decade, Europe underfunded its growth companies to the tune of \$375 billion which still doesn't come close to the trillions invested in the US

That's a huge difference. Imagine where Europe will be if we solve it. Investment from pension funds and major insurers - which currently allocate just 0.01% of their \$9 trillion capital pool into European venture capital - provides the beginnings of the solution.







Solving this could be the difference between our best and brightest companies scaling from Europe, vs being forced to relocate to the Valley. But while these solutions are right in front of us for the taking, they require a further generational shift in mindset to be realised. We must stop comparing our journey to the US, and instead, forge our own path.

Technology is about having the resilience and drive to solve incredibly hard problems - the sector, by its nature, forces us to think several years into the future. If rather than focusing on the scale of opportunity, we're instead disappointed by the shortcomings of today, how can we have the growth mindset to build for a longer-term future?

This mindset is, in our opinion, the central barrier to Europe's success. If we let our actions be clouded by fear and led by conservatism, we'll undo the very thing that has been key to our success until now, and in the future.

### So now we leave you with data to inspire you about Europe's way forward

At a conservative estimate, ten years from now Europe should be an \$8 trillion ecosystem, with a 300% larger job market of 20 million people, and capital unlocked for scale. The brightest, boldest minds will build from Europe, solving our society and economy's hardest problems, and unlocking the first trillion-dollar companies from the region.

Conscious, dynamic and ambitious, but most of all - unprecedented. A technology superpower for a new generation.

We hope you enjoy reading this year's report. Thank you.





While our survey participants called out a range of issues that might impede the continent's progress - from R&D to regulation, we believe that unwarranted pessimism is the central barrier to Europe's success

When you take the long-term view, it's clear that the continent has made huge progress in the last ten years, and this should encourage us to re-discover our confidence and ambition. We must not undo the very thing that has been key to our success.

### **Tom Wehmeier**

Head of Insights at Atomico, Co-Author of the report



### **About Orrick**

Orrick ranks No. 1 in Europe for venture capital (Pitchbook) and has been the leader for each of the past eight years. We counsel venture-backed companies, as well as the most active funds, corporate venture investors and public tech companies worldwide.

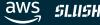
Our advice is informed by working with more than 4,500 high-growth tech companies globally (including hundreds of companies in emerging sectors, such as Al, Life Sciences & Healthtech, Energy Tech and Fintech), 13 of the 25 largest public tech companies, and more than 400 investors.

Our annual Deal Flow Report analyses the hundreds of transactions we help companies and investors close in Europe and shares insights gleaned from term sheets, industry trends, deal volume and more. Our 2023 report leveraged data from the 350+ transactions we closed for clients in Europe with an aggregate value of more than \$7 billion and our 2024 report will launch in Q1.

Visit our Tech Studio, a self-service resource to help companies grow and thrive at all stages. With 50+ customizable forms & document generators, 300+ articles, videos and podcasts and robust FAQ and glossary databases, it's our version of open source for the ecosystem. Learn more at OrrickTechStudio.com.







# The 2024 State of European Tech report showcases a remarkable decade of growth and maturation

With a talent pool expanding at 24% annually and a tenfold rise in venture financing since 2015, Europe has turned tech and innovation into an economic pillar.

### A few takeaways from this year's report:

Talent Boom – Europe's tech workforce has soared to 3.5 million and is on track to match the U.S. in five years. There's been a clear shift toward entrepreneurship, with seven times more talent now working in venture-backed firms than in 2015.

**Capital Surge –** Since 2015, \$426 billion in venture capital has been deployed to Europe, and 2024 is on track to be a \$45 billion year. With growing support from European pension funds, even more capital may come online.

**Sector Strength -** Europe's tech landscape is diversified, from AI to fintech to climate tech. More than 20% of funding goes to sustainability-focused companies—double the U.S. share. In fintech, always a European strength, 17% of 2015 Seed-stage companies have reached a 6th round of financing since.

**Scaling Potential –** With over 35,000 startups and a remarkable unicorn count, there's huge untapped potential for investors ready to address the growth-stage funding gap. Pro-innovation regulatory schemes can only help.

We're honoured to partner with Atomico to bring you this report — and we look forward to continuing to play a leading role in this ecosystem's next decade. We can only imagine what Al-powered innovations are around the corner.





This year's report makes it clear: Europe's capital and talent are converging right as we're on the brink of transformative technological change.

With the right pro-innovation policies in place across Europe, the next decade promises unprecedented growth for this ecosystem.

### **Shawn Atkinson**

Partner and Co-Head of Global Technology Companies Group, Orrick (London)



### **About HSBC Innovative Banking**

HSBC Innovation Banking provides commercial banking services, expertise and insights to the technology, life science and healthcare, private equity and venture capital industries. HSBC Innovation Banking UK is a subsidiary of HSBC Group, benefiting from its stability, strong credit rating and international reach to help fuel its growth.

© 2024 HSBC Innovation Bank Limited. All rights reserved. HSBC Innovation Bank Limited (trading as HSBC Innovation Banking) is registered in England and Wales at Alphabeta, 14-18 Finsbury Square, London EC2A 1BR, UK (Company Number 12546585). HSBC Innovation Bank Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority (Firm Reference Number 543146). HSBC Innovation Bank Limited is part of the HSBC Group. HSBC Innovation Bank Limited is committed to making its website and related documents accessible to everyone. Learn more on www.hsbcinnovationbanking.com/ accessibility







### The past decade has seen a significant transformation of the European tech ecosystem

Our teams have played a crucial part throughout this period, supporting innovators to grow and deliver positive change for their business, their customers and the world. We have therefore witnessed firsthand the rapid evolution which has taken place. Europe has now firmly established itself as a leading global tech hub, fostering an environment for innovation and growth which has created more new technology companies than any other region and attracted a 10x bigger capital pool over the period.

Europe's funding landscape has experienced unprecedented investment growth. Today, European startups have access to a robust funding environment, with VC firms, institutional investors, and corporate venture arms increasingly committed to supporting high-potential companies from seed stage through to IPO. From 2015 to 2024, European startups and scale-ups attracted \$426 billion - nearly ten times the \$43 billion raised between 2005 and 2014.

This surge reflects not only rising confidence in European tech but also the region's emergence as a global powerhouse for innovation and investment. Europe now boasts a formidable talent pool, with over 3.5 million skilled tech professionals fuelling this momentum and positioning the region for continued growth. This has led to Europe becoming a global hotspot for early-stage startups, now hosting around 35,000 early-stage companies, more than any other region.

It's encouraging to see that funding across Europe is going into sectors which have the potential to solve huge societal problems. In 2024, 21% of all funding raised in Europe went to companies related to sustainability, nearly double the ratio for the US, which sits at 11%. This emphasis highlights Europe's commitment not just to growth but to cultivating a tech landscape aligned with environmental and social responsibility and long-term impact. Europe's fintech sector stands out as another success story, solidifying the region's reputation for financial innovation. Notably, 17% of all fintech startups that raised seed funding in 2015 reached a 6th round or more after that, the highest rate across all sectors in Europe.

Despite building a strong foundation, Europe faces a unique set of challenges. Startups face considerable obstacles in scaling beyond the early stages, due to regulatory complexities, talent shortages and a significant growth funding gap. US tech startups are twice as likely to raise a growth stage \$15M+ round than European firms, leading to a notable disparity in the number of companies that successfully transition from startup to growth stages. Over the past decade, this gap has amounted to an estimated \$375 billion in underfunding for European growth-stage companies. Without sufficient growth capital, promising startups often struggle to reach their full potential or are forced to look beyond Europe for resources.

One solution lies in attracting greater investment from pension funds and major insurers, whose contributions could provide the stability and scale that Europe's later-stage startups urgently need. Presently, European pension funds invest just 0.007% of capital into global venture capital, compared to 0.029% into global venture capital by their US counterparts. To match the US in supporting high-potential startups, Europe would need to triple this investment rate. Increasing pension fund and institutional investments would not only help bridge the funding gap but also strengthen Europe's overall competitiveness, creating a stronger pipeline of funding across all stages.

Europe is well placed to seize the opportunity and effectively support the next generation of innovative startups on their growth journeys. Through a blend of robust funding networks, accelerator programs, and a collaborative ecosystem, Europe has become a nurturing ground for founders who are advancing impactful solutions across industries. This extends far beyond funding, encompassing mentorship, cross-border collaboration, and knowledge-sharing that equip startups to scale globally.



By partnering with some of Europe's most innovative, venture-backed businesses and their investors, we're fully committed to accelerating their success. Our focus is on continuing to unlock global opportunities and to enable greater access to growth resources for innovative businesses across the region. Our mission is to empower trailblazing entrepreneurs to develop bold growth strategies, drive economic evolution, and shape the future of the Europe's tech sector.

Atomico's report reveals the transformation of Europe's tech ecosystem and its vast potential for the coming decade. We are excited to see what's on the horizon. Fast-moving sectors such as space tech, life sciences, and artificial intelligence are poised for significant evolution. This momentum will foster a continuous stream of innovation from startups across Europe, further enriching the tech landscape and reinforcing the continent's position as a global leader.





Atomico's report highlights the impressive transformation of Europe's tech sector and the significant potential it holds for the coming decade.

Europe has generated more new technology companies than any other region in the world, dramatically increased investment levels, and positioned itself as a frontrunner in sustainability and an established global leader in fintech. The region's ability to push forward and continue cementing its status as a global superpower is dependent on the provision of sufficient funding for startups and scaleups to innovate and thrive. We are excited to see what's on the horizon and remain focused on supporting the growth of European tech firms throughout their life cycles, to ensure they reach their full potential.

Simon Bumfrey CEO, HSBC Innovation Banking UK









### **About AWS**

Since 2006, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud. AWS has been continually expanding its services to support virtually any workload, and it now has more than 240 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, media, and application development, deployment, and management from 105 Availability Zones within 33 geographic regions, with announced plans for 21 more Availability Zones and seven more AWS Regions in Malaysia, Mexico, New Zealand, the Kingdom of Saudi Arabia, Taiwan, Thailand, and the AWS European Sovereign Cloud. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies-trust AWS to power their infrastructure, become more agile, and lower costs. To learn more about AWS, visit aws.amazon.com.

### The profound technology breakthrough known as Generative AI has transformed our understanding of what's possible

However, just like the mobile revolution and the rise of the internet, technologies that may seem to burst onto the scene actually stand on the shoulders of years, if not decades, of prior innovation.

Cloud computing was a radical idea when AWS launched Amazon S3 and EC2 in 2006. When Atomico published Europe's first State of European Tech report in 2014, the region's global technology ambitions seemed nascent. Ten years on, as Atomico's landmark State of European Tech Report 2024 shows, we're witnessing a transformation; a \$3.2 trillion ecosystem with more startups than any other region globally. As for AWS, we have grown to more than 200 fully-featured services in data centers globally, reaching 245 countries and territories.

Generative AI has its roots in well-established areas of innovation, such as Artificial Intelligence and Machine Learning, Mathematics, Computer Science, and High-Performance Computing. Similarly, access to investment capital and world-class researchers is not a new development. This all begs the question of why Generative AI is happening now. In addition to the recent hyper-convergence of the factors above, there are two things coming together to drive the exponential innovation we call Generative AI: First, the capacity of computing infrastructure at supercomputing scale can now — for the first time in history — run these models. Second, we can now build and deploy supercomputing scale in real-time via the elasticity and global accessibility of Cloud Computing.







# Flywheel effect across Europe redefines growth trajectory

Europe has a long and distinguished history in these fields, and we are seeing top universities and researchers establishing successful AI Startups. Many founders come from not only Computer Science and Mathematics backgrounds but also with High-Performance Computing experience. The UK ranks third globally in AI funding, with \$4 billion invested in 2024, while Germany and France each contribute over \$1 billion. European startups reflect the value areas of their regional markets, including being twice as likely to build companies addressing fundamental societal challenges such as sustainability, with 21% of European funding going to sustainability-focused companies, compared to 11% in the US.

Europe's technical talent pool has grown at a remarkable 24% CAGR since 2015, putting the region on track to potentially align with where the US is today within five years. More than 35,000 early-stage companies are active across the continent, and we've seen an eightfold increase in growth-stage companies over the decade. Despite these successes, regional challenges still exist. European tech startups are half as likely than their US counterparts to secure a \$15M+ venture funding round, creating a growth-stage funding gap of \$375 billion over the past decade. But the momentum forward is clear. The capital pool has grown tenfold in ten years, and new technology-focused institutional investors are entering the market with enthusiasm. For example, 17% of capital went to deep tech in 2015. Today, it commands 33% of all investment.

The ambition and focus of European innovation are evident in AWS's daily work with founders. In our recent Global Generative AI Accelerator program, our European cohort exemplified this: Consider Phagos, using billion-parameter AI models to revolutionize antibiotic drug development, or Odyssey, transforming how visual stories are created with Hollywood-grade visual AI. When Latent Labs develops next-generation biological models, they're not just pushing technical boundaries; they're addressing fundamental human challenges.

Looking forward, Europe's technology community is well-poised for a new phase of growth. We're seeing new Al powerhouses emerge from experienced founders and world-class researchers, like H Company in France or Black Forest Labs in Germany, redefining image generation in a category that didn't exist five years ago. With seven times more people working in venture-backed companies compared to 2015, and more than 350 billion-dollar firms already in flight, the flywheel is spinning faster than ever.

The story in this year's State of European Tech report is about more than numbers. It's about Europe charting its course with a global technology ethos. Combining commercial ambition with conscious purpose, the region is creating a new model for technological progress. The future of technology is global, and Europe is playing a critical role in forging that future. At AWS, we couldn't be more excited to be part of this journey.





This landmark report certifies Europe's role in the future of technology.

Combining commercial ambition and a commitment to solving fundamental societal issues, the region is pioneering a new model for technological progress. Having powered some of the most exciting European startups in recent years, AWS is excited to be part of this journey.

### Jon Jones

VP and Global Head of Startups, AWS



### **About Slush**

Slush is a not-for-profit organization on a mission to help and create founders to change the world. Based in Helsinki, Slush annually hosts the world's leading startup event bringing together a curated crowd of European startups, world-class investors, and tech journalists. Slush stands by relevance over scale, bringing tangible value, and sharing actionable company-building advice. No fluff.







# We believe that entrepreneurship is one of the fastest ways to change the world at scale

Yet, we know that building companies is hard. Founders today struggle with existential problems—everything else is secondary. From funding and growth to Al and regulation, founders are navigating a challenging landscape.

This year marks the tenth anniversary of the State of European Tech report. From the very beginning, Slush has been part of the journey, growing alongside the European tech ecosystem and witnessing its evolution. It's a journey that has demanded relentlessness, endless curiosity, and determination to tackle the hardest challenges out there. This is the perfect moment to reflect back and see how far we've come—and what lies ahead.

Over the past decade, Europe has reached extraordinary milestones. Today, Europe produces more technology companies than any other region in the world, thanks to a transformed talent landscape, a tenfold increase in venture capital since 2015, and a radically positive shift in the perception of entrepreneurship.

While we should be proud of these achievements, this is only the beginning. To fully realize our potential, we need to rethink how entrepreneurship works—how we support it, fund it, and scale generational tech companies. The 2024 State of European Tech report comes at a pivotal time. Despite the promising developments in early stage funding, the \$75 billion gap in growth funding is a major challenge for the ecosystem as a whole. European startups are only half as likely as U.S. startups to raise large funding rounds, which could be detrimental to Europe's potential to lead the next wave of tech innovation.

The path forward is clear but requires persistence. With talent, capital, and a commitment to innovation, Europe can achieve what once seemed impossible: becoming the most attractive place to build and scale generational companies.





Over the past decade, Europe has emerged as a global tech powerhouse, fueled by an unparalleled talent pool and a tenfold increase in venture capital.

This year's report celebrates the continent's achievements while spotlighting the challenges that remain, including a \$375B growth funding gap that demands urgent attention. The path forward is clear: with talent, capital, and a commitment to innovation, Europe can achieve what once seemed impossible: becoming the most attractive place to build and scale generational companies.

**Aino Bergius** CEO, Slush

## **Data Partners**

Producing the State of European Tech is a tremendous effort that would not be possible without the help and generosity of so many across the tech ecosystem. Here's to them.







### With more than 120 individual insights...

It's no small feat putting together the definitive take on European tech. Every year, our partners make this report possible by sharing with us their data, insights, passion and deep expertise. Not only do they provide access to the vast amounts of data they already collect on the ecosystem, they also collaborate with us to craft detailed and unique analysis that best captures the pulse of European tech. Thank you to our amazing partners.



Dealroom.co is the global intelligence platform for discovering and tracking the most promising companies, technologies and startup ecosystems. Dealroom is a trusted source of innovation data and predictive analytics, used by leading venture capitalists, corporates and governments, to discover the world's most promising companies.



Invest Europe is the association representing Europe's private equity, venture capital and infrastructure sectors, as well as their investors. We have over 650 members, split roughly equally between private equity, venture capital and limited partners - with some 110 associate members representing advisers to our ecosystem. Those members are based in 57 countries, including 42 in Europe, and manage 60% of the European private equity and venture capital industry's €1,154 billion of capital under management. Businesses with private capital investment employ 10.9 million people across Europe, 5% of the region's workforce. Invest Europe aims to make a constructive contribution to policy affecting private capital investment in Europe. Invest Europe's research provides the most authoritative source of data on trends and developments in the PE/VC industry. Invest Europe is a non-profit organisation with 31 employees in Brussels, Belgium. For more information please visit www.investeurope.eu

### S&P Global Market Intelligence

At S&P Global Market Intelligence, we understand the importance of accurate, deep, and insightful information. Our team of experts delivers unrivalled insights and leading data and technology solutions, partnering with customers to expand their perspective, operate with confidence, and make decisions with conviction.

S&P Global Market Intelligence is a division of S&P Global (NYSE: SPGI). We are the world's foremost provider of credit ratings, benchmarks, analytics, and workflow solutions in the global capital, commodity, and automotive markets. With every one of our offerings, we help many of the world's leading organizations navigate the economic landscape so they can plan for tomorrow, today.

### crunchbase

Crunchbase is a private company intelligence platform built on proprietary data and AI that helps dealmakers find and act on the right private companies. To learn more visit about.crunchbase.com and follow Crunchbase on LinkedIn and X.







#PitchBook。

PitchBook is a financial technology company that provides data on the capital markets to help professionals discover and execute opportunities with confidence and efficiency. We collect and analyze detailed data on the entire venture capital, private equity and M&A landscape—including public and private companies, investors, funds, investments, exits and people. Our data and analysis are available through our suite of products (the PitchBook Platform), industry news and indepth reports.

### revelio labs

Revelio Labs is a workforce intelligence company. Founded in 2018, Revelio Labs absorbs and standardizes hundreds of millions of public employment records to create the world's first universal HR database. The company's team of data scientists, economists, and engineers deliver valuable workforce analytics to customers including investors, corporate strategists, HR teams, and governments, empowering them to make actionable, data driven decisions.



European Women in VC is the largest network of senior female venture capital and growth investors in Europe. Together with a community of over 1000 investors, founders, limited partners, female tech experts and male allies, we address the gender imbalance in the venture capital ecosystem and highlight the achievements of female led and mixed teams, in terms of financial returns and societal impact.

### ravio

Ravio equips People and Reward teams with everything they need to manage compensation, stress free. Over 1,000 leading tech companies like Adyen, Skyscanner, and Netflix trust Ravio to benchmark their company to today's market, conduct salary reviews, and run pay equity audits. With over +300,000 benchmarking data points sourced from popular HR tools like Personio, HiBob, and BambooHR, Ravio's compensation data stays accurate and easily accessible at all times. You can learn more at https://ravio.com/partners/atomico.

# Executive summary







# **Executive summary**

The European tech ecosystem has been transformed over the past decade - from talent, to capital to company building and value creation. Yet we've seen a lot of dispiriting headlines this year. It's been a year of political and regulatory turmoil, people are concerned about the challenges identified in Mario Draghi's report and there's scepticism about Europe's ability to support breakthrough companies as they grow. It's a paradox that requires some scrutiny and our annual report aims is to bring some perspective because perspective has never been so important. With this special 10th anniversary edition, we are looking not just to 2024, but to the past decade and what lies ahead.







### Europe's core pillars are thriving

To be successful, an ecosystem relies on three key pillars: talent, capital, and ambition. The last one is more difficult to quantify, but \$B+ companies are an expression of the ambition of founders to build tech champions at local, regional and global levels as their companies scale in size and impact.

Since 2015, all three pillars have been transformed across many countries across the continent. Once rare, \$B+ companies are now a feature of almost every European economy. In fact, 11 ecosystems that were yet to produce a \$B+ success story by the end of 2015 now boast one or more.

While gains have been made across the board, the biggest leaps forward have taken place in the UK, Germany and France. These countries have gone from accumulating low double-digit or even single-digit funding levels in the decade leading up to 2014 to attracting a combined \$250B over the past 10 years — the UK even nears the \$150B mark. The tech headcount in these countries has also grown by 6-8 times (in line with the wider 7 times increase seen across Europe), with the total count of employees hired by UK-based tech companies approaching a notable 1M employees. Across European countries, an average of 72% of tech employees work in the same country as their company's headquarters; the rest are based elsewhere in the region, contributing to the growth of other ecosystems through job creation and knowledge transfer.

The growth trajectory of these countries illustrates the power of the flywheel effect: Europe's first \$B+ companies came from the UK, Germany, France and Sweden, paving the way for more funding, talent and billion-dollar companies to thrive.





Nobody would have believed this in the early 2000s.

The fact that we have more than 300 unicorns in Europe is amazing. And the fact that a lot of these unicorns are profitable, fast growing iconic companies like Wise, Spotify, and Adyen. Nobody would have believed this in the early 2000s. If we think about it, Europe has a maybe 30 year lag to Silicon Valley. We can only think about where we're going to be in 10 years, 20 years from now; a lot more companies will get to the same state. We have all the ingredients for the trillion dollar companies to be born in Europe.

**Taavet Hinrikus**Co-Founder, Wise







	Capital invested (\$B) '05 to '14   '15 to '24		\$B+ companies 2015   2024		Tech headcount (k) 2015   2024		۲)
United Kingdom	14.8	142.6	36	130	142	834	
Germany	8.1	74.0	17	66	55	438	
France	5.6	59.9	7	42	63	517	
Sweden	2.7	29.4	7	26	26	159	
Netherlands	1.7	18.4	12	29	39	255	
Switzerland	1.3	16.2	4	22	22	143	
Spain	1.7	14.1	3	14	14	175	
Ireland	1.0	8.6	1	10	11	47	
Finland	1.0	8.3	1	7	11	173	
Italy	0.6	7.7	0	7	26	167	
Denmark	0.7	7.4	1	10	15	80	
Norway	0.7	6.7	2	14	5	69	
Belgium	0.7	5.2	1	5	18	65	
Austria	0.2	4.2	1	6	11	38	
Czechia	0.5	1.9	2	4	4	19	
Rest of Europe	1.6	21.4	4	32	46	276	

### Notes:

Data is as of 30 September 2024. Tech headcount is based on employess by company headquarters. Full year 2024 extrapolated based on year to date data. Excludes the following: biotech, debt, lending capital, and grants. Sources:

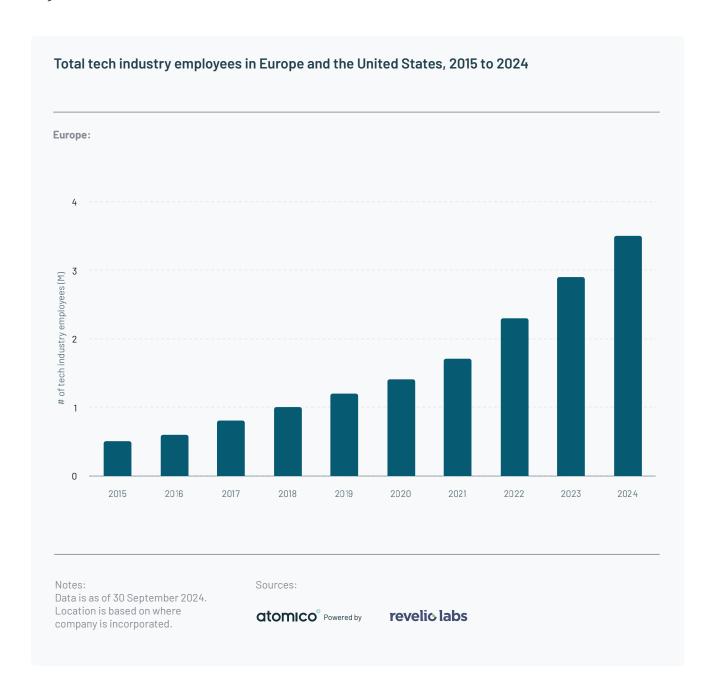




# Talent: Europe's pool scaled 7x over the past decade

Europe's talent landscape has transformed over the past decade, and the startup ecosystem now attracts more employees than ever. Today, the European tech workforce stands at 3.5M. The vast majority of those employees have joined over the past decade with close to 3 million jobs created over that time frame. It's growing at a 24% compounded annual growth rate, which puts Europe on par with the US's more established scene.

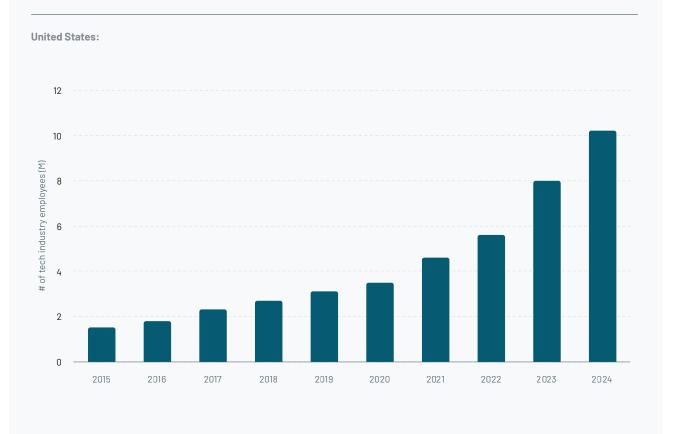
These figures are even more impressive in the context of the last two years, when headlines about funding shortages and staff redundancies have been hard to miss. Against the odds, Europe's tech sector has remained attractive to new talent and its importance as a contributor to the continent's workforce continues to grow.







### Total tech industry employees in Europe and the United States, 2015 to 2024



Notes: Data is as of 30 September 2024. Location is based on where company is incorporated. Sources:

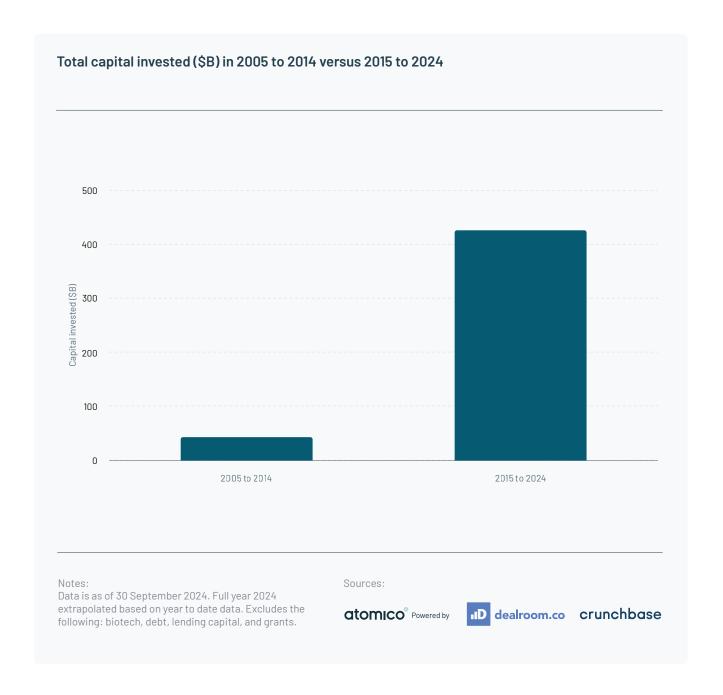
atomico° Powered by

revelio labs

### Capital: investment levels increased 10x

Taking a 20-year horizon illustrates how much the ecosystem has grown. Our pool of capital invested in companies has in fact increased 10 times in ten years, enabling this talent to thrive.

In Europe, the total funding over the past 10 years is 10 times higher than that of the previous decade, having grown from \$43B to \$426B. To put this in perspective, 2024 is on track to see \$45bn capital invested, so in one year it will exceed the amount invested in a whole decade. By comparison, the US grew 2.8 times over the same period, from \$249B to \$1.2T.







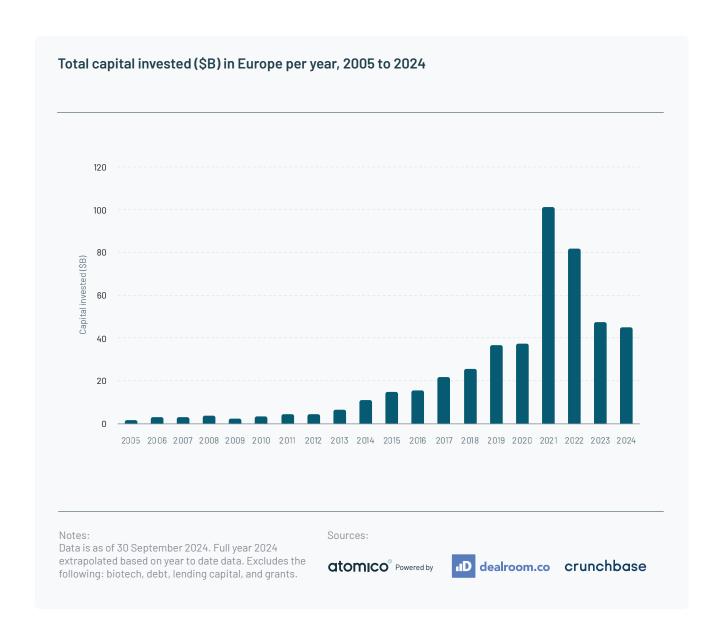


### 2024 on track to reach \$45B of capital invested

Investment into European tech has levelled up significantly over the past decade. This year, investment levels are on track to reach around \$45B — three times as much as the \$15B recorded in 2015.

The VC-backed ecosystem is currently in the process of stabilising after two outlier years. Investment levels peaked at an unprecedented \$101B in 2021 — up 170% year-on-year. As the broader macro environment shifted, capital invested has since reverted back to levels in line with the long-term growth trajectory of the ecosystem. While this year's projection is slightly lower than 2023's \$47B, it's likely to align more closely with the coming quarters as more investments are announced retrospectively.

It is also 20% higher than the level of investment seen in 2020, suggesting the market as a whole has reached a new equilibrium, despite a few turbulent years.

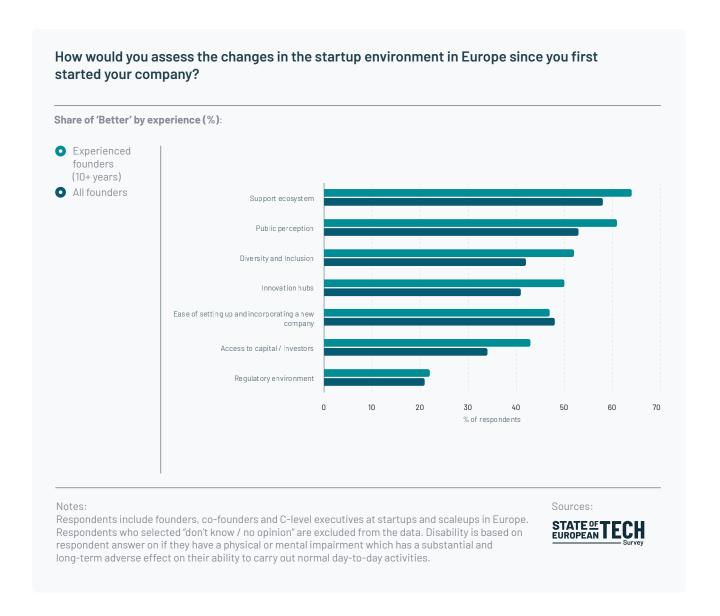




### Mindset: a clear shift

There is a greater public understanding of entrepreneurship, the attractiveness of the start-up career path, and more ambition.

Most experienced founders say public perception of entrepreneurship has improved, and that shows in the number of people pursuing careers in the sector. The most ambitious founders starting out today don't dream of building a billion-dollar company. They aspire to grow to 100 times that scale.







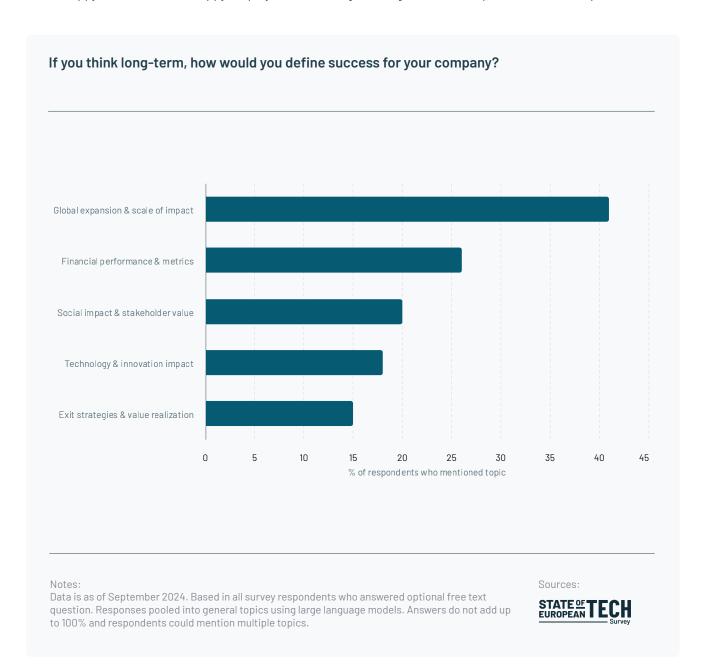


### European founders are as ambitious as ever

From "building a multi-billion dollar revenue business" to "life on Mars", European founders continue to shoot for the stars. Notably, beyond the goals of revenue targets, market leadership and big exits, many founders cite making a positive impact as their ultimate goal.

For 41% of respondents, their ambition is not to build a business, but "leave a legacy with a significant environmental and financial contribution". Some respondents told us they will achieve success when their brand is "ubiquitous". What struck us as we read through the most ambitious statements from the thousands of responses was the clear alignment of success with positive outcomes for the planet — for example, one respondent mentioned "permanently removing 1 gigatonne of CO2 per year, profitably", while another is looking to "build a generational business that can reduce electricity costs by 95%".

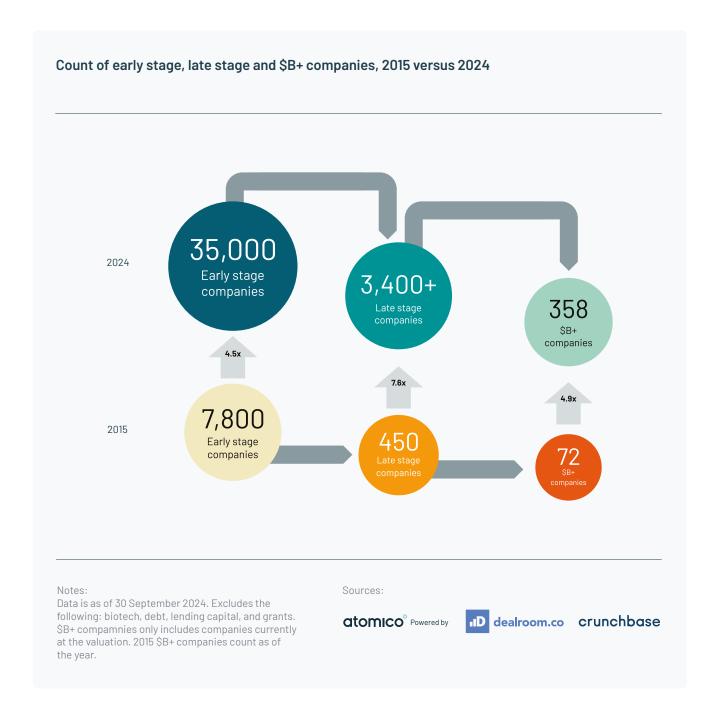
The ability to impact society is also evident in some of the metrics communicated by founders, such as "1 billion happy users and 1,000 happy employees", or having "the largest market capitalisation in Europe".



### **Biggest opportunity set in Europe ever**

And with this change in mindset, we're seeing more companies, more ambitious ideas, built to solve harder problems. Founders are upping their game.

Travelling back to 2015, there were just shy of 8,000 early stage companies. Fast forward to 2024, and that number has more than quadrupled to 35,000+. Growth-stage companies seen an eight-fold increase to over 3,400 and there are more \$B+ valued companies in Europe than ever before. These numbers give us the best bird's-eye view perspective of truly how much stronger Europe's entrepreneurial muscle has become in a decade. It's exciting to think where the next decade might take us.









### **Growing track record of exits**

The volume exits reached in Europe has grown by more than 150% in the decade. With a total of \$925B value released since 2015, this is a significant step up from \$391B the decade before. Total M&A value has gone to \$604B and IPO value to \$321B, compared to \$291B and \$100B from the previous decade, respectively.

Source

S&P Global Market Intelligence

### **Billion-dollar hubs**

Over that time frame, Europe has generated world-class returns and a growing track record of exits. It has scaled valuable firms across sectors and the breadth of the continent.

In fact, Europe has witnessed billion-dollar companies emerge across 30 unique countries, reflecting the continent's broad entrepreneurial reach. As these companies grow and advance along their funding journey, many will eventually reach the point of an IPO or acquisition. However, exits tend to lag behind both \$B+ valuation milestones and especially company formation, so it's perhaps unsurprising that, to date, only 15 European countries have seen a billion-dollar exit. This trend underscores the time it can take for these high-value businesses to reach liquidity events, even as they continue to expand and scale.

This cluster of countries is centered on Western Europe, stretching as far east as Poland and as far south as Italy. But even among this cluster, exits aren't evenly distributed. Almost half of all \$B+ exits over the past decade took place in the UK alone, including the two biggest exits Europe has seen since 2015: IHS Markit's \$45B acquisition in 2020, and ARM's blockbuster IPO in 2023, which closed its first day of trading with a market cap of \$65B.

Sweden comes next, having been host to Europe's third-biggest exit when Spotify went public via a direct listing in 2018. Germany follows, with Berlin-based AUTO1 being the the seventh largest exit in Europe over the past decade, followed by Delivery Hero's 2017 IPO. Poland also follows, home to top 10 exited company Allegro.







### Number \$B+ exits by country, 2015 to 2024YTD



As per S&P Capital IQ Platform, asof 14 October 2024, for illustrative purposes only. Excludes biotech.

Sources:

S&P Global Market Intelligence

### Europe's biggest success stories shape mindset

Europe's biggest success stories of the past decade? Spotify and Revolut.

That's according to our survey respondents, who were asked to name the company they thought was emblematic of Europe's growth over the past 10 years. This was an optional question and no prompts were provided — impressively, Spotify and Revolut were named by 26% and 15% of respondents, respectively. But what's more is that more than 110 unique companies were named by respondents more than once, and close to 30 mentioned over 10 times.

Describing these companies as European champions hardly captures their impact. Some of these globally recognised brands have inspired both founders and investors, and are part of the draw for many new joiners coming from outside of tech. Spotify has transformed the music streaming landscape and created a ripple effect in the wider market for digitally distributed audio content.

Finance companies — Revolut, Klarna and Adyen — grab the next top spots, underlining Europe's characterisation as a global centre of excellence for finance. Finally, the presence of Mistral, which was only founded in 2023, in a list of the most influential companies of the past decade highlights Europe's ambitions to create its own Al leaders.



**Theme: Music** HQ: Sweden 580+ mentions



**Theme: Neobank**HQ: United Kingdom
350+ mentions



Theme: AI / ML HQ: France 90+ mentions



Theme: Payments HQ: Sweden 110+ mentions



**Theme: Payments** HQ: Netherlands 90+ mentions



Theme: Automation Platform
HQ: Romania / United States
50+ mentions









**ASML** 

Theme: **Semiconductors** 

HO: Netherlands 85+ mentions

Wolt

Theme: Food delivery

HQ: Finland 60+ mentions

**Bolt** 

Theme: **Transportation** 

HQ: Estonia 60+ mentions



Theme: BI / Analytics

HQ: Germany 50+ mentions

**7WISE** 

**Theme: Payments** 

HQ: United Kingdom / Estonia 50+ mentions

arm

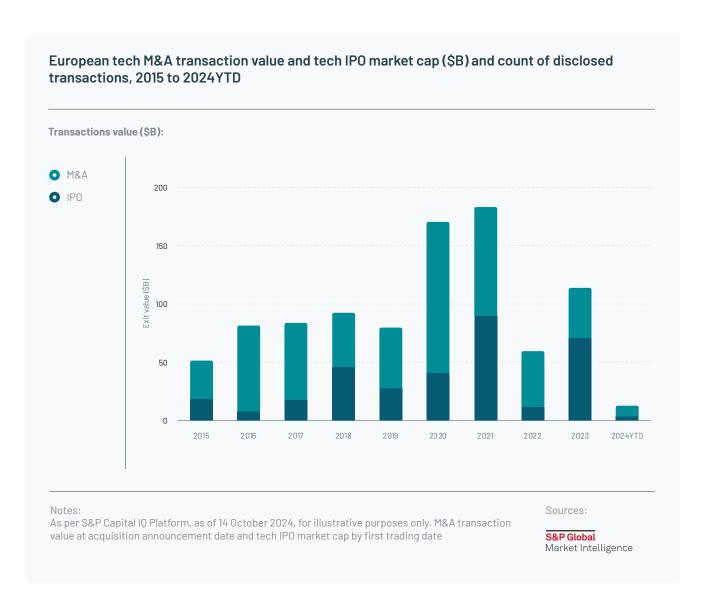
Theme: Semiconductors

HQ: United Kingdom 45+ mentions

## Positive long-term outlook, short-term under pressure

Over the past decade, M&A and IPO transaction values in Europe have steadily increased, consistently surpassing \$50B per year threshold, aside for 2024YTD. While some level of activity has persisted over the past two years, transaction volumes across both M&A and IPOs are at their lowest point in the past decade as liquidity routes remain subdued post correction.

A handful of blockbuster transactions are driving the overall transaction value. In 2023, ARM's \$65B IPO alone accounted for 92% of the total IPO value, while in 2020, the \$45B IHS M&A deal represented 35% of that year's total M&A activity.







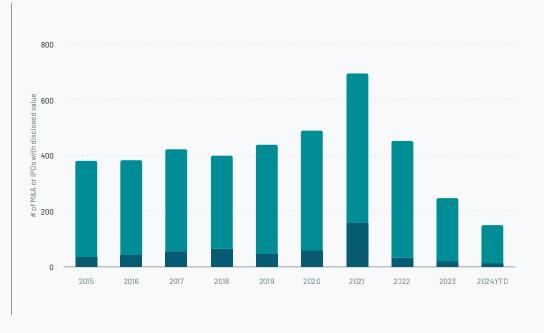


#### Private and public markets tech ecosystem value (\$B), 2015 to 2024YTD

#### **Transactions count:**

• # of M&A transactions

• # of IPOs



#### Notes:

As per S&P Capital IQ Platform, as of 14 October 2024, for illustrative purposes only. M&A transaction value at acquisition announcement date and tech IPO market cap by first trading date

Sources:

**S&P Global** Market Intelligence

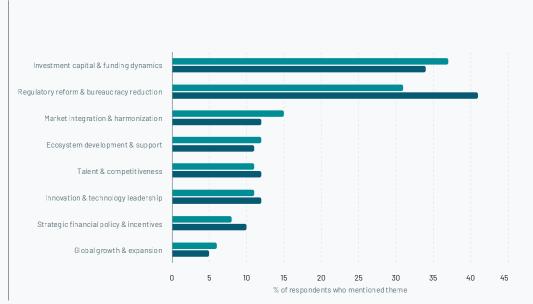
### How can Europe reach its full potential?

Europe has come a long way over the past decade, but there is more work to be done if the continent's tech ecosystem is to reach its full potential. We asked our survey respondents what they think the key priorities for the next decade should be to unlock Europe's growth.

We have more new founders starting companies in Europe than in the US today, yet questions are starting to be asked about Europe's attractiveness as a place to start and scale a tech company - especially by our most ambitious talent. We asked thousands of industry participants about what could stand in the way of Europe's potential. From founders to talent to investors, there are frustrations about the continued challenges faced when it comes to regulation, bureaucracy, capital, and scaling across a still fragmented European market. In fact 47% of overall respondents see regulation and policymaking as a barrier to Europe to fulfilling its full potential - that's almost one in two respondents. There are fears that these challenges could erode the future success the ecosystem has set itself up for.

## In a few words, what do you think is the change that needs to happen for European tech to reach its full potential in the next decade?

- % of responses (all respondents)
- % of responses (least optimistic respondents)



Data is as of September 2024. Based on all survey respondents who answered optional free text question. Least optimistic respondents include only those who responded "Somewhat less optimistic" or "Significantly less optimistic" to the survey question "Compared to 12 months ago, are you more or less optimistic today about the future of European technology?". Respondents' responses were mapped to all applicable themes. Numbers do not add up to 100% as respondents' responses can be mapped to multiple themes.

Sources:





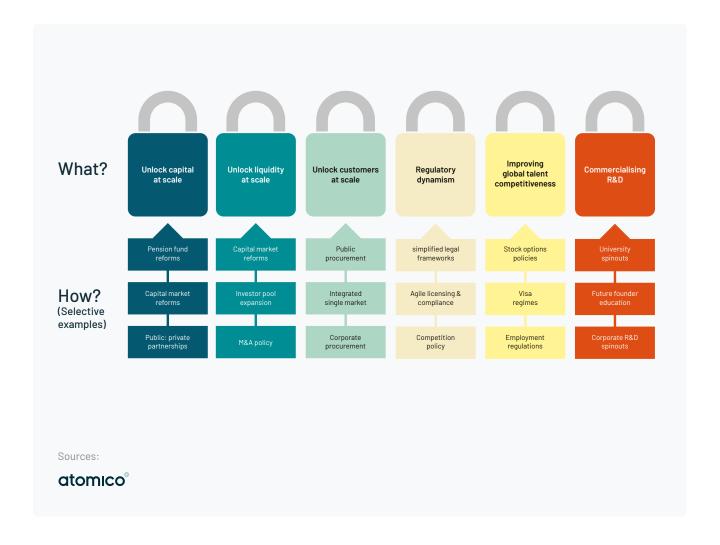




### Keys to unlock Europe's potential

We've organised the barriers to success under six keys to unlock the future European tech deserves. These span from unlocking capital at scale, to liquidity, to customers, to regulatory dynamism, global talent competitiveness and commercialising R&D.

None of these individually is insurmountable, but bold, positive action is needed. We must support those who are finding new ways to tackle old problems. An example is the '28th Regime' or EU Inc, as it's sensibly been rebranded, an EU legal framework that would allow businesses to operate in a single market. This would scale back bureaucracy and scale up ease of doing business across European borders.



### The growth funding gap

One issue which consistently hampers Europe's scale up ambitions is the growth funding gap. Since 2015, the lower conversion rates to growth stage rounds meant that \$300B worth of potential funding was never raised in Europe. In addition, in the Investors chapter we explore that European investors are having to rely on US investors to bridge a further \$75B. This brings the total European growth stage funding gap to \$375B.

Source

atomico

Powered by



crunchbase

S375B

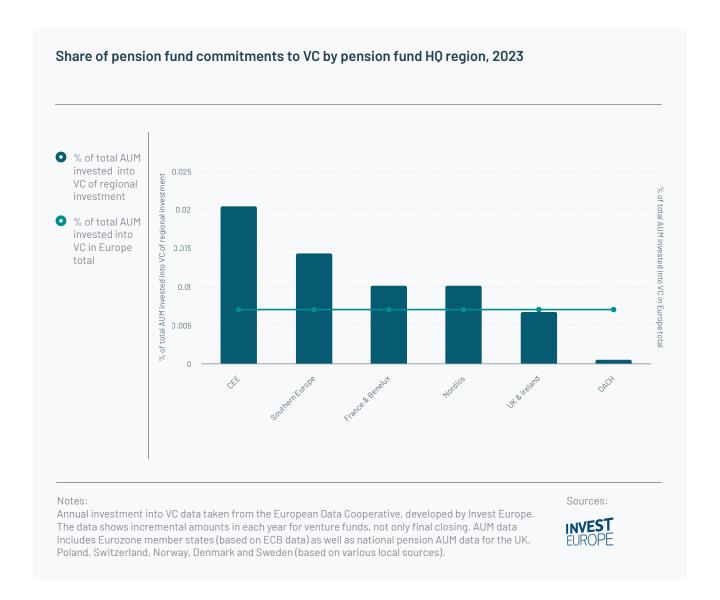






### A solution on the horizon

Investment from pension funds and major insurers provides the beginnings of the solution. If we take a look at European pension funds, they currently invest just 0.01% of capital into european venture – a rounding error for the \$9 trillion of assets they are managing. Despite a robust local startup ecosystem, pension funds in the UK and Ireland allocate just 0.007% of AUM to VC. Across the continent movements are being made to address the issue from the UK's Mansion House reforms to the French Tibi initiative. Doing so could result in billions more capital available to Europe's scale ups. This could be the difference between the best and brightest companies scaling from Europe and being forced to relocate to Silicon Valley.



#### A decade from now

Mindset is a key pillar of the success of our ecosystem, and more than any of the challenges identified in our survey, it is a risk to unlocking Europe's success. If we rise to the challenge, we can look forward to another transformative decade. A mantra for the team working on this report is that it's human nature to overestimate what's possible in the short term, but underestimate the long term.

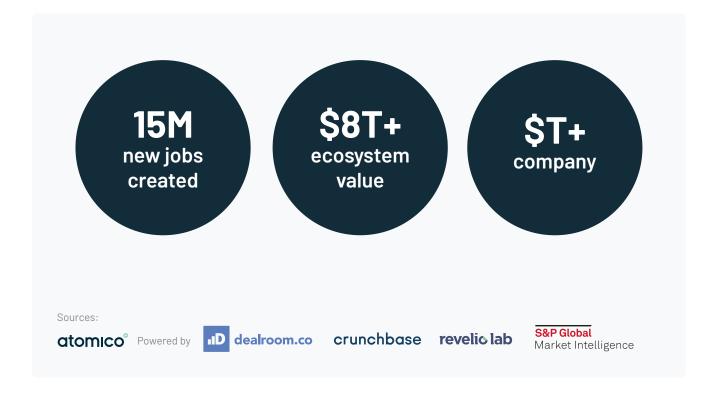
In ten years' time, the talent pool will have become even stronger and will continue to attract new joiners at a similar rate to the last decade. This means an additional 15 million jobs created by Europe's technology companies.

Capital will be unlocked for scale - allowing Europe to keep its brightest minds here, focused on solving our society's and economy's toughest problems.

European tech will make a significant contribution to the continent's GDP by adding \$5T worth of ecosystem value – growing at a compound annual growth rate of 10%, in line with more mature ecosystems such as the US. This would bring Europe's total ecosystem value to just over \$8T. And by then, Europe will be home to its first trillion-dollar company.

If we can keep up the momentum and address the challenges we've set out, Europe will be a tech superpower that's fit for a new generation. It will be highly dynamic and conscious of the impact it's having on the world and a home to the world's most ambitious companies.

A technology superpower for a new generation.













I'm incredibly proud of so much of our vision becoming reality. This is in terms of how strong the ecosystem is, but much more importantly, how many people have been participants in building it to have GDP level impact. Progress was very hard and very slow at the beginning, but we can see it happening so much faster now.

This should certainly leave us feeling ambitious for what we can achieve in the next 10 or even 20 years.

#### Reshma Sohoni

Co-founder & managing partner, Seedcamp



# Investment Levels







## **Investment Levels**

How are Europe's companies tracking when it comes to investment? This chapter explores the flow of capital into the continent's startups, from how companies are performing at different stages and in different regions, to which founders are most likely to achieve \$1B+ outcomes.





### 35,000+ early-stage companies in Europe

The number of early-stage companies has more than quadrupled from around 7,800 back in 2015 to over 35,000 today, giving a taste of what's to come in the next decade.

### \$426B invested in European since 2015, a 10x increase

Europe's tech ecosystem has undergone a dramatic transformation over the past decade, and levelled up across the board. More capital was raised in 2024 alone than the total \$43B invested in the decade to 2014.

### 20% of founders find it easier to raise capital from investors

2022 and 2023 were some of the toughest fundraising years according to our survey respondents. This year's results are showing some easing.

### Still only 5% of seed funding goes to women today

Despite efforts to address the gender funding gap, female founders continue to face tougher hurdles than their male counterparts when it comes to fundraising.

### 1 in 2 say regulation and policymaking change is needed

47% of our survey respondents see excessive bureaucracy as the one change that needs to be addressed for Europe to be able to reach its full potential in the next decade.

### **Summary**

Ten years ago, we published the first State of European Tech report. It was a brief snapshot of the ecosystem — just 40 pages long — produced as a one-off to celebrate Europe's vibrant potential at a time when most attention was focused on the US. It became an annual event as we charted the progress of the ecosystem. Today, the State of European Tech report is the most in-depth analysis of the continent's tech journey.

A lot has changed since then. Over the decade, Europe's ability to attract and grow talent, unlock capital and raise its ambition level has been transformed. In particular, in this chapter we explore the investment trends and dynamics as Europe has scaled its capital invested by a magnitude of 10 over as many years. Europe is well and truly on the map, with investors from all over looking for opportunities here, and competition heating up again despite the headline number for capital invested projected to be flat year on year.

Today, Europe boasts an impressive 35,000 early-stage companies, up from 7,800 in 2015. The virtuous flywheel that leads to success breeding more success is firmly in motion. Founders are reinvesting their know-how and capital in Europe after exiting their businesses, and tech employees are going on to grow their very own \$B+ businesses. This has led to a whole new generation of firms setting up with greater ambitions for European tech, and their contribution to building out its ecosystem will be vital in the next decade.

Still, diversity remains a challenge with only a fraction of funding going to women today. Very little has changed across the board, with all-women teams still attracting less funding at every stage. At Pre-Seed, diverse teams seem to be at last attracting a bigger share of funding, but the progress has been slow.

## Europe's tech ecosystem has come a long way

We asked respondents to share their views on the most important positive change they have seen in European technology over the last decade. Almost 50% shared their thoughts, which were then grouped into themes using large language models. Across all respondents, capital invested is the most cited area of positive change, with many referencing different factors such as access to capital becoming more evenly distributed, the presence of US investors in Europe, or a more diverse investor base overall (including angels, accelerators and government initiatives alongside VCs).

Some changes are harder to quantify, but 25% see progress in the maturity of the ecosystem, its evolution and increased ambition. "Overall, there's been a shift where the brightest minds are choosing not to pursue careers in large corporations, but to become entrepreneurs," says one of our respondents. Another adds: "I know more talented people running their own businesses than trying their luck in the Fortune 500."

More cross-border collaboration between European markets was also highlighted, as was the growth of the talent pool, and the emergence of innovative sectors that will drive Europe forward, such as deep tech and sustainability.

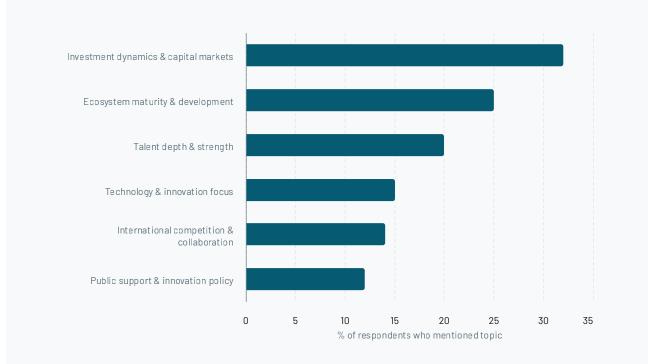
The take-home message is made clear by another survey respondent: "We are part of the global conversation now."







## The top topics mentioned when asked what the most important positive change in the European tech ecosystem over the past decade has been



#### Notes:

Data is as of September 2024. Based on all survey respondents who answered optional free text question. Respondents' responses were mapped to all applicable themes. Numbers do not add up to 100%.

Sources:

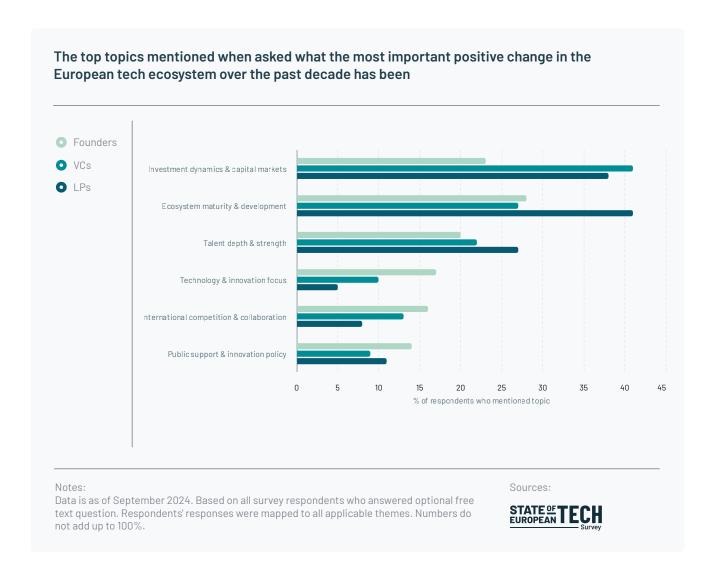


### A diverse set of perspectives

Respondents in the survey include founders, VCs, and LPs, offering diverse perspectives across the ecosystem.

Investors, including VCs and LPs, primarily noted significant shifts in the investment landscape (41% and 38% respectively), pointing to the transformative changes they've observed. Founders, on the other hand, most often highlighted the increasing maturity of the ecosystem (28%), noting the emergence of successful role models that have created a clearer, more navigable path to success and raised ambition. One founder put it simply: "There are more European hubs and more founders in these hubs that are building companies with big global ambitions."

This also speaks to the growth of the talent pool, which 27% of LPs highlight as an important positive change. Founders are able to tap into a strong community and support networks where they are based, and LPs mention that experienced founders are sharing insights and mentoring the next generation of entrepreneurs. They also note improvements in the VC talent base, with "more sophistication in the financial ecosystem" and "more knowledgeable and experienced VC investors".













In early-stage start-ups, momentum is the one thing that makes or breaks the business. Europe has enough talent, and comparably enough money.

What we frequently lack is early-stage momentum. The main culprit here is fragmentation. Our founders fundraise in isolated national silos - less than 18% of all early-stage investments are pan-European. Meanwhile, their main competitors in the US fundraise coast-to-coast. We need a pan-European entity standard to simplify investing in Europe and unify our startup ecosystems to finally compete globally as one.

#### **Andreas Klinger**

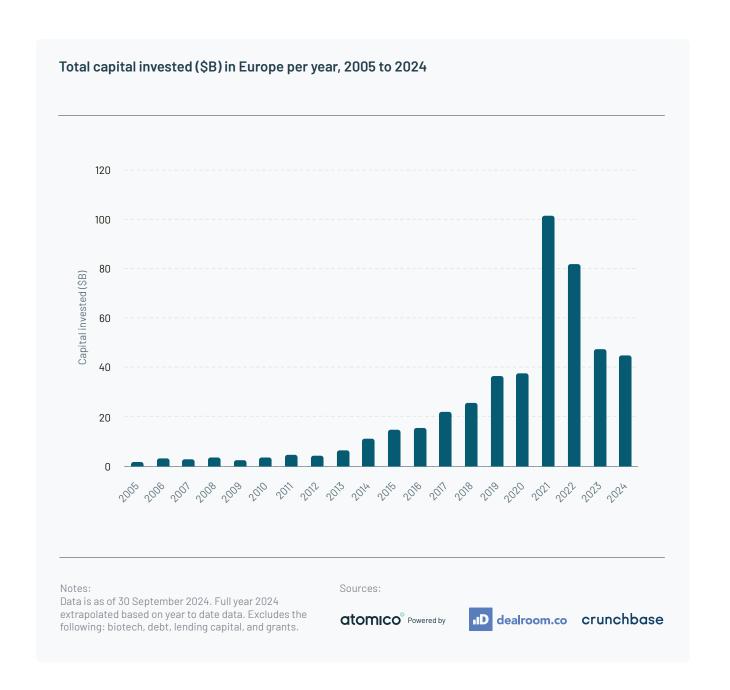
Investor at Prototype Capital, Co-initiator EU-Inc

## Venture funding in European tech has tripled since 2015

Investment into European tech has levelled up significantly over the past decade. This year, investment levels are on track to reach around \$45B — three times as much as the \$15B recorded in 2015.

The VC-backed ecosystem is currently in the process of stabilising after two outlier years. Investment levels peaked at an unprecedented \$101B in 2021 — up 170% year-on-year. As the broader macro environment shifted, capital invested has since reverted back to levels in line with the long-term growth trajectory of the ecosystem. While this year's projected \$45B is slightly lower than 2023's \$47B, it's likely to align more closely with the coming quarters as more investments are announced retrospectively.

It is also 20% higher than the level of investment seen in 2020, suggesting the market as a whole has reached a new equilibrium, despite a few turbulent years.



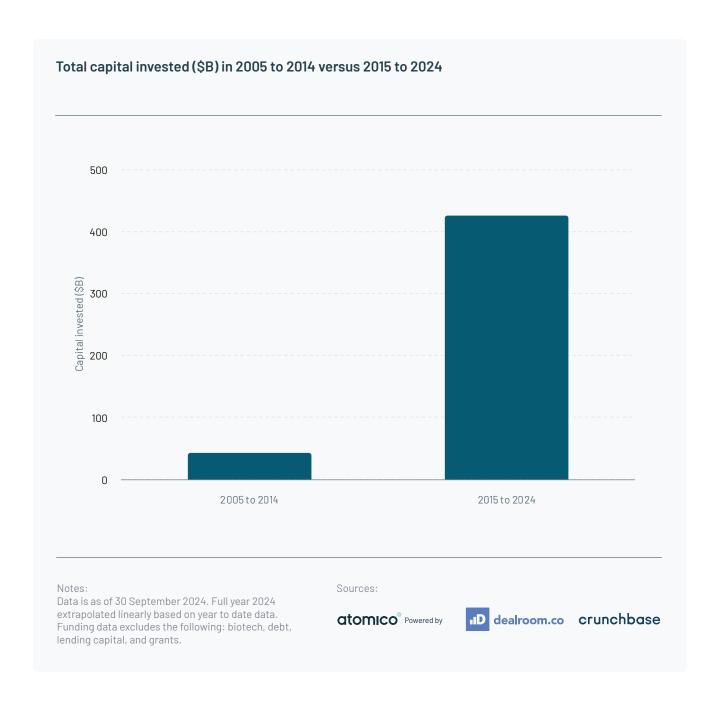






### **Investment levels increased 10x**

Taking a 20-year horizon illustrates how much the ecosystem has grown. In Europe, the total funding over the past 10 years is 10 times higher than that of the previous decade, having grown from \$43B to \$426B. By comparison, the US grew 2.8 times over the same period, from \$249B to \$1.2T.







Building start-ups is incredibly hard. Even today, the conventional wisdom is that you have a very small chance of being very successful. Most start-ups are designed to fail, and I don't think this has changed much in the past decade.

We just have a lot more people who have the courage to start now.

**Taavet Hinrikus** Co-Founder, Wise

### Europe's investment into startups outpaces all regions

Funding levels may have fallen since the highs of 2021 and 2022, but if we zoom out to look at the last decade, it is Europe that has seen more growth than any other region. The continent's 10-year compounded annual growth rate (CAGR) is 13%, faster than anywhere else in the world. The US - still the leader in absolute VC funding – has seen a 10-year CAGR of 8%, compared to 2% for China and 10% for the rest of the world. At this rate of growth, it would take some time for Europe to reach the \$139B level of funding seen in the US this year. Were Europe to continue on the same 13% CAGR, this milestone would be reached some time in a decade in 2034.

On a year over year basis Europe falls behind other regions. The difference to the US is particularly stark, where funding levels experienced relatively strong growth and are on track to add 16% this year compared to last. The continued climb in the US is largely driven by the outsized rounds, with the share of \$250M+ rounds accounting for 44% of this year's funding. To put this into perspective, during the 2021 and 2022 peaks years these accounted for 21% to 34% of total funding only.

#### Capital invested (\$B), select Y-o-Y growth rate (%) and 10-YR CAGR by regions

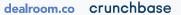
	Europe	United States	China	RoW
2015 to 2024 CAGR (%)	13%	8%	2%	10%
2024 versus 2020 change (%)	20%	21%	22%	-2%
2024 versus 2023 change (%)	-5%	16%	1%	-1%
2024 capital invested (\$B)	\$45B	\$139B	\$49B	\$42B

Data is as of 30 September 2024. Full year 2024 extrapolated based on year to date data. Excludes the following: biotech, debt, lending capital, and grants.

Sources:

















Access to capital, especially local funding options including both earlier stage funds and growth funds, is essential for startup success.

At the moment, the Spanish ecosystem primarily offers access to earlier stage funds, and scaling a Spanish startup into a unicorn often requires turning to international investors. Ideally, we'd see more local growth funds in the ecosystem to enable those €50-100M companies to reach that €1B threshold without needing to go abroad. Supportive policies can go a long way, like tax reliefs for investments into Spanish growth companies, as it is clear that our country has a lot to contribute in the tech space and we've already seen the ripple effect of big Spanish companies in the ecosystem.

#### **Juan Urdiales**

Co-founder and co-CEO, Job&Talent

## Estonia is the world leader in venture funding relative to GDP

The scale of investment into Europe's tech ecosystem has grown consistently over the past decade, but once we normalise for GDP to adjust for the relative size of each country, it highlights which governments are putting tech high on the agenda. It is worth nothing that the measure is not constant in time, and looking at just this year's data would paint a different picture to the last ten year's average due to the 2021 and 2022 peak fundraising years pushing the average up.

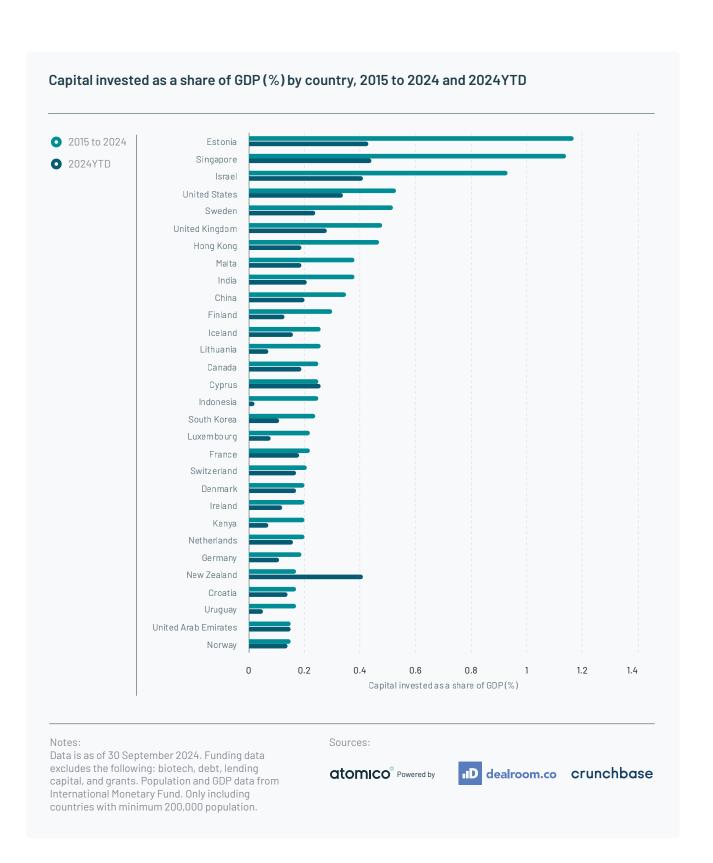
Estonia takes the world's top spot by the relative scale of investment in tech, with VC funding accounting for 1.17% of GDP over the past decade. Singapore and Israel take second and third place, respectively. The US ranks fourth, with local tech companies raising the equivalent of 0.53% of GDP since 2015.

While 17 of the 30 top countries in this list are from Europe, it also highlights the room for growth in many of Europe's larger ecosystems. Notable large European countries missing from the top 30 are Spain and Italy, which are ranked 34th and 60th, respectively, behind a number of developing countries.









## Closing the gap between European tech investment and GDP

The US invested 0.53% of its GDP in technology over the last decade — while this is not to say this level of investment is a gold standard, it serves as a useful benchmark to highlight the scope for growth in most European countries.

Sweden and the UK are close with 0.52% and 0.48% of GDP respectively, reflecting their strong position as innovation and technology hubs within Europe. Surprisingly, some larger economies, such as Germany and France, lag behind on this measure, despite higher absolute levels of VC funding. Malta and Cyprus also stand out — their high positions in the ranking are likely to be influenced by their favourable tax and regulatory environments, which attract companies to set up there.

The gap widens from there, with Eastern European countries (such as Poland and Romania) and Southern European countries (like Portugal and Italy) at the other end of the spectrum, each with less than 0.10% of GDP. This ranking reflects the continent's own regional disparities, and active effort will be needed for these regions to close the gap with leading tech hubs in Europe and beyond.

For tech to have captured 0.5% (in line with US levels) or even 1.0% of Europe's GDP as Estonia has achieved, historic funding levels would need to have been 2.5x and 5.0x higher, respectively. In absolute terms, this equates to an additional \$620B or \$1.7T of capital to be invested in European tech respectively over the last decade.







## Capital invested as a share of GDP (%) by region, 2015 to 2024 By European country: 1.25 European country United States European country 0.75 0.5 By region: 0.6 European country United States 0.5 0.4 European region United States 0.3 0.2 0.1 CEE Sources: Notes: Data is as of 30 September 2024. Funding data excludes the following: biotech, debt, lending atomico Powered by dealroom.co crunchbase capital, and grants. Population and GDP data from International Monetary Fund. Only including countries with minimum 200,000 population.

# More talent, more funding and more \$B+ companies in Europe

To be successful, an ecosystem relies on three key pillars: talent, capital, and ambition. The last one is more difficult to quantify, but \$B+ companies are an expression of the ambition of founders to build tech champions at local, regional and global levels as their companies scale in size and impact. Since 2015, all three pillars have been transformed across many countries across the continent. Once rare, \$B+ companies are now a feature of almost every European economy. In fact, 11 ecosystems that were yet to produce a \$B+ success story by the end of 2015 now boast one or more.

While gains have been made across the board, the biggest leaps forward have taken place in the UK, Germany and France. These countries have gone from accumulating low double-digit or even single-digit funding levels in the decade leading up to 2014 to attracting a combined \$250B over the past 10 years — the UK even nears the \$150B mark. The tech headcount in these countries has also grown by 6-8x (in line with the wider 7x increase seen across Europe), with the total count of employees hired by UK-based tech companies approaching a notable 1M employees. Across European countries, an average of 72% of tech employees work in the same country as their company's headquarters; the rest are based elsewhere in the region, contributing to the growth of other ecosystems through job creation and knowledge transfer.

The growth trajectory of these countries illustrates the power of the flywheel effect: Europe's first \$B+ companies came from the UK, Germany, France and Sweden, paving the way for more funding, talent and billion-dollar companies to thrive.

## \$B+ outcomes reached new highs in the last decade

The last ten years have seen a five-fold increase in the number of European tech companies that are at \$B+ valuations. By early 2015, 72 European tech companies had reached this milestone, while in the years after, this number had reached 358. These companies span 30 European countries and 127 unique cities.

Source

atomico°









		nvested ( 4   15 to 12		ompanies 5   2024		eadcount(I	۲)
United Kingdom	14.8	142.6	36	130	142	834	
Germany	8.1	74.0	17	66	55	438	
France	5.6	59.9	7	42	63	517	
Sweden	2.7	29.4	7	26	26	159	
Netherlands	1.7	18.4	12	29	39	255	
Switzerland	1.3	16.2	4	22	22	143	
Spain	1.7	14.1	3	14	14	175	
Ireland	1.0	8.6	1	10	11	47	
Finland	1.0	8.3	1	7	11	173	
Italy	0.6	7.7	0	7	26	167	
Denmark	0.7	7.4	1	10	15	80	
Norway	0.7	6.7	2	14	5	69	
Belgium	0.7	5.2	1	5	18	65	
Austria	0.2	4.2	1	6	11	38	
Czechia	0.5	1.9	2	4	4	19	
Rest of Europe	1.6	21.4	4	32	46	276	

#### Notes:

Data is as of 30 September 2024. Tech headcount is based on employess by company headquarters. Full year 2024 extrapolated based on year to date data. Excludes the following: biotech, debt, lending capital, and grants. Sources:





# The short-term funding slowdown is visible across Europe

The year-on-year decline in funding levels is evident across Europe. Despite this, the top three countries have maintained their positions, with the UK continuing to lead the way with tech companies on track to raising over \$13.1B in 2024. France and Germany follow with \$7.5B and \$6.7B raised respectively.

However, there has been movement further down the list. The Netherlands has seen the biggest absolute funding increase, attracting \$2.5B in 2024 compared to \$1.8B in 2023, moving up to fourth place. It overtakes Switzerland and Sweden, the latter of which has dropped from fourth to sixth place. The Nordic country has one of the largest year-on-year decreases in funding, from \$5.2B to \$2B.





Many stars have aligned over the French VC landscape over the last five years. We have a vibrant GP and start-up ecosystem, LPs willing to consider venture as a compelling asset class (if only by virtue of diversification), public policies in favour of innovation and technology, and, finally, a very good chemistry between all stakeholders.

The French recipe might not suit every country in Europe, but we would be thrilled to exchange with EU partners and cooperate on the basis of reciprocity, as a way to enlarge a much needed vast European pool of venture capital.

#### **Philippe Tibi**

Professor of economics, Ecole Polytechnique









## Capital invested (\$B) by top 30 countries, 2023 versus 2024 Top 10 countries: **O** 2023 **O** 2024 15 Capital invested (\$B) Top 11 to 30 countries: **O** 2023 **O** 2024 0.8 Capital invested (\$B) 0.6 0.4 0.2

Notes:

Data is as of 30 September 2024. Full year 2024 extrapolated linearly based on year to date data. Only includes countries with more than 200,000 population. Funding data excludes the following: biotech, debt, lending capital, and grants.

Sources:

atomico Powered by

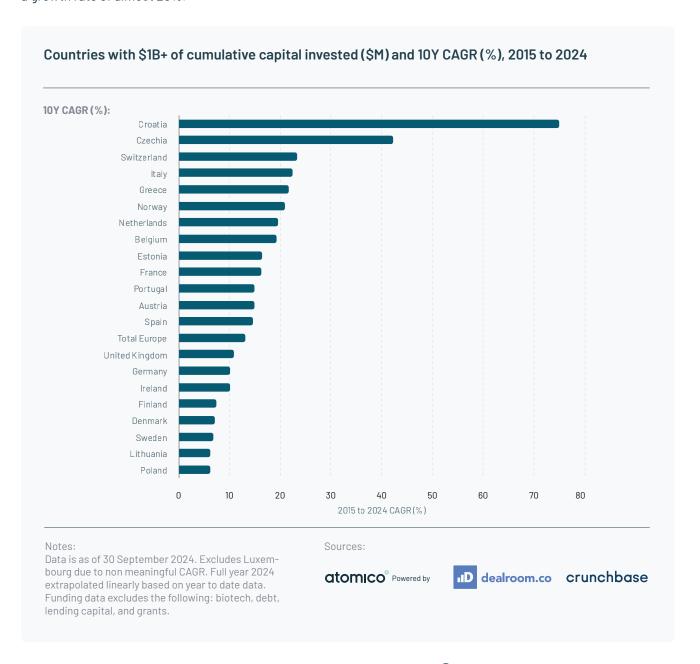


## As Europe's tech ecosystem matures, funding spreads beyond traditional hubs

The UK may have consistently attracted the largest share of funding in Europe over the past decade — but as the overall pie expands, other nations are taking a growing share of total capital invested. In the decade from 2015 to 2024, 21 European countries invested more than \$1B in total. In the previous decade, just seven countries achieved this.

What's more is that the rate at which some of these countries are investing is growing at a much faster pace than the European average CAGR of 13%. Smaller European economies in particular are catching up, with the likes of Croatia and Czechia seeing an average growth rate of 75% and 42% year-on-year, respectively.

France is one of the top three countries in terms of capital invested, and its growth stands out. It recorded a CAGR of 16.3% over the period, more than 3 percentage points above the European average and more than 6 percentage points above Germany. The Netherlands is also on a positive trajectory, with a growth rate of almost 20%.

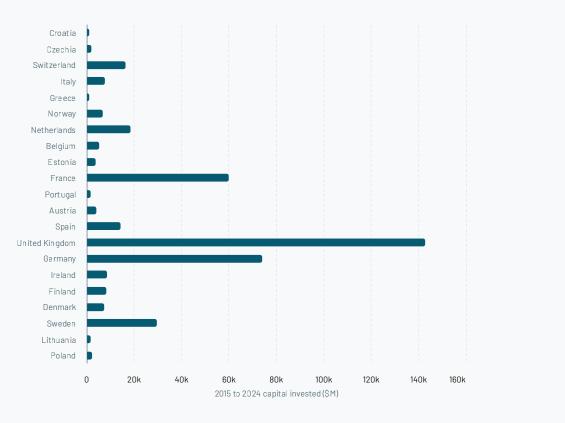






#### Countries with \$1B+ of cumulative capital invested (\$M) and 10Y CAGR (%), 2015 to 2024

Total capital invested (\$M), 2015 to 2014:



#### Notes:

Data is as of 30 September 2024. Excludes Luxembourg due to non meaningful CAGR. Full year 2024 extrapolated linearly based on year to date data. Funding data excludes the following: biotech, debt, lending capital, and grants.

Sources:





## Paris and Berlin join London as top global tech hubs

The San Francisco Bay Area has long been synonymous with tech, consistently topping rankings of cities by amount of funding raised. But several European cities are cementing their status as globally leading tech hubs.

Back in 2015, London was the only European city in the list of top 10 hubs by funding raised for early-stage startups (rounds under \$15M). Fast forward to 2024, and London has risen to second place globally, with Berlin and Paris also joining it in the top 10.

For later-stage rounds (\$15M+), London has moved up two places, while Paris has replaced Berlin in the top 10. The increasing presence of European cities in the rankings reflects the scale of VC funding in the region today, as well as the fact that Europe is now producing many local champions that are also global leaders.

While Asian hubs dominated both rankings in 2015, their presence in the early-stage category has declined significantly over time. Chinese cities in particular have fallen. It tells a cautionary tale on how an adverse political and regulatory environment can quickly impact its entrepreneurial ecosystem.







#### Top cities by total amount raised and round size, 2015 versus 2024

Ranking	2015: Less than \$15M	2024: Less than \$15M	2015: \$15M+	2024: \$15M+
1	San Francisco Bay Area	San Francisco Bay Area	San Francisco Bay Area	San Francisco Bay Area
2	New York City	London	Beijing	New York City
3	London	New York City	Hangzhou	Beijing
4	Beijing	Singapore	Shanghai	London
5	Boston	Shenzhen	New York City	Hangzhou
6	Shanghai	Seoul	London	Shanghai
7	Shenzhen	Bangalore	New Delhi	Shenzhen
8	Tokyo	Berlin	Berlin	Paris
9	Austin	Tokyo	Shenzhen	Hefei
10	Hangzhou	Paris	Suzhou	Mumbai

Data is as of 30 September 2024. Full year 2024 extrapolated based on year to date data. Excludes the following: biotech, debt, lending capital, and grants.

Sources:





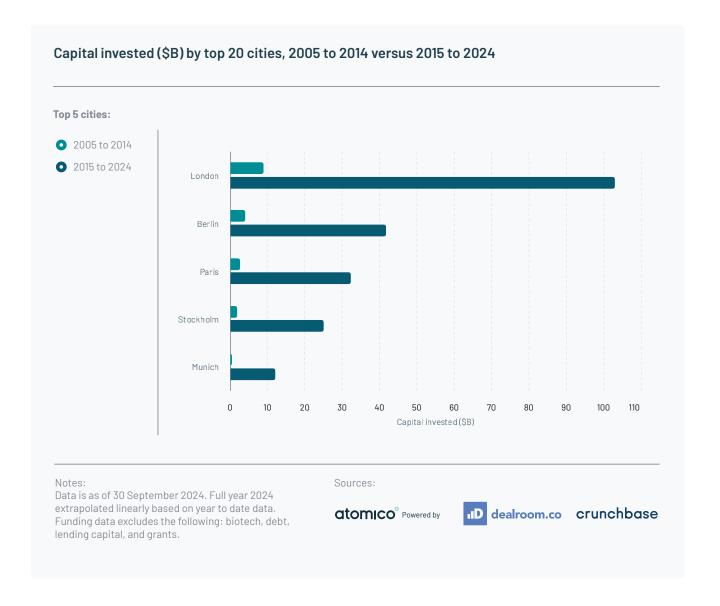
## Tech hubs are levelling up across Europe

Tech hubs in London, Berlin, Paris, Stockholm and Munich are not only established but continuing to get stronger, with funding levels increasing by at least 10-fold when comparing this decade to the previous one.

London holds the top spot by a wide margin, with its startups raising more than \$100B in funding between 2015 and 2024, compared to the \$42B raised by startups in Berlin, which takes the next place.

But European companies no longer need to be based in just these major hubs to thrive. The diversity of the top 20 ranking is remarkable, spanning 14 unique countries and including many non-primary cities.

While primary cities such as London, Amsterdam and Stockholm continue to attract 60%+ of the country's venture capital, the expansion in total investment levels means that non-primary cities are now also reaching scale. These are home to \$B+ companies, such as CMR Surgical in Cambridge or 1KOMMA5° in Hamburg. As tech becomes even more ubiquitous over the next decade, we expect to see many more hubs emerge across Europe, given its rich canvas of business and academic centres spread around the continent.







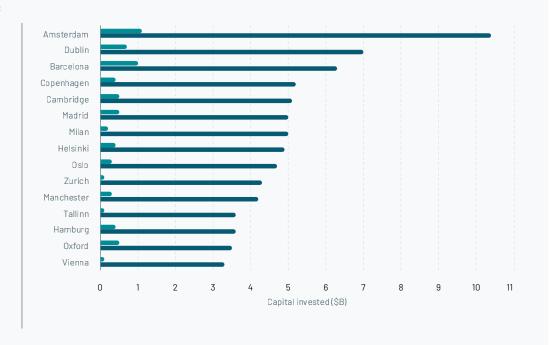


#### Capital invested (\$B) by top 20 cities, 2005 to 2014 versus 2015 to 2024

#### Top 6 to 20 cities:

• 2005 to 2014

• 2015 to 2024



Data is as of 30 September 2024. Full year 2024 extrapolated linearly based on year to date data. Funding data excludes the following: biotech, debt, lending capital, and grants.

Sources:

atomico Powered by

dealroom.co crunchbase

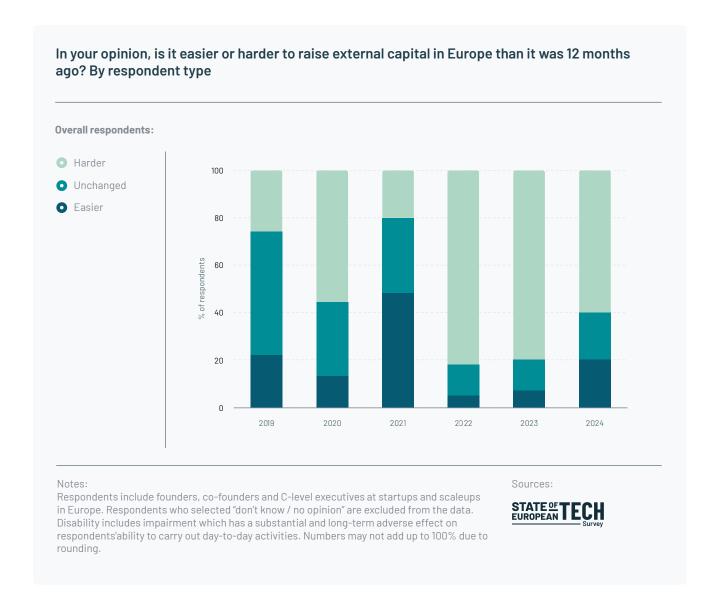
## Could the toughest years for fundraising be behind us?

While funding activity has shown little change year-on-year, founder sentiment provides a valuable leading indicator for what to expect in 2025.

In the second half of 2022 (when the survey was run) and 2023, 80% of founders told us it was harder to raise capital than before. This was a stark contrast to responses we received in 2021, when just one in five founders told us they were finding the market more difficult compared to the year before.

The tide seems to have turned with sentiment improving this year, although most still describe the environment as challenging. In 2024, 60% of respondents told us it is harder to raise external finance now than it was a year ago. In addition, some founders are finding the environment harder than others. The share of respondents who find the funding environment harder is higher among women, and particularly so for non-white women (70%).

Encouragingly, though, 20% of respondents tell us they have actually found it easier this year – a significant increase from just 7% of founders who described the market this way in 2023.



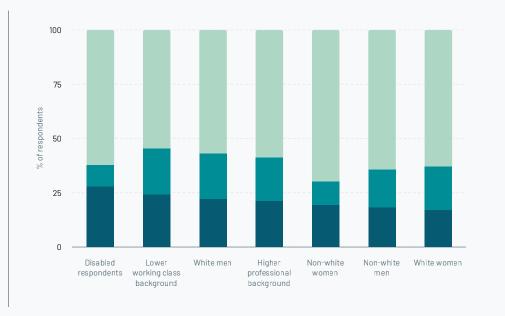




# In your opinion, is it easier or harder to raise external capital in Europe than it was 12 months ago? By respondent type

#### By respondent type:

- Harder
- Unchanged
- Easier



#### Notes:

Respondents include founders, co-founders and C-level executives at startups and scaleups in Europe. Respondents who selected "don't know / no opinion" are excluded from the data. Disability includes impairment which has a substantial and long-term adverse effect on respondents'ability to carry out day-to-day activities. Numbers may not add up to 100% due to rounding.

Sources:

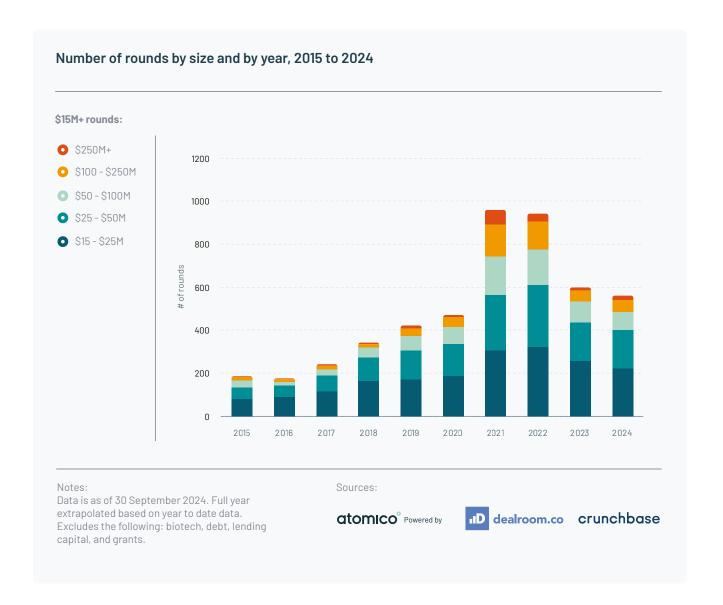


# Growth-stage rounds have multiplied as Europe's ecosystem matures

The number of investments taking place across Europe has risen over the past decade, maintaining a positive trajectory overall.

It's the increase in growth stage, though, that is most revealing about the transformation Europe's tech ecosystem has undergone over the past decade. These rounds have been increasing in number at a faster rate, with those raising \$15M or above having more than tripled since 2015.

The number of earlier stage rounds has gradually been increasing, with 2023 representing nearly a 40% increase from 2015. While the most recent numbers for 2024 are trending down year-on-year, they are also most impacted by the reporting lag — where round announcements are often significantly delayed by six months to a year. Once the reporting lag catches up, it is likely we are looking at a flat trend year-on-year.









#### Number of rounds by size and by year, 2015 to 2024 Less than \$15M rounds: ○ \$10 - \$15M O \$5 - \$10M O \$2.5 - \$5M ○ \$1-\$2.5M 6k ○ \$0.25 - \$1.0M Less than # of rounds \$0.25M 2k 0 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 Sources: Notes: Data is as of 30 September 2024. Full year extrapolated based on year to date data. dealroom.co crunchbase atomico Powered by Excludes the following: biotech, debt, lending capital, and grants.





The opportunity set at the growth stage has expanded considerably over the past decade. As early stage funding has continued to meet and drive the rate of company creation and innovation at the early stage higher, so too has an ever higher number of European startups reached scale at pace. We now have more ambitious founders scaling innovation than ever before, not just in the major hubs, but across Europe from Copenhagen and Barcelona to Sofia. However, European growth funds are still sub-scale relative to US and global competitors.

It needs to change if we are to reap the benefits of the last decade of ecosystem building.

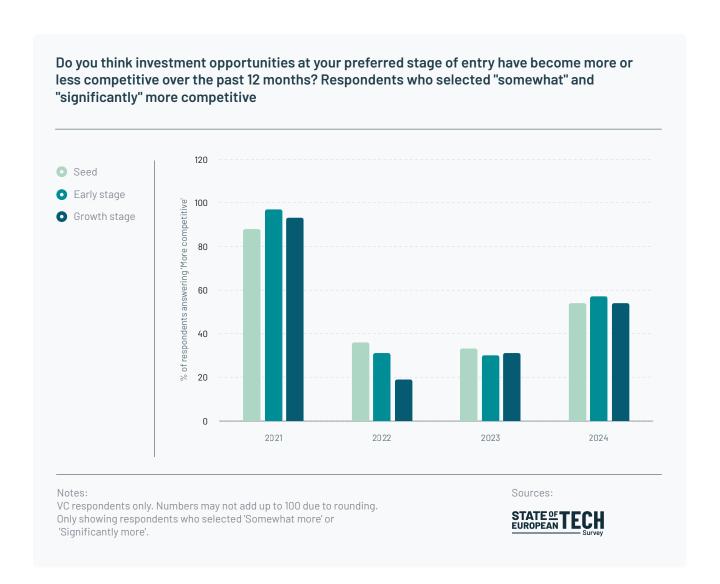
#### **Laura Connell**

Professor of economics, Ecole Polytechnique

# Competition is heating up among European investors

Another leading indicator of market activity is perceived competition intensity, which appears to be heating up once again.

When asked about the competitiveness of investment opportunities in 2024, the majority of investors at each Seed, early and growth stages told us competition has increased over the last 12 months. This recent change in sentiment suggests investment activity is picking up again.





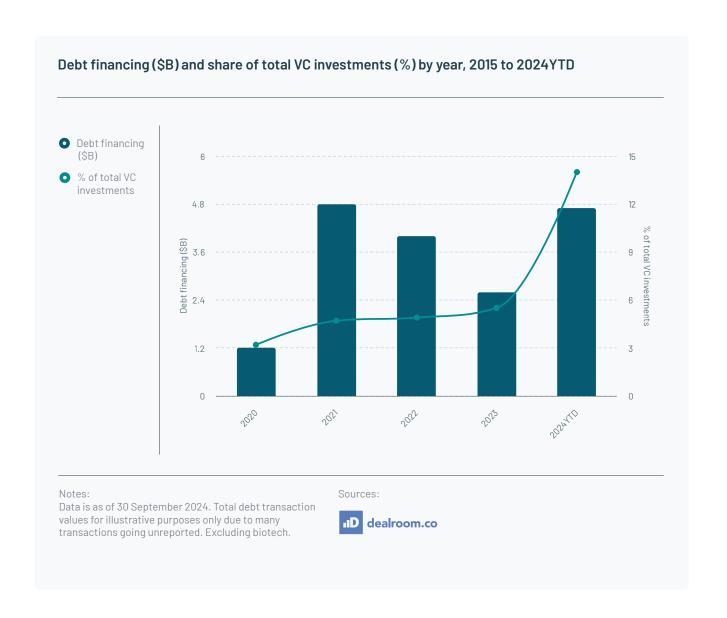




# Venture debt has had its best year on record

This year has been the biggest year for debt financing in Europe on record. Due to the changes in interest rate environments, the relative cost of fundraising has also gone up, making debt an even more attractive prospect for those startup founders who don't want to give up equity.

With \$4.7B raised in just the first three quarters of 2024, this equates to the highest share of VC funding raised, equivalent to 14%. Keeping in mind these numbers only reflect the share of debt financing that gets disclosed, as some banks, debt funds or government led funding organisations do not make their debt transactions public, the reported totals are only the tip of the iceberg.







**European entrepreneurs have demonstrated they have the** talent, innovation and ambition to succeed on the global stage. However, all too often these scale-ups have limited choices other than to source overseas capital to build full stack companies at scale. Our investment infrastructure in Europe must develop to deliver long-term capital, values aligned capital at scale. The momentum to unlock Europe private assets through pensions and insurers is key to connecting capital to opportunity. This will ensure entrepreneurs can access the type of capital they need and members can reap the rewards of Europe's invested strengths to gain exposure to and shape industries of the future.

Building strong investment programmes takes time, commitment, and cumulated experience. Therefore this work must continue with conviction and pace to seize this opportunity.

#### **Stephen Lowery**

Head of Investor Coverage & Business Development, **HSBC** Innovation Banking UK

# Seed rounds are five times bigger than a decade ago

Comparing the median size of today's funding rounds with those of a decade ago, Europe's ecosystem has levelled up across the board.

Seed-stage investments in Europe are now almost five times the size than in 2015, up from a median size of \$300K to \$1.4M. Series C rounds, although based on a smaller sample in Europe than in the US, have also grown in size. Today, the median Series C round comes in at \$55M compared to \$18M in 2015.

Yet, Seed rounds in particular are becoming even larger in the US, with the median now more than double the value of those in Europe. While the size of Series A rounds has grown faster in Europe, the US still leads by around 40%.

This highlights another facet of the overall funding gap. Ultimately, to compete on a global scale, European companies need competitive resources to support their ambitions, the talent they can attract and the speed at which they can build.







# Round size (\$M) per quarter per stage, 2015 to 2024 Seed: Europe United States • Europe 5-year average • Europe 10-year average Round size (\$M) 2 0 2015 2016 2017 2018 2019 2020 2022 2023 2024 2021 Series A: Europe United States • Europe 5-year average • Europe 10-year average 12 Round size (\$M) Sources: Data is as of September 2024. Excludes the following: biotech, debt and grants. dealroom.co crunchbase atomico Powered by

#### Round size (\$M) per quarter per stage, 2015 to 2024

#### Series B:

- Europe
- United States
- Europe 5-year average
- Europe 10-year average



#### Series C:

- Europe
- United States
- Europe 5-year average
- Europe 10-year average



Data is as of September 2024. Excludes the following: biotech, debt and grants.

Sources:

atomico Powered by



dealroom.co crunchbase



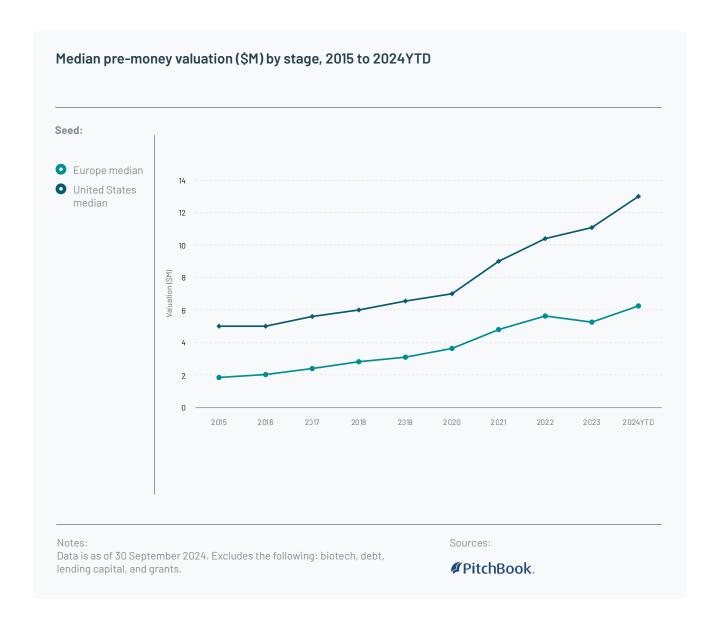




# Startup valuations on the rise

The recovery of public market multiples since early 2023 is now also evident in the private markets, following a lag of several quarters. Round size and founder dilution are important factors in setting valuations, especially at the early stages, so it's not surprising that valuations have bottomed out and are now heading back up. There are some clear differences between early stage (Seed and Series A) and growth (Series B and C). The former is one step further removed from the public markets and has seen greater consistency and a longer upward trend. Meanwhile, companies further along in their scaling journey have seen their valuations adjusted downwards after the market reset, following a more normalised growth curve.

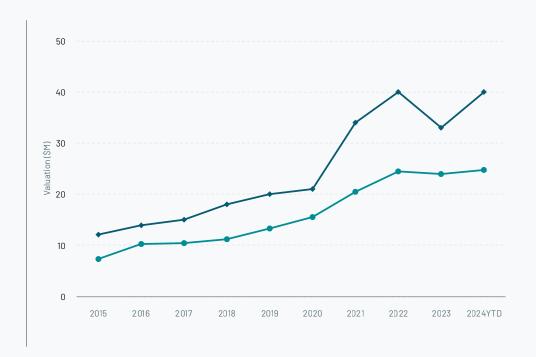
This mirrors what's happening in the US, although average valuations in Europe continue to be 29 to 52% lower than the US across all stages. In particular, the gap is wider at the early stage where Seed and Series A currently present a 52% and 38% discount on average compared to the US, respectively.



#### Median pre-money valuation (\$M) by stage, 2015 to 2024YTD

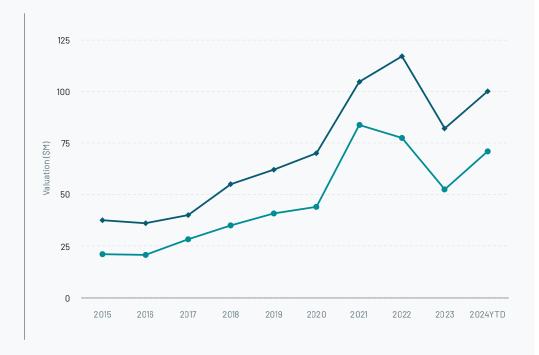
#### Series A:

- Europe (median)
- United States (median)



#### Series B:

- Europe (median)
- United States (median)



#### Notes:

Data is as of 30 September 2024. Excludes the following: biotech, debt, lending capital, and grants.

Sources:

#PitchBook.









### Median pre-money valuation (\$M) by stage, 2015 to 2024YTD Series C: Europe (median) 350 United States (median) 300 250 Valuation (\$M) 150 100 50 2015 2016 2018 2020 2021 2022 2023 2024YTD Sources: Data is as of 30 September 2024. Excludes the following: biotech, debt, PitchBook. lending capital, and grants.





The most successful European founders understand that technical innovation is just the starting point.

What truly matters is building sustainable businesses with clear paths to revenue. That's why we focus intensely on go-to-market strategy and ROI with our startup partners. When you combine Europe's technical excellence with strong commercial execution, you create category-leading companies. The data proves this approach works.

**David Roldán Jr.**Head of Startup BD, AWS (EMEA)

# Smaller nations challenge Europe's established tech hubs

Countries with the most established tech ecosystems naturally produce the largest number of startups with \$B+ valuations. But measuring \$B+ outcomes on a per capita basis reveals the significance of a country's tech ecosystem to its local economy.

Estonia, which also topped the rankings in 2023, is a prime example. The country has actively implemented startup-friendly policies, with incentives such as zero corporate tax on reinvested profits and the digitisation of processes like incorporating a company. The outsized number of companies with \$B+ valuations compared to its population is a reflection of not just the wealth of talent within Estonia's borders, but the effectiveness of its pro-startup policies. Estonia has three times the number of \$B+ companies per capita than Sweden, the next closest country.

The number of startups making the \$B+ list in 2024 was subdued compared to previous years, although companies in Italy, Greece, the Netherlands, the UK and France crossed this threshold. Namely, BETA CAE Systems, a software for analysing car and jet engine designs, founded by a research team at the Aristotle University of Thessaloniki (Greece), was acquired by a US company for more than \$1.2B.

Interestingly, some of the countries with the largest tech ecosystems do not appear as high on the list as one might expect. Germany and France have fallen down the rankings compared to last year, for example, while the UK has narrowly missed out on a spot in the top five. These countries also have the largest populations in Europe, which dilutes their \$B+ company production on a per capita basis.





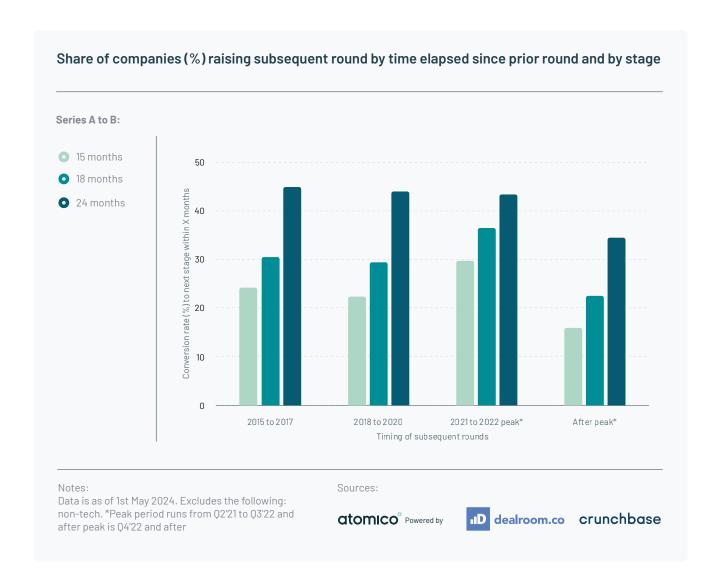


#### Count of \$B+ companies per 1M inhabitants, 2024 0 2024 Estonia Luxembourg **O** 2015 Norway Switzerland Sweden United Kingdom Ireland Malta Denmark Netherlands Finland Germany Lithuania Austria France Croatia Slovenia Belgium Czech Republic Spain Portugal Greece Poland Bulgaria Italy Romania Ukraine 0 # of \$B+ companies per 1M inhabitants Sources: Notes: Data is as of 30 September for 2024 and as of end of year for 2015. \$B+ is defined as a tech company that dealroom.co crunchbase atomico Powered by is currently valued at \$1B+. Population data from International Monetary Fund.

### Conversion to next rounds have slowed

Once the market turned, it became significantly harder for founders that raised a Series A or B round at the peak to secure subsequent rounds amid a new reality. As a result, over the past two years, it has taken longer for companies to convert from A to B. Just 16% raised their next round on a compressed timeline for 15 months or less versus 30% at the peak — marking a return to a healthier cadence of funding milestones.

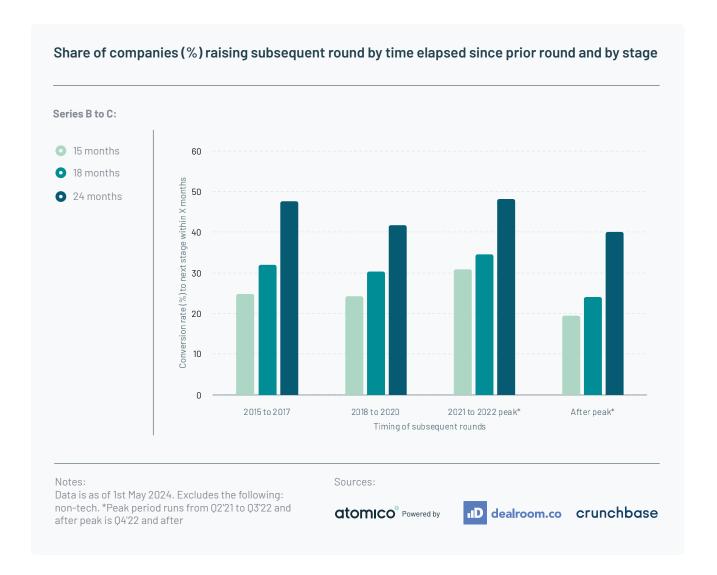
If you expand that window to 24 months - a more standard proxy for expected runway - we still see a 20% decline in the number of companies that managed to complete a raise on this timeline, though the gap is far less pronounced.











# Ready, set, go!

The proportion of companies that go on to raise Seed funding is equivalent in Europe and the US. Fifteen percent of all companies founded in Europe in 2015 went on to raise Seed stage funding, while the equivalent figure in the US is 16%.

15%

Source atomico°

Powered by

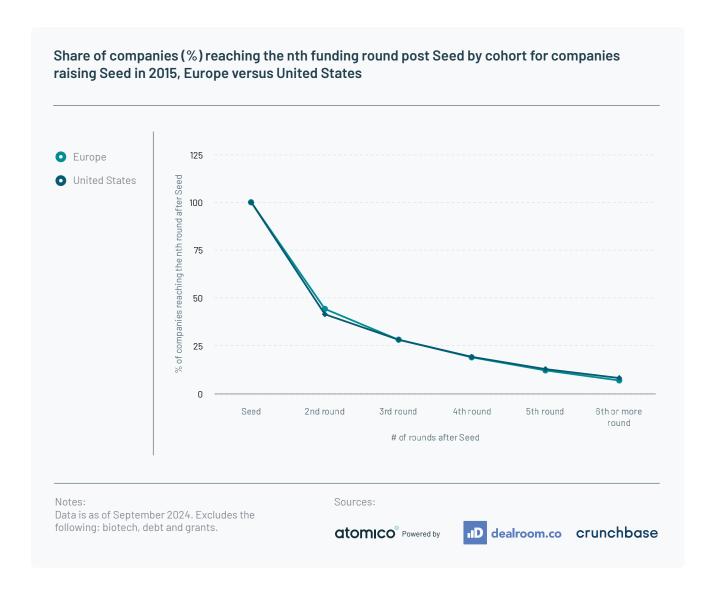


crunchbase

## **Europe and US funnel are the same**

Looking at the percentage of companies that raised Seed rounds in 2015 and went on to raise additional funding shows that companies are progressing through the funnel at the same rate on both sides of the Atlantic.

European companies are slightly more likely than their US counterparts to raise funding after their initial Seed round at 44.3% compared to 41.5%, respectively. This continues until the sixth round of funding, where 8.1% of companies secured this round or beyond in the US, compared to 6.9% in Europe. Our previous analysis also confirms that European tech companies are just as likely to reach \$B+ outcomes as the ones starting out from the US.







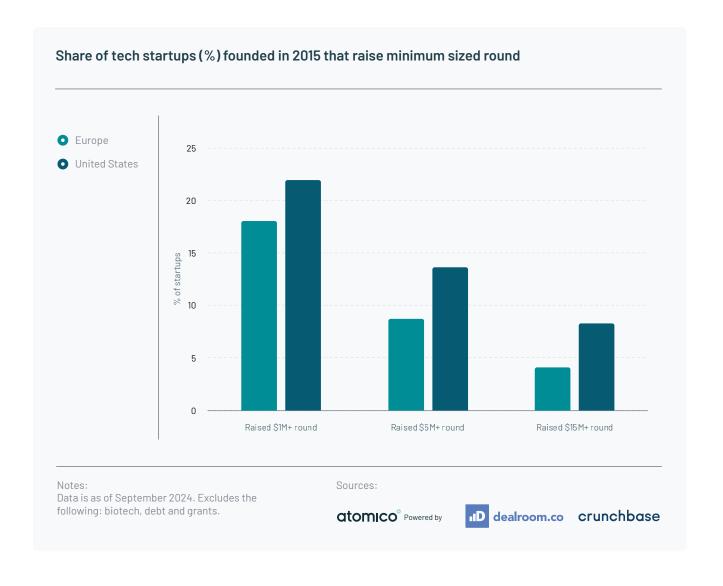


## Europe's tech startups hit a funding bottleneck

The key difference in the funnel analysis is this: while European and US companies are progressing at the same rate, their US counterparts are raising larger rounds.

The funding gap between Europe and the US is bigger than people think. While the share of companies founded in 2015 that go on to raise at least a \$1M round is similar between the US and Europe (22% versus 18%), the gap widens by the time companies reach \$5M. The proportion of US companies able to raise rounds of \$15M or more is twice that of Europe, 8.3% versus 4.1%.

With only 4.1% of European companies reaching \$15M+ rounds, compared to double that in the US, we can really see the scale of the underfunding problem for European growth-stage capital. Europe has raised \$300B in growth-stage rounds since 2015, but that number would have been double if European companies had the same access to capital as their international peers.



# Europe is underfunding its growth stage companies by \$375B

Since 2015, the lower conversion rates to growth stage rounds meant that \$300B worth of potential funding was never raised in Europe. In addition, in the Investors chapter we explore that European investors are having to rely on US investors to bridge a further \$75B. This brings the total European growth stage funding gap to \$375B.

Source

atomico

Powered by



crunchbase



# A decade on: What progress has been made closing the gender funding gap?

The gender funding gap is well documented throughout the world's tech ecosystems — but despite all this awareness, the issue persists. Over the past decade, the needle has moved just a fractional amount when it comes to closing the gender funding gap.

The one significant positive change can be seen in Pre-Seed funding, where all women teams have doubled the share of funding they receive and mixed gender teams have seen their funding levels rise by around a third.

However, the story changes in later stages. Between 2013 and 2016, all women teams received 4.1% of all Seed funding — and after more than a decade of conversations around the importance of creating equal opportunities for women founders to grow and scale their businesses, that number has ticked up to just 5% for the 2021 to 2024 period. The same unfolds for mixed gender teams, where their share of Seed funding raised back in 2013 to 2016 was at 17.8%, decreasing to 16.1% for the 2021 to 2024 period.

Some say that more Pre-Seed funding for mixed and female teams will solve the gender funding gap over time as these companies progress through the funnel. However, the data shows this is not the case. What women and mixed teams need is more capital across the board.





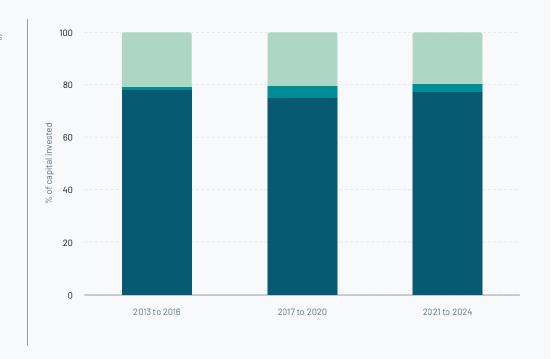


# Share of capital invested (%) by team gender, 2013 to 2024 Pre-Seed: Mixed genders 100 All women All men 80 % of capital invested 60 40 20 2013 to 2016 2017 to 2020 2021 to 2024 Seed: Mixed genders 100 All women All men 80 % of capital invested 60 40 20 2021 to 2024 2013 to 2016 2017 to 2020 Sources: Data is as of 30 September 2024. Based only on funding rounds with atomico Powered by revelio labs available gender information.

#### Share of capital invested (%) by team gender, 2013 to 2024

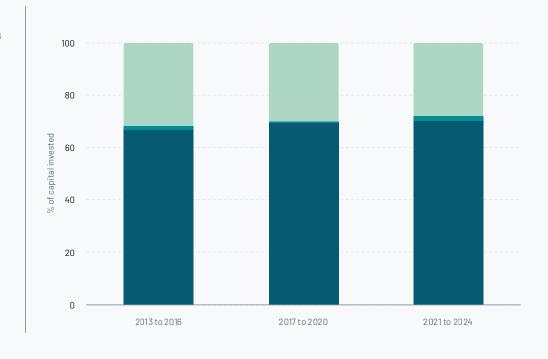
#### Series A:

- Mixed genders
- All women
- All men



#### Series B and beyond:

- Mixed genders
- All women
- All men



Data is as of 30 September 2024. Based only on funding rounds with available gender information.

Sources:

atomico Powered by

revelio labs









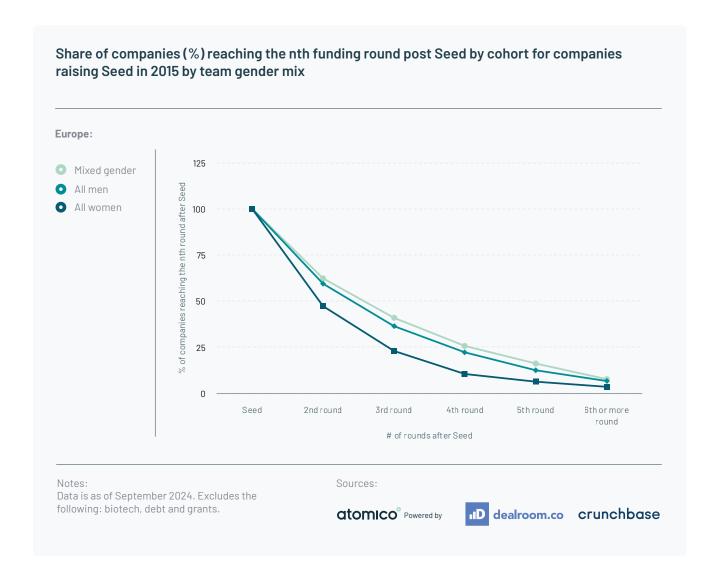
# Funding gap persists for women-only founding teams

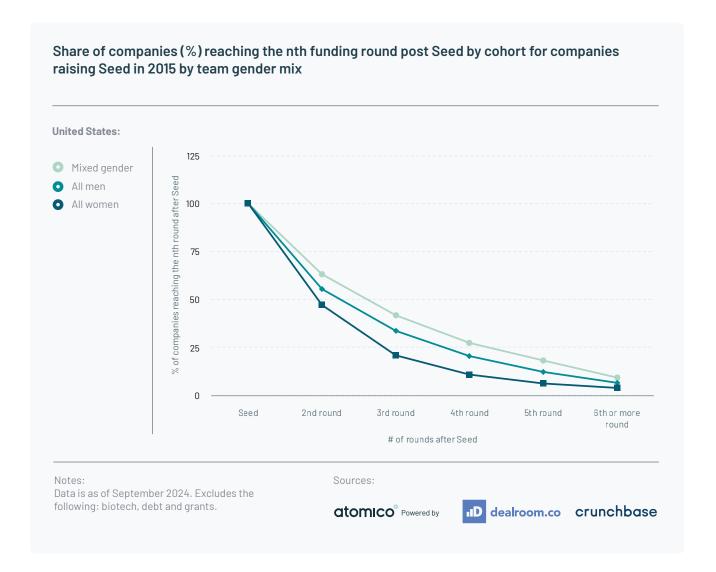
The gender funding gap remains a troubling feature of both the US and European tech ecosystems.

We looked at a subset of companies from the 2015 Seed cohort that had information on the gender of the team. This dataset is more susceptible to survival bias due to the filters applied, and therefore the percentages should be interpreted in relative terms rather than in isolation.

All-female teams are less likely to secure further funding than their all-male counterparts. In Europe, 47% of women-founded companies secured funding after their first Seed round, compared to 59% of all-male founding teams. As they progress on their capital journey, the gap widens. In fact, by the time they reach their fourth round, all-male teams are more than twice as likely than all-female teams to have secured funding. The same issue is prevalent in the US.

But overall, mixed founding teams perform better, as they are more likely to secure funding across each rounds in both the US and Europe compared to all-male teams.





# How can Europe reach its full potential?

Europe has come a long way over the past decade, but there is more work to be done if the continent's tech ecosystem is to reach its full potential. We asked our survey respondents what they think the key priorities for the next decade should be to unlock Europe's growth.

While individual countries within Europe have carved out their positions in the global tech ecosystem, our respondents also told us they would like to see "less bureaucracy and more regulatory reform". This was particularly true among respondents whose views on the future potential for European tech trended negative, with 41% of these respondents stating this as the key area for change - 10 percentage points higher than the overall respondent base.

On top of that, a number of other topics related to regulation and the need for broader policymaker action were mentioned by respondents. Including unique respondents who mention "market harmonisation" or "strategic financial policies and incentives", 47% of overall respondents see regulation and policymaking as a barrier to Europe to fulfilling its full potential — that's almost one in two respondents.





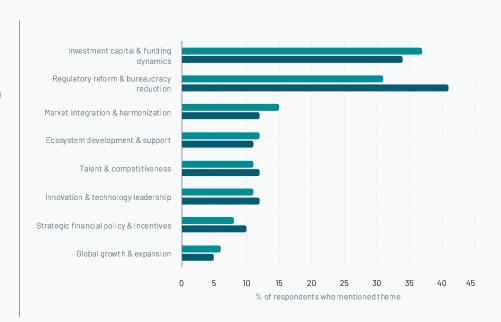


This, of course, reflects conversations taking place in Europe's startup ecosystem today, such as the recent calls for "EU Inc", a pan-European company identity akin to the Delaware corporation in the US. "We need to become more of a true single market, including the UK, Norway and Switzerland," one respondent told us.

Being a combination of many individual nations does indeed have its challenges, but Europe as a whole is the second biggest market globally after the US by gross domestic product. Solving this challenge would be a crucial unlock for founders looking to build global champions in Europe. Regulatory actions also form part of the solution to the "investment capital and funding dynamics" barrier identified by 37% of all respondents, where improvements are needed to bridge the European funding gap. As one respondent put it: "If we can keep our mafia's in Europe, and our returns in Europe, we can improve the entire ecosystem."

# In a few words, what do you think is the change that needs to happen for European tech to reach its full potential in the next decade?

- % of responses (all respondents)
- % of responses (least optimistic respondents)



#### Notes:

Data is as of September 2024. Based on all survey respondents who answered optional free text question. Least optimistic respondents include only those who responded "Somewhat less optimistic" or "Significantly less optimistic" to the survey question "Compared to 12 months ago, are you more or less optimistic today about the future of European technology?". Respondents' responses were mapped to all applicable themes. Numbers do not add up to 100% as respondents' responses can be mapped to multiple themes.

Sources:



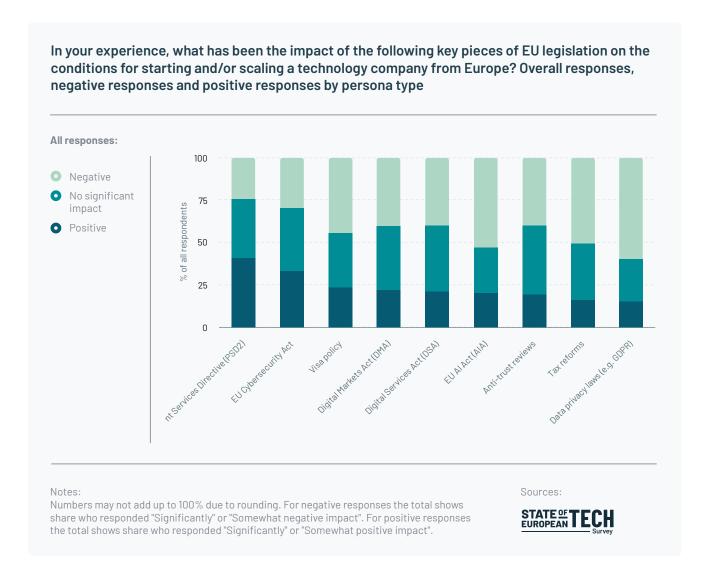
### Legislation gets mixed reviews

Overall sentiment on the impact of legislation on entrepreneurship is trending negative among ecosystem participants. When asked about the impact of specific legislation, LPs and VCs are the most critical voices. Data privacy laws, the EU AI Act (AIA) and antitrust reviews are the most controversial. LPs and VCs are trending particularly negative on the latter two, while data privacy laws are universally seen as a hindrance.

Data privacy laws, such as the GDPR introduced in 2018, have been set to enforce consumer and human rights, but critics emphasise the additional weight this adds to companies wanting to stay compliant, ranging from adapting new data strategies to hiring additional personnel. The restrictions on data use are also criticised for hampering innovation and the development of more customised products for the end user.

When it comes to the EU AI Act, some industry voices have raised concerns that regulating new AI technologies might not leave sufficient room for innovation, while for the latter, survey respondents have even called out competition authority approval as the biggest limitation for selling down positions in their portfolio.

However, some policy initiatives have received a warmer welcome. The Payment Services Directive (PSD2) in particular sees the highest share of positive respondents, at 40% overall. The directive aims to create an integrated and secure electronic and mobile payments market with strong customer authentication. The initiative is seeing particularly positive feedback among VCs.







In your experience, what has been the impact of the following key pieces of EU legislation on the conditions for starting and/or scaling a technology company from Europe? Overall responses, negative responses and positive responses by persona type

% of positive responses by persona:

O LPS
O VCs
Founders

60

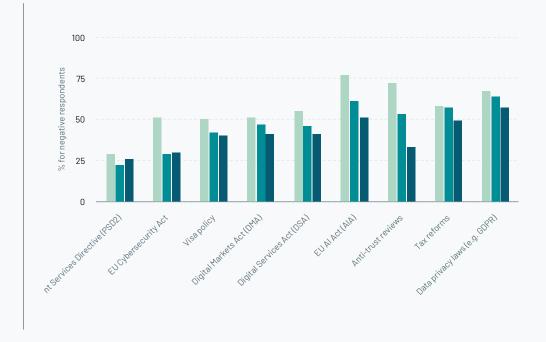
And The product of the product of

#### % of negativeresponses by persona:

LPs

VCs

Founders



#### Notes

Numbers may not add up to 100% due to rounding. For negative responses the total shows share who responded "Significantly" or "Somewhat negative impact". For positive responses the total shows share who responded "Significantly" or "Somewhat positive impact".

Sources:



### The future of European tech is at a crossroad

European technology is experiencing a shift in sentiment. The high levels of optimism seen over the past decade are being eroded, with challenges including the lack of progress on regulatory reforms, market harmonisation and greater access to funding cited by our respondents.

In 2015, when we first asked how founders felt about the future of European tech, 55% expressed optimism. This year, though, that figure has declined to 34%. The number who feel the same about the future compared to a year earlier has also decreased, from 38% in 2015 to 27% in 2024.

The biggest change has been in those who feel less optimistic about the future of European technology. In 2015, only 8% of respondents felt this way. Today, it's 40%. While investors tend to be a notch more positive than founders, the same pattern emerges when comparing over a 10-year horizon — the less positive share has risen from just 6% in 2015 to 26% this year. It's not all doom and gloom, however, as we still see almost twice as many investors who are positive than negative.

This uncertainty comes at a time when Europe needs to flex its innovation muscles more than ever. Addressing founders' concerns about the future of the ecosystem will be crucial to ensuring that new generations of talent can continue to drive Europe's position as a global heavyweight in sectors such as Al, renewable energy, biotech and digital transformation.





Europe stands at a crossroads with AI: regulation can either become a launchpad for innovation by fostering trust and safety, or a roadblock to growth.

The challenge is crafting frameworks that balance opportunity with responsibility, enabling Europe to lead in ethical, cutting-edge technology while attracting global talent and investment.

**Julia Apostle**Partner, Orrick







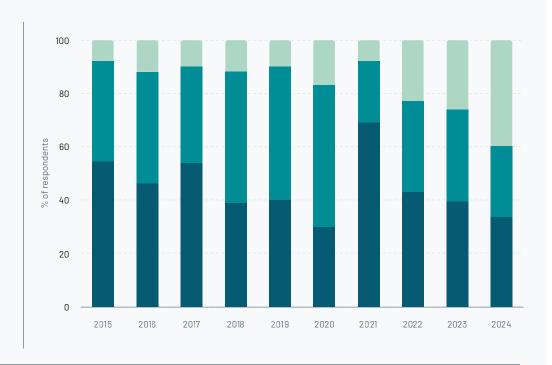
# Compared to 12 months ago, are you more or less optimistic today about the future of European technology? 2015 to 2024

#### Founders:

Less



More

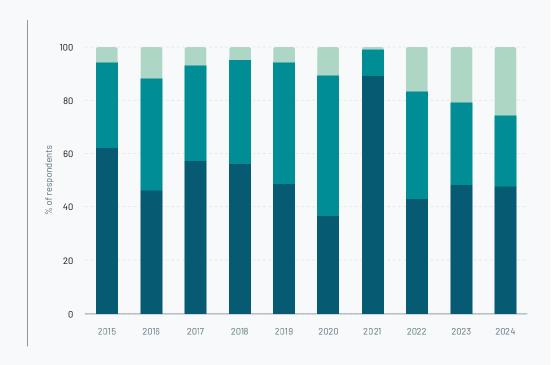


#### Investors:

Less

Same

More



#### Notes:

Shown for Founder and VC respondents only. Founders include founders, co-founders and C-level executives at startups and scaleups in Europe while operators include department heads and employees at tech startups and scaleups in Europe.

Sources:

STATE OF TECH SURVEY





I'm incredibly proud of so much of our vision becoming reality.

This is in terms of how strong the ecosystem is, but much more importantly, how many people have been participants in building it to have GDP level impact. Progress was very hard and very slow at the beginning, but we can see it happening so much faster now. This should certainly leave us feeling ambitious for what we can achieve in the next 20 years.

# **Reshma Sohoni**Co-founder & managing partner, Seedcamp

# **Biggest opportunity set in Europe ever**

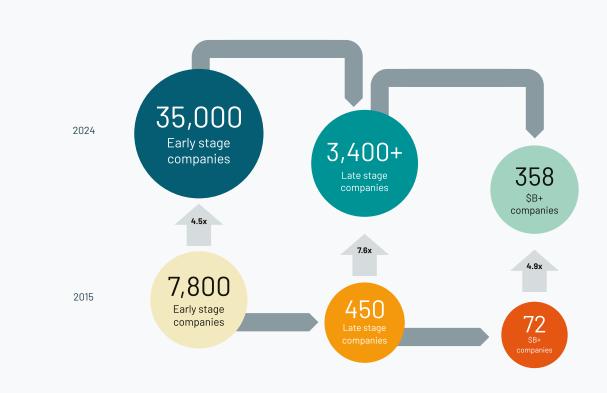
Travelling back to 2015, there were just shy of 8,000 early stage companies. Fast forward to 2024, and that number has more than quadrupled to 35,000+. Growth-stage companies have scaled to over 3,400 and there are more \$B+ valued companies in Europe than ever before. These numbers give us the best bird's-eye view perspective of truly how much stronger Europe's entrepreneurial muscle has become in a decade. It's exciting to think where the next decade might take us.







#### Count of early stage, late stage and \$B+ companies, 2015 versus 2024



#### Notes:

Data is as of 30 September 2024. Excludes the following: biotech, debt, lending capital, and grants. \$B+ compannies only includes companies currently at the valuation. 2015 \$B+ companies count as of the year.

Sources:







# **Themes**









# **Themes**

Where will Europe's next breakout companies emerge? In this chapter, we take a thematic lens to the tech ecosystem, exploring the sectors producing global success stories, and drilling down into the themes capturing investor attention.









### 21% goes into Sustainability

One in five dollars invested into European tech goes to companies tackling sustainability. That's more than double the US equivalent of 11%, and the vast majority goes to mitigating, rather than adapting to, climate change.

### 31 new SB+ AL / ML companies

Over the last decade, the number of AI / ML companies that reached a \$B+ valuation has increased tenfold. Three companies reached this milestone in the years before 2015, versus 31 in the last decade.

### 23% of earliest stage funding goes to AI / ML

AI / ML is the top theme in sub-\$5M funding today. While already in the top three a decade ago, it's a big step up from 12% share of funding it received back in 2015.

## **Summary**

Over the past decade, Europe has demonstrated its ability to produce category-leading global champions across a wide range of sectors, from finance and retail to healthcare and deep tech. Companies such as Spotify and Revolut have come to define the region's success in building global technology, but it does not stop there: in our survey, an impressive diversity of over 110 companies were recognised by respondents as emblematic of European innovation.

However, there are a number of challenges that stand in the way of visionary and bold founders realising their full potential in Europe. There is still a significant funding gap in strategic areas that underpin much of what our future will be built on. There is a global technology race and Europe can still win if it takes bold action to change course. To remain competitive, Europe must redouble its support for transformative areas such as Sustainability / Climate, Al and other Enabling Technologies.

Encouragingly, Europe's commitment to sustainability sets it apart: in 2024, 21% of total capital invested in European technology will be targeted at climate or sustainability initiatives, almost double the share in the US. Europe's talent and ambition signal a promising decade ahead, if bold steps are taken to realise the continent's full potential.

## Europe's global winners span the economy

To better understand the flow of value, talent and capital in Europe, we have developed a proprietary framework that organises companies into sectors, themes and clusters. Here we are looking at sectors — there will be more on themes and clusters later in the chapter.

Sectors represent the broad industries that shape the global economy, such as Finance or Transportation, and are the highest level of our taxonomy. While a company may fit into multiple themes, it can only be categorised into one sector.

The variety of \$B+ companies speaks to European technology's ability to build global, category-defining companies over time. Europe's historical strengths have been in Manufacturing and Enabling Technologies (e.g. electronics, semiconductors) as well as being a Consumer powerhouse (e.g. games, music, travel). The next wave of companies focused on Finance, Software and Sustainability / Climate.

These trends can be seen when looking at Europe's most highly valued companies by sector. Since 2015, Dutch chipmaker ASML has seen its value increase almost tenfold in 2024, from \$40B to over \$300B (although since the data cut-off date, its market cap has come down from its 2024 highs). Over the same period, Spotify's valuation has increased eightfold, from \$8.5B to \$70.7B.

It also speaks to what makes the continent unique — Europe has managed to create a multitude of vibrant ecosystems, rather than one central hub. The companies included here represent as many as 12 countries. From Ukrainian education company Grammarly to Austrian observability leader Dynatrace and Estonian mobility app Bolt, global leaders have emerged from across the continent.







**ASML** 

**Enabling Technologies** 

HO: Netherlands Valuation: \$326.4B Finance

HQ: United Kingdom Valuation: \$40.0B

arm

**Enabling Technologies** 

HQ: United Kingdom Valuation: \$147.7B

amadeus

**Horizontal Software** 

HO: Spain

Valuation: \$34.6B

**Booking.com** 

**Social & Lifestyle** 

HO: Netherlands Valuation: \$142.0B miro miro

**Horizontal Software** 

HO: Netherlands Valuation: \$17.5B



**Social & Lifestyle** 

HQ: Sweden Valuation: \$70.7B 577

Industrial

**HQ: Netherlands** Valuation: \$21.4B



Finance

HQ: United Kingdom Valuation: \$64.3B

logitech

Industrial

H0: Switzerland Valuation: \$11.2B

Revolut

**Finance** 

HQ: United Kingdom Valuation: \$45.0B

**G** grammarly

**Education** 

HO: Ukraine Valuation: \$13.0B



#### Retail

HQ: Germany Valuation: \$16.1B



#### **Digital Infrastructure**

HQ: Austria

Valuation: \$15.0BB



#### Retail

HQ: Norway Valuation: \$15.8B



#### **Digital Infrastructure**

HQ: Czech Republic Valuation: \$8.6B



#### **Transportation**

HQ: Estonia Valuation: \$8.4B

# Enpal.

#### **Horizontal Software**

HO: Netherlands Valuation: \$17.5B



#### **Transportation**

HQ: Germany Valuation: \$2.8B Doctolub

#### Health

HQ: France Valuation: \$6.5B







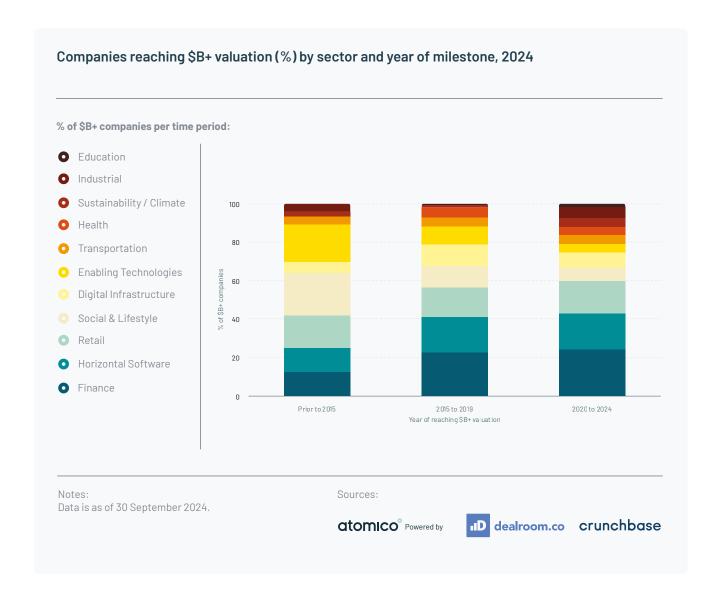
## Finance is Europe's power sector

In recent years, European companies valued at more than \$1B have emerged at an increasing pace. The number of new \$B+ companies added over the last decade is five times the level seen before 2015.

Back then, the Social & Lifestyle sector accounted for the largest share (22%) of Europe's \$B+ companies, with Enabling Technologies following at 19%, and Retail in third place at 17%. However, over the last decade, Finance has become the leading sector with globally recognised names such as Stripe, Klarna and Revolut demonstrating Europe's strength in the sector. It accounts for 24% of new \$B+ companies added in the last five years, followed by Horizontal Software at 19%.

The Sustainability / Climate sector, which includes themes such as energy or carbon removal, has seen modest growth, accounting for 5% of \$B+ companies created between 2020 and 2024. This limited representation contrasts with the significant investor focus on the sector. The solutions here are often more capital intensive, and access to follow-on funding remains a key risk in these companies' journey to scale. However, these large-scale projects are critical to make a meaningful contribution to the climate crisis.

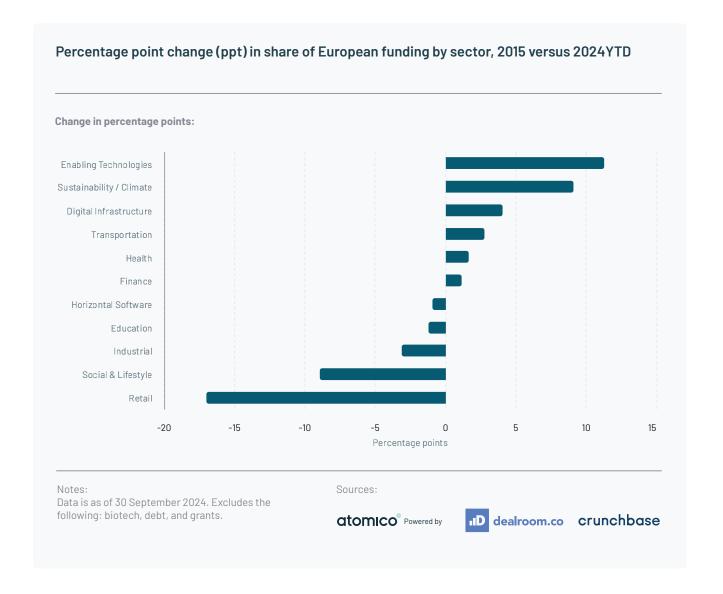
Europe has also seen its first \$B+ companies emerge in the Education and Health sectors over the past decade. Both sectors have continued to grow their share in the last five years, and it will be exciting to see who follows in the footsteps of companies like Multiverse and Doctolib.



# The winds of change in Europe's funding landscape

Over the past decade, Europe's funding priorities have shifted from consumer-facing sectors to those pushing the boundaries of innovation. In particular, the Retail sector has seen its share of the pie fall by almost 20 percentage points. Funding for the Social & Lifestyle sector has also fallen by nine percentage points.

Enabling Technologies — such as AI and semiconductors, which continue to lay the foundations for further innovation to take place — has been the biggest gainer in terms of the share of funding received, increasing by 11 percentage points and capturing 18% of capital invested in 2024 so far this year. The Sustainability / Climate sector is coming in at a close second, representing 17% of total funding.









#### Percentage point change (ppt) in share of European funding by sector, 2015 versus 2024YTD Overall % share by sector: Education 100 Retail Social & Lifestyle 80 Industrial Health Transportation 60 Digital Infrastructure Horizontal Software 40 Finance Sustainability / Climate 20 Enabling Technologies 2015 2024YTD Sources: Data is as of 30 September 2024. Excludes the following: biotech, debt, and grants. dealroom.co crunchbase atomico Powered by





Often people say, 'you must be so good at predicting the future because you had it right so many times'. And then I think, 'but actually we just embraced that we don't know the future'. We are quick adopter at scale and that's currently still what we're doing. I see Adyen as a large scale up even now with 4,000 people in.

We need to constantly be in a modus where we look how things are changing.

Pieter van der Does CEO and Founder, Adyen

## Europe in its B2B era

While Retail and Social & Lifestyle were among the defining sectors of Europe a decade ago, today sectors with primarily a business-tobusiness model (B2B) now represent 75% of overall funding. Europe is now firmly in its B2B era, while the share of funding going to business-to-consumer (B2C) business models has decreased from 31% in 2015 to 16% in 2024.

Source







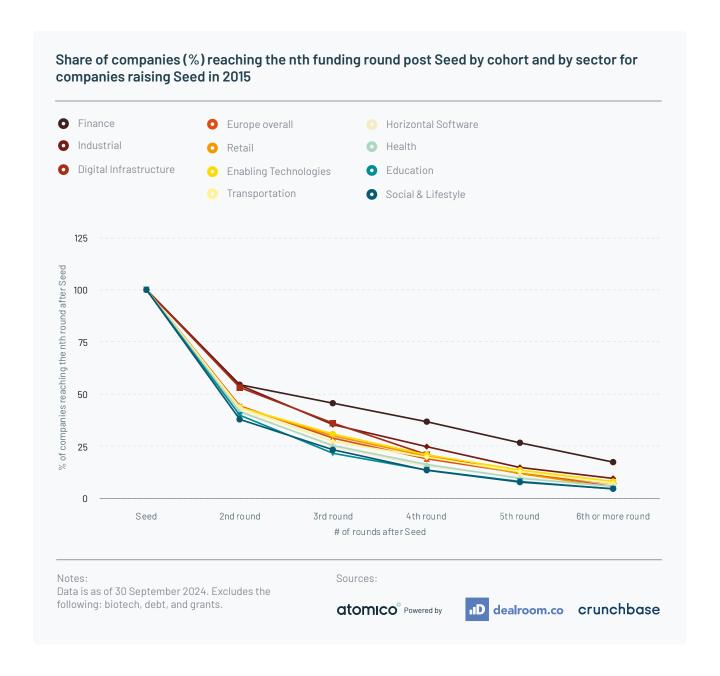


## Finance and Digital Infrastructure in favour

Examining the progression of startups that raised a Seed round in 2015 reveals notable differences across sectors. Finance and Digital Infrastructure companies outperform the average benchmark for Europe across the funnel while Education, Health, and Social & Lifestyle lag behind.

A significant driver of this disparity is likely Europe's distinct market structure, especially in Education and Health, where startups are often reliant on public sector procurement processes, which can be lengthy and difficult to navigate.

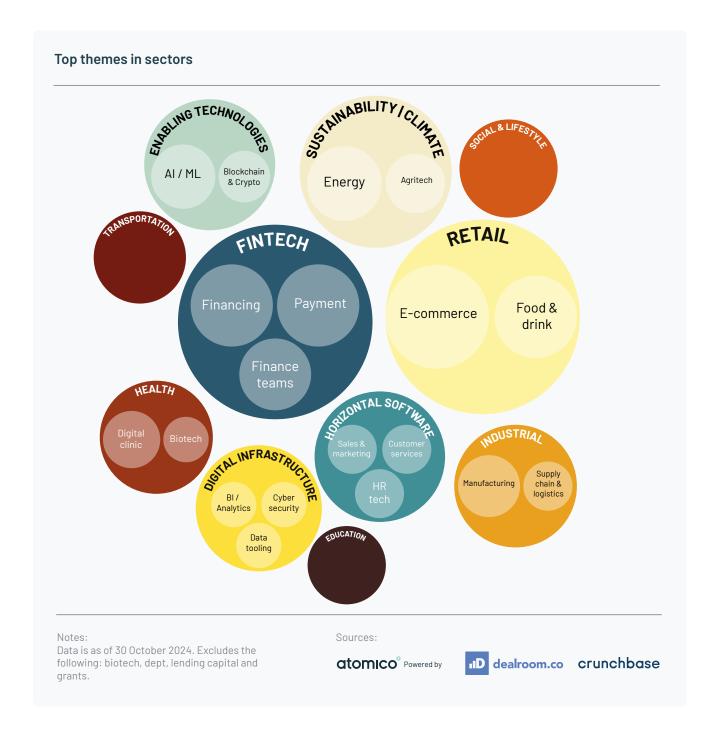
Meanwhile for Finance, there are unique factors at play such as the more unified regulatory framework like the Payment Services Directive 2 (PSD2) or the more fragmented banking system in Europe that traditionally charged higher fees, especially for cross-border transactions.



### Mapping Europe's top themes

While sectors are a high-level way of categorising companies, themes relate more specifically to a company's products or services, or how they might describe themselves — as such, they are not mutually exclusive. For example, within Finance, a number of companies focusing on selling software solutions to finance teams might also provide credit cards for spend management, meaning they fit both the finance teams and payments themes.

We track more than 70 unique themes, from agritech, where more companies are developing sustainable food alternatives, to digital clinics, where an increased focus on prevention is driving innovation in healthcare.









## Europe's biggest success stories shape mindset

Europe's biggest success stories of the past decade? Spotify and Revolut.

That's according to our survey respondents, who were asked to name the company they thought was emblematic of Europe's growth over the past 10 years. This was an optional question and no prompts were provided - impressively, Spotify and Revolut were named by 26% and 15% of respondents, respectively. But what's more is that more than 110 unique companies were named by respondents more than once, and close to 30 mentioned over 10 times.

Describing these companies as European champions hardly captures their impact. Some of these globally recognised brands have inspired both founders and investors, and are part of the draw for many new joiners coming from outside of tech. Spotify has transformed the music streaming landscape and created a ripple effect in the wider market for digitally distributed audio content.

Finance companies – Revolut, Klarna and Adyen – grab the next top spots, underlining Europe's characterisation as a global centre of excellence for finance. Finally, the presence of Mistral, which was only founded in 2023, in a list of the most influential companies of the past decade highlights Europe's ambitions to create its own Al leaders.



Theme: Music HQ: Sweden 580+ mentions



**Theme: Payments** HQ: Sweden 110+ mentions



Theme: Neobank HQ: United Kingdom 350+ mentions



**Theme: Payments** HO: Netherlands 90+ mentions



Theme: AI / ML H0: France 90+ mentions



**Theme: Automation Platform** HQ: Romania / United States 50+ mentions

**ASML** 

Theme: **Semiconductors** HO: Netherlands

85+ mentions

celonis

Theme: BI / Analytics

HQ: Germany 50+ mentions

Wolt

Theme: Food delivery H0: Finland 60+ mentions

**7WISE** 

**Theme: Payments** HQ: United Kingdom

/ Estonia 50+ mentions

Bolt

Theme: **Transportation** H0: Estonia

60+ mentions

arm

Theme: **Semiconductors** 

HO: United Kingdom 45+ mentions





Europe has everything it needs to become the most entrepreneurial continent—if it chooses to.

The region has shown it can build \$50bn+ companies time after time. It has the capital to fuel the next generation of founders. It has a deep talent pool, with more people holding equity, laying a strong foundation for future success. And with the AI technological revolution underway, the opportunities ahead are limitless. Whether you are a founder, investor or a policymaker, don't hold back — Europe's future depends on it.









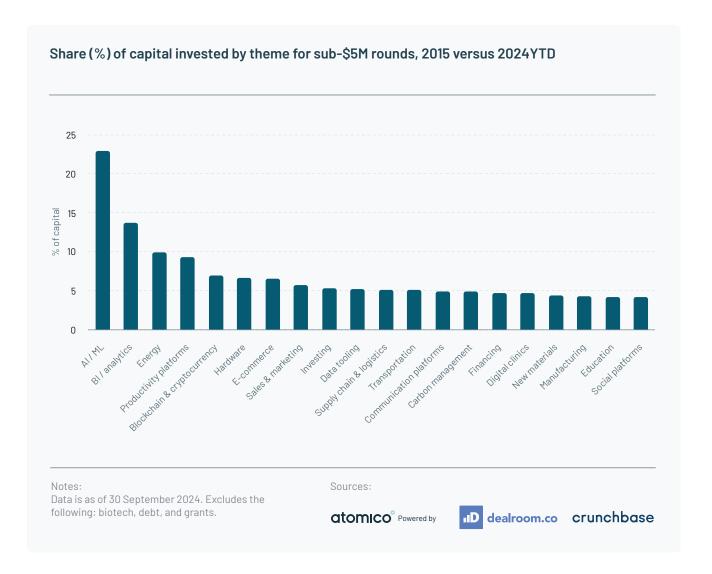
# Al and sustainability-related themes are driving early funding

Looking at the themes of rounds under \$5M, we can see where momentum is building — and where \$B+ companies might emerge.

Al / ML — which ranges from generative Al, Al computing infrastructure and more general Al applications — have long been favoured by investors, but there has been a recent surge in investment activity. So far in 2024, 23% of all sub-\$5M rounds have been in this theme, with nearly one in every four VC dollars allocated to this area. Sustainability-related themes — energy, transportation, carbon management and new materials — have also taken numerous spots in the top 20 themes in 2024. On the other hand, the tables have turned for the likes of travel and gaming, which are no longer featured in the list as of 2024.

Comparing today's most invested themes with those of 2015 provides a window into the journey technology is taking, as it becomes increasingly ubiquitous. Retail and Social & Lifestyle related themes — e-commerce, sales & marketing, communication and social platforms, entertainment, travel, and gaming — captured the lion's share of investment back in 2015. Today, a greater proportion of capital is being invested in Al / ML, energy or even blockchain, as technology turns to the digitalisation of traditional sectors.

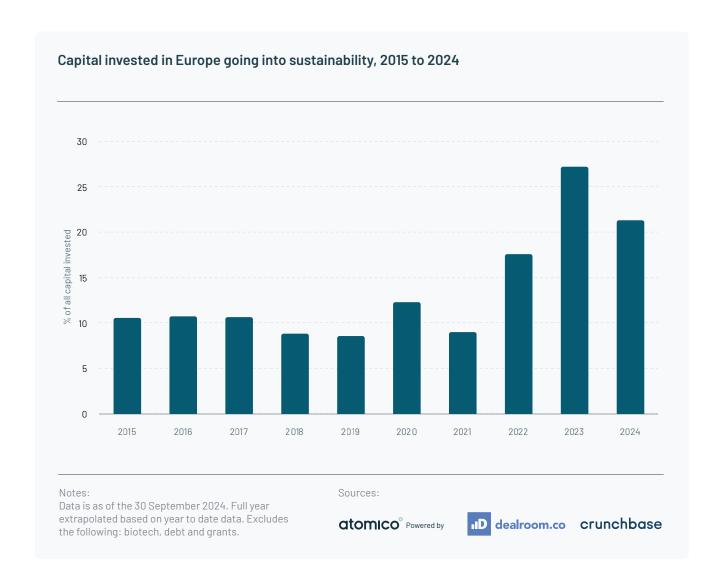
If we look at the evolution of the \$B+ distribution across sectors, we can expect the early-stage energy and AI / ML companies of today to become the \$B+ companies of tomorrow.



# Sustainability funding had its second biggest year

Today, one in every five venture capital dollars goes towards building a more sustainable future, where new technologies and innovations are necessary to turning that vision into reality. This trend has been picking up pace over the past decade and emphasises the effort companies are putting into pursuing that, as well as the sizable opportunity investors are recognising.

Between 2015 and 2021, the share of funding that companies in sustainability themes raised hovered between 9% and 12%. In 2022, this increased to 18%, followed by a high of 27% in 2023, driven by megarounds such as 1KOMMA5°s \$473M Series B round (part equity and options to finance potential acquisitions) and Verkor's \$935M Series C. Deals of this magnitude have not been as common in 2024, and capital invested in this theme has come down to pre-2022 levels as a result.







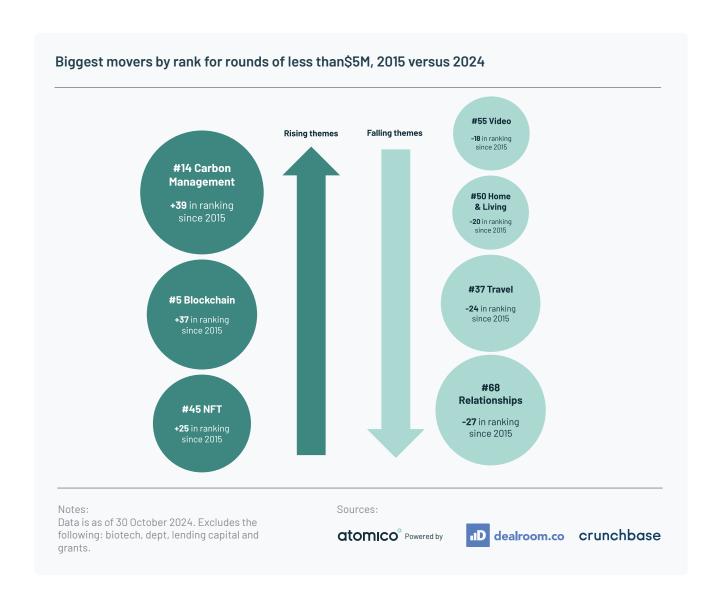


## At Seed, carbon management leads — and blockchain is back

Looking at the biggest movers in Seed stage funding reveals key trends that are likely to pick up momentum in the near term.

Carbon management — which encompasses both active reduction technologies like carbon capture as well as carbon management software - has seen a significant increase in its share of funding, climbing 39 places in our rankings over the past decade. For context, in 2024 over 350 unique companies in the carbon management theme have raised funding compared to less than 100 in 2015. This reflects growing recognition of the urgency and opportunity to address climate change through innovation.

Blockchain has also made a surprise comeback, rising 37 places. More recent positive regulatory developments, such as the SEC's approval of Bitcoin and Ethereum Spot ETFs, along with the Federal Reserve's interest rate cut in September, and the recent acquisition of Bridge by Stripe (the largest crypto acquisition by a major payments company), could boost further momentum in this space.



### Global leader in Sustainability commitment

Europe is a leader in its commitment to sustainability and funding the right solutions. Twenty-one percent of total capital invested in European tech in 2024 went into companies building in climate or sustainability related themes, representing one in every five dollars invested. For comparison, the US equivalent is 11%. Furthermore, 95% of all European sustainability funding is going to strategies directly attempting to mitigate climate change, instead of strategies preparing or adapting to climate change.

Source atomico

Powered by



crunchbase

# Positive shift in sustainability discussions towards measuring impact

Together with S&P Global Market Intelligence, we have been able to track the evolution of the sustainability conversation, both in terms of volume and topics. By going through the dataset of machine-readable earnings calls from listed technology companies, quarter by quarter, mentions of sustainability topics were extracted and injected into a proprietary LLM model to identify and contextualise trends over time in the US and Europe.

The Al classification model reveals a shift over time from compliance to strategy — in other words, companies are moving from viewing sustainability as a mere compliance requirement to integrating it as a fundamental component of their business strategies, driving overall shareholder value.

In addition, companies are increasingly defining specific sustainability goals linked to brand reputation and consumer expectations, and linking these to measurable results and long-term commitments. Indeed, we are seeing an increase in carbon-related mentions (e.g. carbon emissions, offsetting, and net zero), which underpins the appetite for more solutions in the space. This is likely to be a strong growth driver for the carbon management software solutions theme.

While the shift in the narrative towards measuring impact is positive, the decline in overall mentions could be an early indicator that, in a tougher macro environment, companies are pushing sustainability further down the priority list and focusing their resources elsewhere. If this trend continues, it could have knock-on effects for technology companies building in this area.

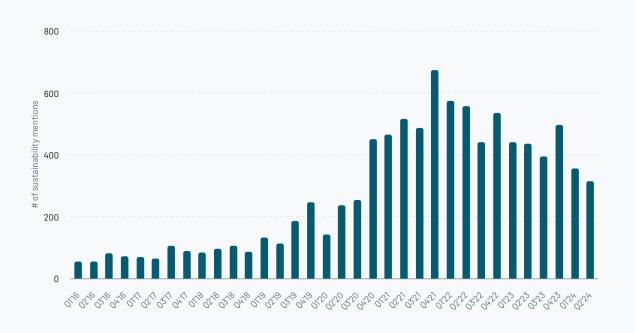






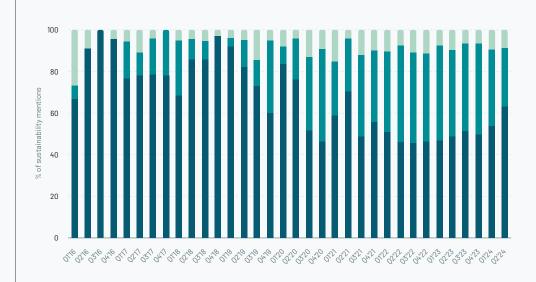
#### Sustainability mentions in United States and European public tech company earnings call transcripts, Q1'16 to Q2'24

# of mentions:



#### % of mentions:

- Climate change
- Carbon-related
- Enviromental



#### Notes:

S&P Global Market Intelligence Quantamental Research. Data as of 9 October 2024. Based on Textual Data Analytics of Earnings Call Transcripts available for public technology companies (excluding biotech). The analysis averages to 632 firms per quarter for European and US firms.

Sources:

**S&P Global** Market Intelligence





Europe is leading the charge in sustainability, driven by broad public awareness, excellent deeptech expertise and favourable regulation.

A large number of founders are moving into the space, building companies that focus on not just making a profit but also tackling some of the most complex societal and environmental challenges we're facing. They use new tools and technologies to create inspiring innovation in areas such as the transition to renewable energy, battery technology, and corporate carbon emissions measurement and management.

**Terese Hougaard** Partner, Atomico

## Talent is drawn to the hardest problems

Exceptional talent is distributed across many themes in Europe — but increasingly, higher volumes of talent have migrated to companies solving hard problems.

Having overtaken sales & marketing, e-commerce and BI / analytics, AI / ML is now the theme that sees the largest number of new joiners, with many transitioning from other parts of the tech industry. Some notable talent magnets include DeepL, Scale AI and Synthesia, as well as Open AI.

Energy and HR tech have entered the top 10 after being absent in 2015. Notably, energy's rise is characterised by a large influx of new joiners from outside of the tech industry, highlighting the diversity of roles and sector-specific knowledge needed to advance the transition to net zero. Following the large rounds raised in 2023, 1K0MMA5° and Verkor have been adding to their teams. Personio, Deel and Factorial are among the top names for HR tech.

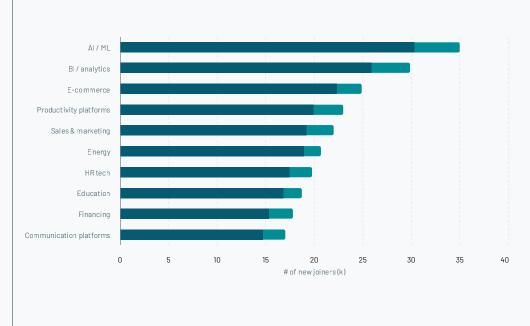






#### Top themes by number of new employee joiners, 2015 versus 2024

- New joiners from within tech
- New joiners from outside tech



#### Notes:

Data as of September 2024. To adjust for lags in reporting, we compare snapshots of data at different points in time, which allows us to estimate future growth of current figures by extrapolating differences between time points. 2024FY is based on data adjusted for lag effect and extrapolated.

Sources:

atomico Powered by

revelio labs

#### The next big ideas

Sectors and themes are the top two layers of our taxonomy, but as the tech ecosystem and our economies continue to evolve, how can we predict the next big ideas on the horizon?

This year, we set out to quantify this by conducting an in-depth analysis of how companies in the European startup ecosystem describe themselves. The aim is to identify the new ideas, technologies and business models around which an increasing number of companies are clustering. A 'cluster' can emerge and diverge within a theme or sector, although we only ever classify individual companies into one cluster.

These clusters are useful indicators of the innovative ideas that Europe's entrepreneurs are putting their energy into. As they mature, they could become investment themes in their own right. They also reflect market opportunities — either by expanding existing ones, with new Al-powered applications for enterprise businesses for example, or by identifying entirely new ones to displace existing solutions, such as nuclear fusion for more sustainable energy sources.

This lens also allows us to break down the dominant AI / ML theme into the sub-trends that are fuelling the theme's rise. The application of AI across multiple sectors and problems has led to the emergence of several new clusters, from AI-driven finance to real estate. In particular, the application of AI in the enterprise space is gaining momentum, with companies such as Timefold, which helps companies create optimised employee schedules, and Userled, which uses AI to personalise the sales process.

We can also drill into Sustainability / Climate-related clusters, and in particular the energy theme which is attracting a bigger share of capital this year. We see a new renewable energy solutions cluster ranging from German battery storage company Voltfang and Norwegian wind farm project planner Vind.





Atomico's latest survey underscores the maturation of Europe's tech ecosystem, with AI now a crucial driver of investment, talent demand, and opportunity. As we enter the intelligence age, Europe has the chance to lead a new era of AI driven growth. But to achieve this, Europe must act swiftly and boldly—prioritizing competitiveness and policies that help all sectors embrace this technology.

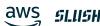
With every month that passes, the imperative grows for Europe to develop and deploy Al to unlock value for all European citizens.

#### Sandro Gianella

Head of Policy for Europe, OpenAl







#### New technology cluster forming across Europe CODESTAR lawhive Satellite spacetech Fiat Republic Legaltech RBITAL Blockchain infrastructure Leya Advanced computing \* Formance NcodiN timefold DinMo † THALERON **∠**VIND Al-powered enterprise solutions Renewable energy solutions Proxima Fusion **V** Voltfang spacetek userled /root signals 3D printing & new manufacturing **CARBON X** KALPANA syte lemon.markets **B2B** carbon Al-powered real estate solutions Al-driven fintech removal solutions Optiml<sup>¬¹</sup> NEOCARBON ▲ Triple neoshare Notes: Sources: Data is as of 30 October 2024. Excludes the following: biotech, dept, lending capital and dealroom.co crunchbase

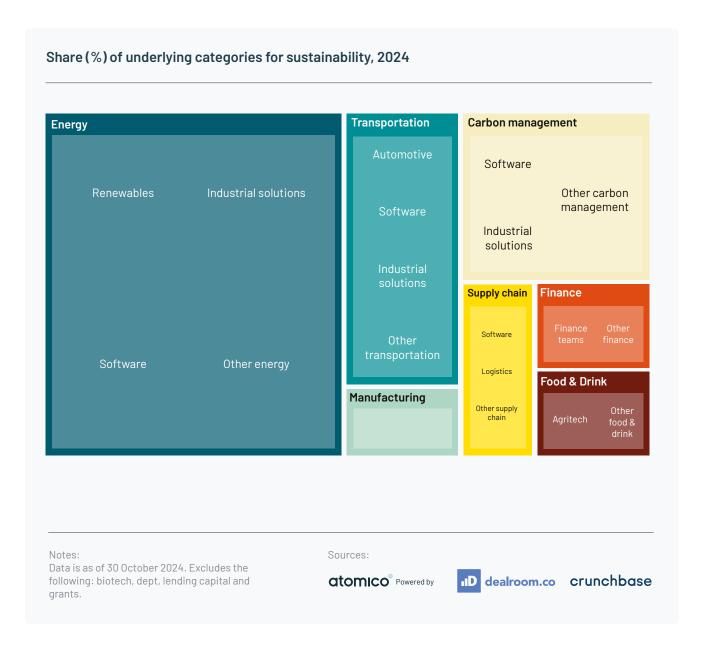
grants.

atomico° Powered by

#### Investors are backing the energy transition

Sustainability is a broad category and funding spans the sector. Energy and the transition to cleaner solutions is the underlying theme that has attracted the most capital over the past decade, as startups develop new types of clean energy infrastructure, from smart software solutions to carbon capture. Cleaner transport solutions and carbon management take the next largest shares.

The spread of investment across sustainability themes over the past decade presents an opportunity and a challenge for those building in the space. On the one hand, it points to the ongoing maturity of the Sustainability / Climate sector, which now cuts across multiple sectors and themes and is constantly seeing new clusters emerge from within. On the other hand, at a time where progress is most urgent, finding the right investor to back large fundraises in a specialist space has only become more difficult.













We're in the midst of three unique and momentous tidal shifts.

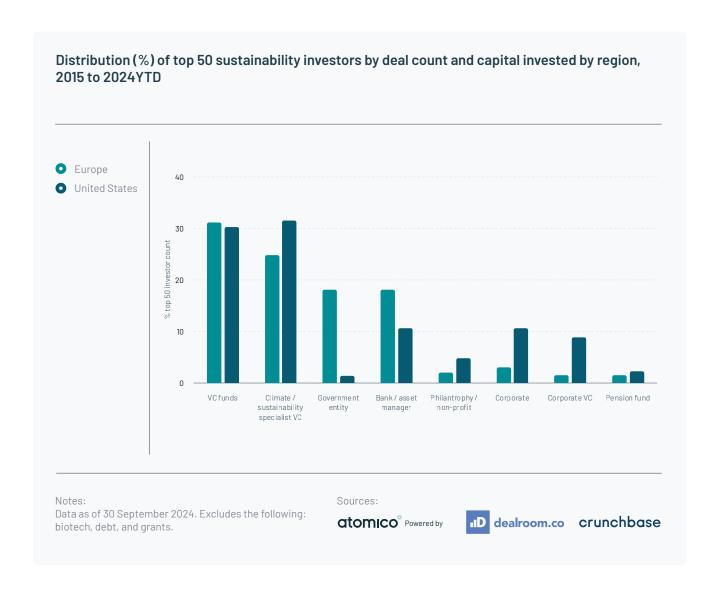
A shift from fossil fuels to low-carbon electrons, creating unprecedented market fragmentation; radical corporate accountability demanding true sustainability; and technological advances in Al and data science enabling solutions that weren't possible even two years ago. With successful disintermediation in sectors such as Finance, there is an opportunity for new players to completely reshape the energy market.

Joe McDonald Co-founder & CEO, tem.

#### Who's funding sustainability?

Sustainability covers a wide range of business types, from software and asset-light companies to more capital-intensive deep-tech innovators. These companies are building for a more sustainable and efficient world — a world we haven't yet arrived at — and need access to committed, long-term partners.

We looked at who the top funders are in this sector, particularly those who have participated in rounds of more than \$15M, where access to growth-stage capital can be a barrier. While there are many generalist venture funds investing in this space, we also found a number of specialist players among the top investors by number of rounds participated. For example, sustainability focused firms Lowercarbon Capital, Energy Impact Partners and Demeter are among the top firms by investment since 2015 in Europe. Government entities are also particularly active in direct investments in Europe, accounting for 18% of top investor activity, compared to just 1% in the US — French government-backed BPI France appears to be the most active sustainability investor in Europe over the period. In the US, corporations and corporate venture funds such as Amazon, Google Ventures and the like are far more active than in Europe.

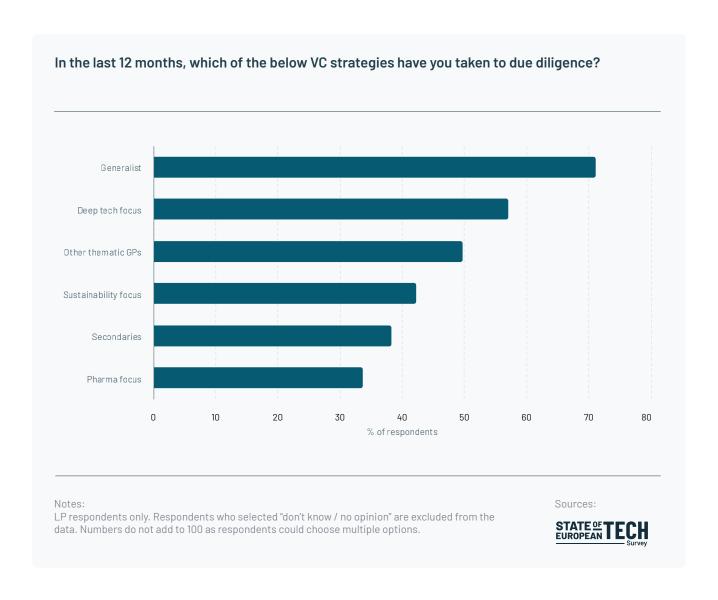






## European LPs have an appetite for deep tech

Most LPs are still inclined towards generalist funds, but there's a clear trend towards increased interest in thematic funds, with deep tech emerging as a primary focus. Fifty-seven percent of LPs surveyed say they are conducting due diligence on deep tech funds, indicating potential future commitments or a growing interest in investing with more specialised fund managers. Sustainability also ranks high, with 42% of LPs interested, while 50% have explored other thematic areas. This trend towards due diligence in deep tech and other themes may well be a leading indicator of greater capital allocation to more specialised fund strategies.



# Deep tech has gained in importance

Europe's deep tech ecosystem boasts a combination of research excellence, a strong talent pool from world-leading institutions, and success stories like Deepmind keeping the flywheel in motion.

Funding has followed accordingly, with investment in deep tech themes increasing from a modest \$2.5B in 2015 to a high of \$18.9B in 2021. Funding levels have dipped in line with the recent market activity, but remain well above even 2020 levels. So far in 2024, \$14B has been invested into deep tech, representing a 85% increase on 2020 levels and an impressive 450% rise compared to a decade ago.

# Total deep tech funding (\$B) and share (%) of total funding in Europe, 2015 to 2024 Capital invested in deep tech (\$B) % share of capital of total raised in Europe Notes: Data is as of the 30 September 2024. Deep tech includes any technology that is based on tangible engineering innovation or scientific advances and discoveries applied for the first time as a product, often aiming to solve society's biggest issues. Full year funding extrapolated linearly from year to date. Excludes the following: biotech, debt, lending capital, and grants.











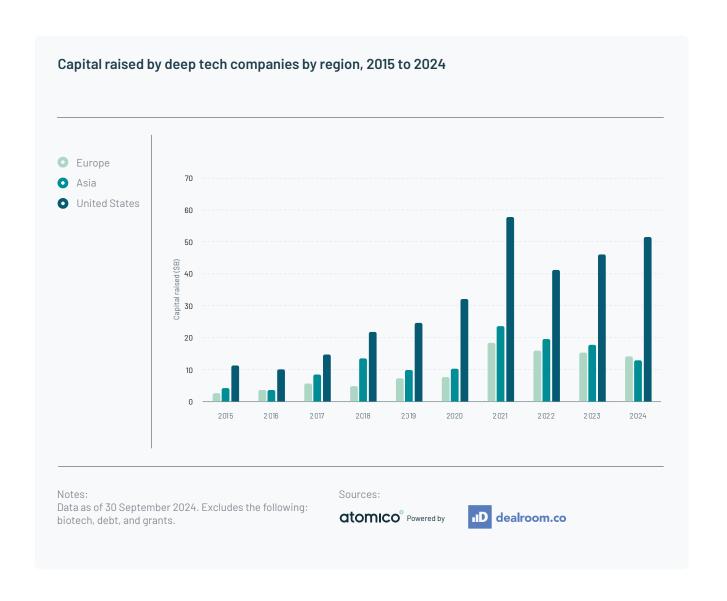
The evolution of European tech has been characterised by enormous growth, a lot of innovation, and increasing competitiveness in Europe.

If you think about innovation, Europe clearly showed leadership in areas like fintech, deep tech and sustainability. And now, we can see Europe making big steps in quantum computing, in AI, robotics and biotech, supported by financing from Europe.

**Gillian Tans** Former CEO, Booking.com

# Scale of deep tech funding lags the US and Asia

Since 2015, deep tech companies in the US have raised over \$310B, while Asia and Europe are neck and neck around the \$100B mark (at \$123B and \$94B, respectively). The accelerated rise in US deep tech funding figures is largely attributed to its growing AI / ML scene. In the last two years, Enabling Technologies contributed just over half of all deep tech funding in the US. OpenAI's \$10B round in 2023 alone accounted for 22% of the total capital raised by deep tech companies in the US that year. But even without these outlier rounds, the US is currently outpacing all other major economies in the world, by nearly four times.







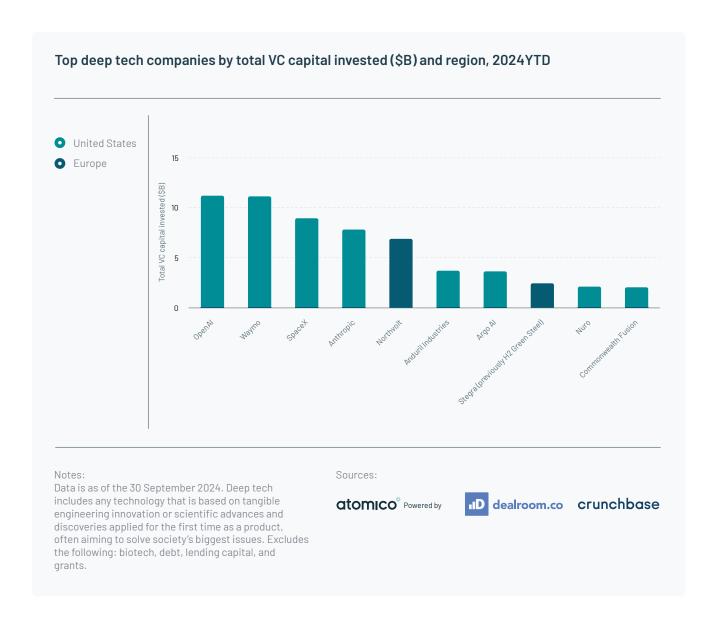


# Most of the best funded deep tech companies are based in the US

The top two names in deep tech have reached significant milestones this year, with OpenAl hitting more than 1 million paid users and SpaceX's Starship booster successfully completing a first of a kind landing. Meanwhile in Europe, Northvolt, once touted as Europe's electric vehicle battery champion, is now fighting to stay afloat.

Moonshot companies like these require significant amounts of funding as they grow. Across the top 10 best funded, they have collected \$60B of venture capital financing. The vast majority — eight out of 10 — are based in the US, a ratio that remains the same when we look at the top 100 companies in terms of capital invested.

With less growth capital available in Europe, local champions face a higher barrier to success from the outset. While the nature of pursuing these ideas means that some will fail, Europe must also work hard to ensure that it doesn't fail them.







In addition to venture capital, we're seeing a diversification in financing strategies that European tech companies, particularly in deeptech sectors, are leveraging to drive growth.

Many early-stage companies are turning to smaller loans from local banks, often backed by government guarantees, to mitigate risk. These are frequently combined with larger working capital facilities sourced from global banks, offering more liquidity as companies scale. To further boost cash flow, some firms are relying on R&D tax credits as a critical liquidity source. Hardware-dependent businesses are also adopting sale and leaseback agreements or equipment financing to cover capital-intensive hardware expenditures. Additionally, many companies are shifting from traditional one-off sales models to a hardware-as-a-service approach, allowing them to secure upfront customer payments, which supports ongoing innovation and expansion. This multi-faceted approach to financing reflects a growing sophistication in how European tech companies manage capital needs.

#### Sonya Iovieno

Head of Venture and Growth Banking, HSBC Innovation Banking UK







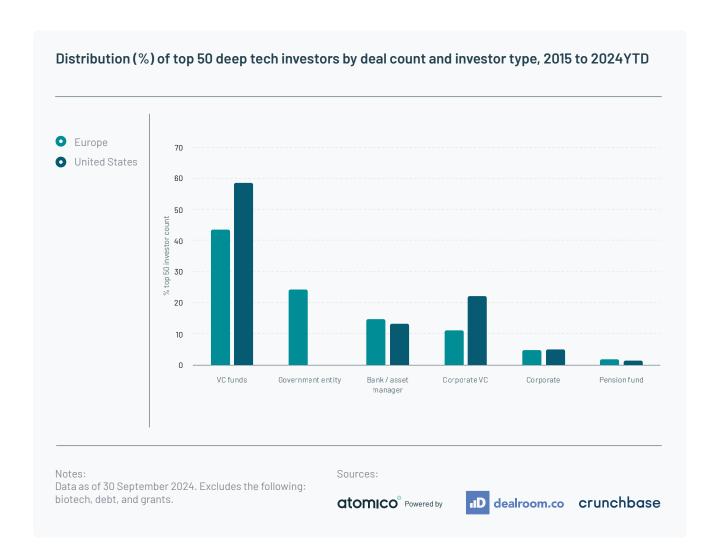
### Who's funding deep tech?

From foundation models to first-of-a-kind products, the amount of capital required by some deep tech companies to compete on a global scale can be substantial. The journey to scaling such complex technologies is often non-linear, with companies going through cycles of funding, scaling and cost management before fully optimising their business models or even securing customers.

These are business models that require a large base of investors with not only deep pockets, but a high degree of patience and commitment, too.

While the majority of rounds are backed by VC funds, government agencies fund nearly a quarter of the rounds mapped through direct investment in Europe. This is thanks to the role played by Bpifrance and other very active Pre-Seed and Seed government investors.

This differs from the US, where there is a larger base of VC funds with deep pockets to invest in the space, as well as strategic corporate VCs (such as Google Ventures, Microsoft M12, Intel Capital). Across both Europe and the US, the most active corporate investors are Tencent, NVIDIA and Microsoft.



#### **Europe is home to world-leading AI companies**

The continent is home to a number of global AI / ML leaders. France's Mistral, now valued at over \$6B after less than two years in business, is often touted as a frontrunner, but there are plenty more European successes to pay attention to. Hugging Face, Synthesia, Kyutai, Stability AI — the list goes on.

It's also worth noting the outsized impact OpenAI has had on inflating the US's overall fundraising figure. Its most recent \$6.6B round closed after the cutoff point for our data — meaning the company's total funding now accounts for 7% of the overall \$245B AI funding raised in the US since 2015.

The number of AI / ML companies that have reached a \$B+ valuation has seen a tenfold increase over the past decade. Prior to 2015, we note only three companies that reached a \$B+ valuation before 2015, versus 31 in the 2015 to 2024YTD period. The most recent to reach that milestone was mobility company Wayve in May 2024.

Source

atomico

Powered by

revelio labs













Choosing to build our technical team in Europe was a forwardthinking decision, and the region's rich tech talent ecosystem has been precisely what we needed to develop next-generation Al for software engineering. The blend of world-class technical expertise, emphasis on sustainable growth, and access to enterprise customers through collaborations with organizations like AWS has been transformative.

In Europe, we discovered an environment that genuinely understands how to balance technical innovation with commercial success.

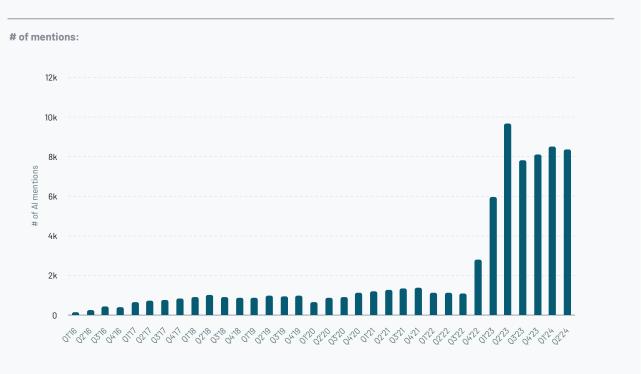
**Eiso Kant** CTO & Co-Founder, poolside

#### Al sector tailwinds continue into 2024

Al has dominated tech discussions since late 2022, with mentions of the topic in public tech company earnings calls across the US and Europe doubling quarter-on-quarter following the launch of OpenAl's ChatGPT. This surge peaked in mid-2023, driven largely by the rapid rise of generative Al, which has since overshadowed traditional machine learning and predictive analytics.

For private markets, this shift signals a pivotal trend: as enterprises increasingly prioritise Al-driven solutions, demand for innovation in generative Al could reshape purchasing strategies, potentially intensifying competition from incumbents already adopting Al at scale. This may also be a leading indicator of heightened M&A activity as companies seek to integrate generative Al into their capabilities.

# AI / ML mentions in United States and European public tech company earnings call transcripts, Q1'16 to Q2'24



#### Notes

S&P Global Market Intelligence Quantamental Research. Data as of 9 October 2024. Based on Textual Data Analytics of Earnings Call Transcripts available for public technology companies (excluding biotech). The analysis averages to 632 firms per quarter for European and US firms. Topic mentions exclude "Artificial Intelligence" mentions.

Sources:

S&P Global
Market Intelligence



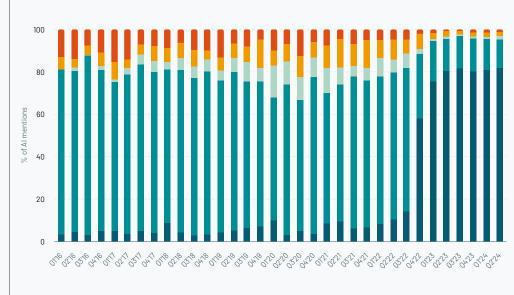




# Al / ML mentions in United States and European public tech company earnings call transcripts, Q1'16 to Q2'24

#### % of topic mentions:

- Data techniques
- Applications
- Systems and infrastructure
- Machine learning methods
- Generative Al / LLM



#### Notes:

S&P Global Market Intelligence Quantamental Research. Data as of 9 October 2024. Based on Textual Data Analytics of Earnings Call Transcripts available for public technology companies (excluding biotech). The analysis averages to 632 firms per quarter for European and US firms. Topic mentions exclude "Artificial Intelligence" mentions.

Sources:

**S&P Global**Market Intelligence

# The UK, Germany and France stand out in the Al funding race

While the US and China dominate Al funding globally, several European nations rank highly when looked at individually.

The UK ranks third on the list of top countries by Al funding, having invested \$4B so far in 2024. It holds this position comfortably ahead of Canada, which is in the next top position, having invested more than twice the amount into Al.

Germany and France have also made strong showings, ranking in fifth and sixth place respectively, and each allocating over \$1B each to AI companies. These countries demonstrate Europe's growing influence in the AI race, despite the continent's broader funding gap with the US.







#### Top countries by Al funding, 2015 versus 2024

Rank	2024 top countries	2024 funding raised (\$B)	2015 top ountries	2015 funding raised (\$B)
1	United States	47.2	China	9.4
2	China	10.9	United States	7.4
3	United Kingdom	3.8	United Kingdom	0.5
4	Canada	1.5	Israel	0.4
5	Germany	1.4	India	0.4
6	France	1.1	Canada	0.3
7	Israel	0.9	Germany	0.2
8	Singapore	0.8	Singapore	0.2
9	South Korea	0.7	France	0.1
10	India	0.6	Ireland	0.1

Data as of 30 September 2024. Full year funding extrapolated linearly from year to date. Excludes the following: biotech, debt, lending capital, and grants.

Sources:



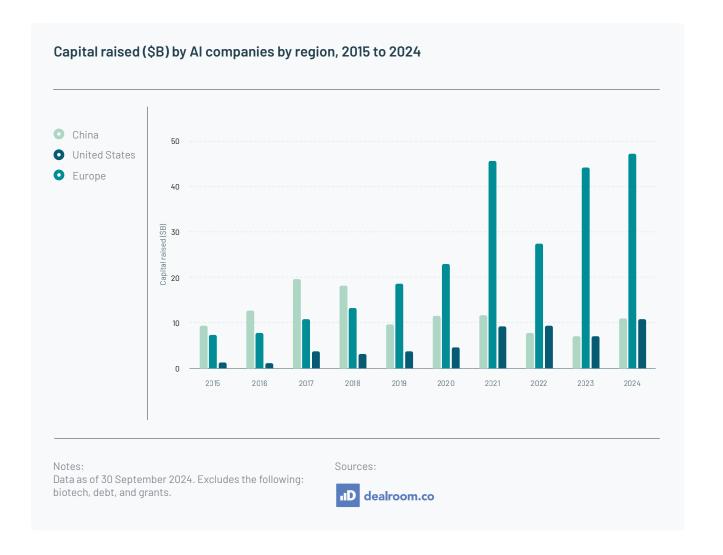
#### The continent lags on Al funding — but it's not too late

Europe has a long way to close the gap with the US in terms of Al funding. In 2024, the US will have invested \$47B in Al, compared to Europe's nearly \$11B.

However, it's not too late for Europe to catch up, and the continent has made remarkable progress over the past decade. In 2015, Al investment in Europe was just over \$1B, meaning that it has seen an almost ninefold increase in funding over the past decade. This momentum is far greater than that of the US, and has put Europe on a par with China, the former leader in Al funding.

The ambition to build global Al leaders in Europe is there, with examples all around. The UK's Wayve is going head-to-head with the US's Waymo in the self-driving arena. Al mafias are also emerging — H Company in France was founded by ex-DeepMinders and recently raised one of the country's largest Seed rounds. Black Forest Labs was founded by Stable Diffusion alumni and is now competing with Midjourney in text-to-image generation. Meanwhile, Poolside, founded by the former CTO of GitHub, is building the next generation Al for software engineering, Germany's DeepL is setting new standards in translation tech, and France's PhotoRoom continues to break ground in image-editing Al.

The opportunity for Al breakthroughs in Europe is immense, but more funding will be key to unlocking these ambitions on a global scale.











We don't want our children to grow up in a world where they are consumers of US and Chinese products and technologies.

To make this a reality, we must invest in and retain innovation here, fuelling a sustainable cycle of growth and creativity that benefits our economies and future generations alike.

Alexandru Marin Founder & CEO, INFINIT



# Talent









# Talent

Talent is the driving force behind any startup, and the landscape has been transformed over the past decade. In this chapter, we dig into who the individuals forming the beating heart of Europe's tech ecosystem are — from founders to employees — to unpack what's changed, and how they feel about the future.









### 3.5M talent employed in **European tech**

Europe now employs as many people today as the US did just five years ago in 2020. The talent pools on both sides of the atlantic are growing at the same pace of 24% year-on-year for the past 10 years.

### 12,000+ tech professionals in Europe list a senior leadership role at a SB+ on their CV

The number of European tech professionals with senior leadership experience at a billion-dollar company has quadrupled since 2015, with many training up in the continent's established tech firms.

### 18,000 companies will have spun out of Europe's \$1B+ companies by 2030

New founders are spinning out of Europe's top companies at an everincreasing rate. Since 2000, over 9,000 new founders have spun out of \$1B+ European companies; by 2023, this number could double.

59% say it's better to become a founder of a **European tech company** now compared to 10 years ago

It's been a tough few years for founders — but despite the fundraising challenges and difficult decisions, 59% say it's better to be a founder today than it was a decade ago.

## **Summary**

Europe has gone from strength to strength in nurturing and growing its tech talent pool. Over the past decade, entrepreneurship has become a preferred path for ambitious and exceptional talent at every stage of their career. From recent graduates to seasoned professionals, the region now benefits from a vibrant community of experienced founders, engineers and operators driving innovation across the continent.

Zooming in on founders, it is clear that European founders have increasingly embraced risk and a bolder approach. This shift in mindset is reflected in the ambition level of new ventures, the global outlook from day one, and a willingness to tackle some of the toughest problems in a more sustainable way.

While European founders are increasingly in control of their narrative and optimistic about the future, their overall confidence in Europe's competitiveness is trending down. They are championing the strengths and unique qualities of the European tech scene, while challenging the remaining barriers that prevent Europe from realising its full potential. Over the next decade, this proactive stance will reshape global perceptions and enable Europe to retain its best talent, the critical ingredient for even greater progress.





The most positive thing in European tech in the last 10 years is the recognition that being an entrepreneur is a legitimate path.

If you have a great idea, you don't have to go to the United States. You have great investors and talent here. You have a vibrant community of people coming together, working together and tapping into that richness of ideas. It's a real path now to be a European entrepreneur. That's the real change.

**Baroness Joanna Shields** CEO & co-founder, Precognition

## Europe's talent pool scaled 7x over the past decade the past decade

Europe has gone from strength to strength when it comes to nurturing its talent pool, and the startup ecosystem is now attracting more employees than ever. Today, the European tech workforce stands at 3.5M. The vast majority -2.9M – of those employees have joined over the past decade, and they have done so at a rate that puts Europe on par with the US's more established scene.

These figures are even more impressive in the context of the last two years, when headlines about funding shortages and staff redundancies have been hard to miss. Against the odds, Europe's tech sector has remained attractive to new talent and its importance as a contributor to the continent's workforce continues to grow.





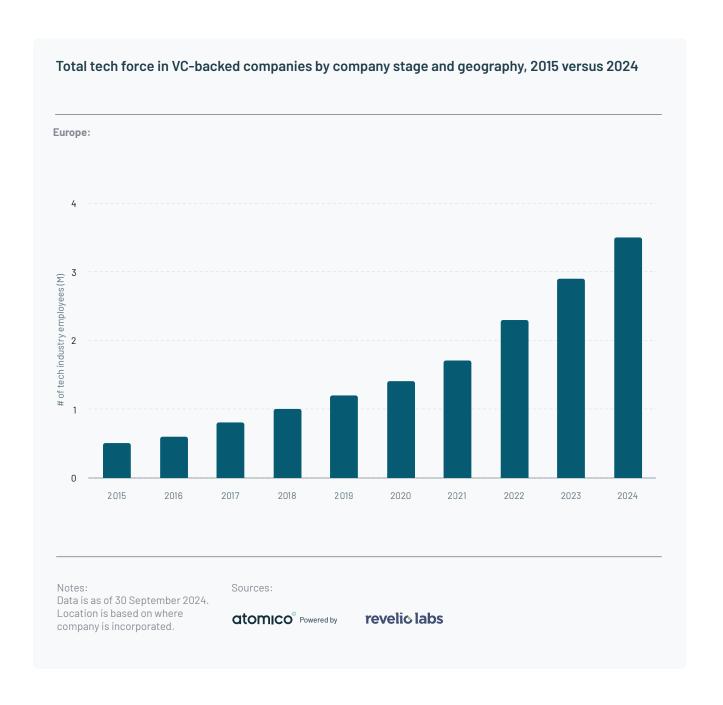


### Total tech industry employees in Europe and the United States, 2015 to 2024 Europe: # of tech industry employees (M) **United States:** # of tech industry employees (M) revelio labs Sources: atomico Powered by Data is as of 30 September 2024. Location is based on where company is incorporated.

## Europe's talent pool scaled 7x over the past decade

Europe's talent landscape has transformed over the past decade, and the startup ecosystem now attracts more employees than ever. Today, the European tech workforce stands at 3.5M. The vast majority -2.9M — of those employees have joined over the past decade, and they have done so at a rate that puts Europe on par with the US's more established scene.

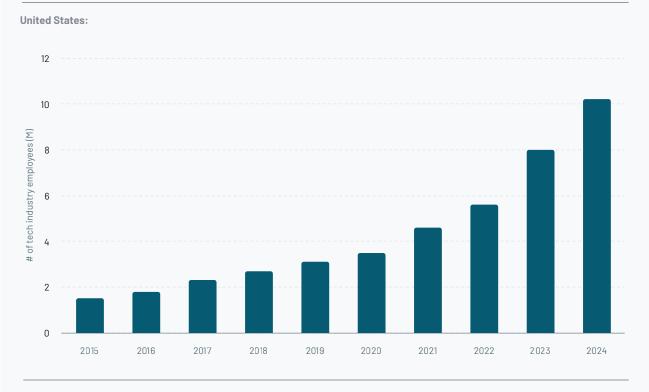
These figures are even more impressive in the context of the last two years, when headlines about funding shortages and staff redundancies have been hard to miss. Against the odds, Europe's tech sector has remained attractive to new talent and its importance as a contributor to the continent's workforce continues to grow.







Total tech force in VC-backed companies by company stage and geography, 2015 versus 2024



Notes: Data is as of 30 September 2024. Location is based on where company is incorporated. Sources:

atomico Powered by

revelio labs





I'm very pleased to see the continued growth and strength of the early stage European entrepreneurial and VC ecosystems.

The excellent education system, numerous effective support programs, thriving early stage funding scene and world class operators and technologists turned entrepreneurs are all compounding to make various European cities leading global technology hubs in the age of Al. I couldn't be more excited for where we will be in a decade!

Mehdi Ghissassi

CPO, AI 71

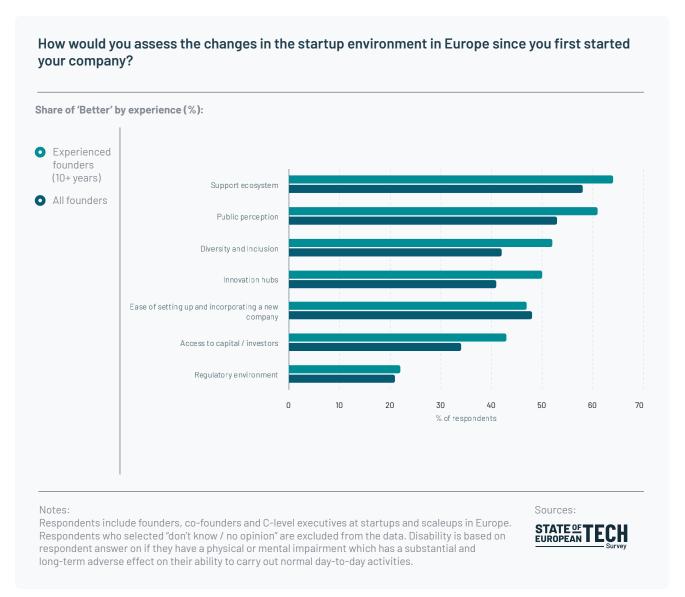
## A more supportive startup ecosystem in Europe

Building a business is an ongoing journey full of challenges. With the right support in place, founders have a better chance of navigating it successfully.

Europe has made significant progress in this regard, with 58% of founders saying they have better access to mentors, accelerators, knowledge and information now than when they started their business. Founders also report a positive shift in the public perception of startups and entrepreneurship, especially for those who have been in the tech industry for a long time (10+ years).

Responses are mixed on whether other key growth levers have improved, such as access to capital and ease of starting a business. However, it is encouraging to see more long-term founders signalling positive changes in these areas. However, it is clear that the regulatory environment has made very slow progress, as the gap between this topic and all others suggests.

Founders with more than 10 years' experience have seen progress in diversity and inclusion over the past decade. This is echoed by respondents from under-represented groups - be it those who self-identify as non-white and/or with a disability. Interestingly, these groups report less progress when it comes to public perceptions of entrepreneurship. Those with a disability are also less likely to see significant progress in terms of access to capital.



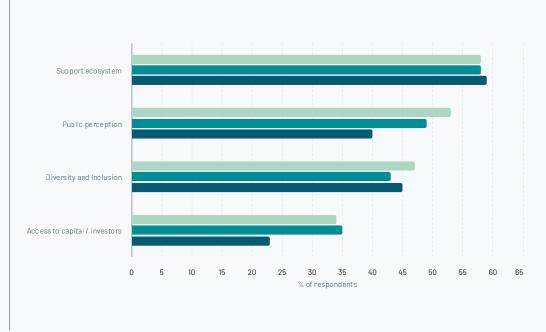




#### How would you assess the changes in the startup environment in Europe since you first started your company?

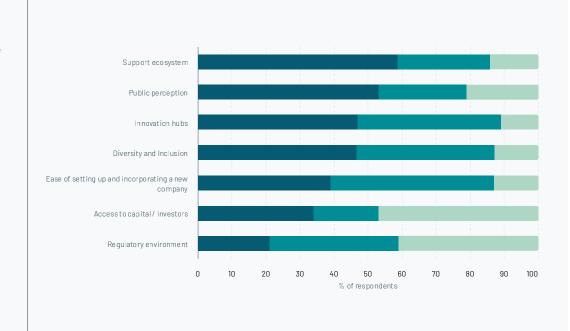
#### Share of 'Better' by demographics (%):

- Overall
- Non-white respondents
- Respondents with disability



#### Overall:

- Worse
- No Change
- Better



Respondents include founders, co-founders and C-level executives at startups and scaleups in Europe. Respondents who selected "don't know / no opinion" are excluded from the data. Disability is based on respondent answer on if they have a physical or mental impairment which has a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities.

Sources:



## Europe's talent pool is growing as fast as the US...

Today, European tech companies employ 3.5 million tech talent, a number that has grown at a compound annual growth rate (CAGR) of 24% since 2015. The European tech sector now employs as many people today as the US did in 2020.

3.5<sub>M</sub>

Source

atomico

Powered by

revelio labs

## ... but some things remain unchanged

While the overall pool of European tech workers has continued to grow, the gender split has remained the same. Today, 34% of tech talent are women, down from 35% in 2015. The same is true in the US, where the corresponding proportion has also stayed the same at 36%.

54.%

Source

atomico°

Powered by

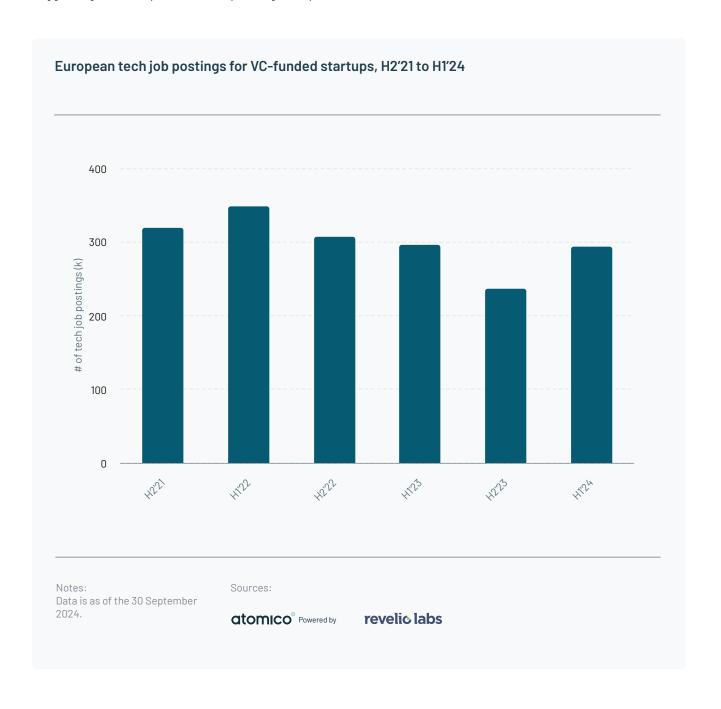




## Resurgence in hiring

We are seeing a turnaround in the human capital landscape. Job postings for VC-backed companies were up 25% in the first half of 2024 compared to the previous six months, finally reversing the declines we've seen over the past two years.

There are a number of drivers behind this growth. By stage, the biggest contributors are Series A and B startups, suggesting renewed confidence at these crucial stages of growth. And by function, it's customer service roles, suggesting that companies are responding to improved commercial demand.

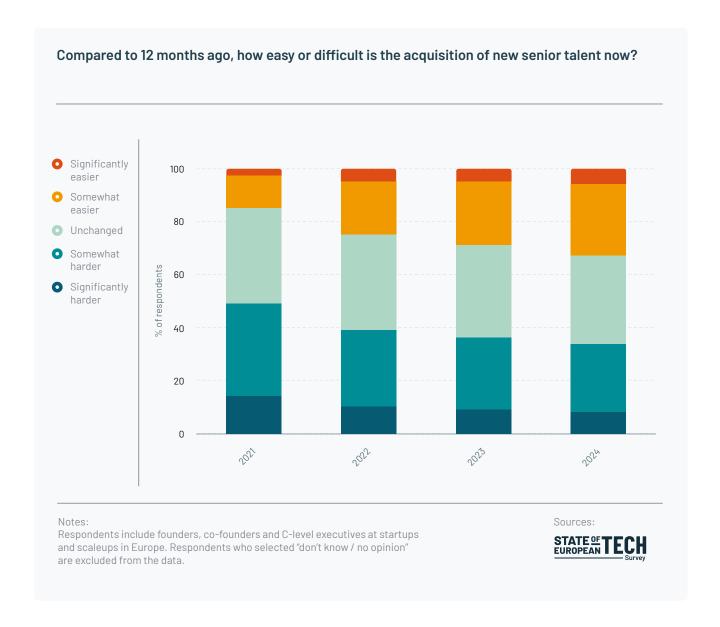


# The senior talent market has reset — but hiring isn't easy

Again this year, a growing number of founders - 33% - told us that the market for talent has eased. This is in stark contrast to the heady days of 2021, when record amounts of capital were flowing into European startups and only 15% of founders told us they were finding it easier to recruit talent.

The number of founders describing the recruitment market as difficult has also fallen accordingly. While almost half of founders said it was difficult to hire talent in 2021, only 34% say the same today. Given the layoffs in 2023, it's possible that companies looking to hire had a larger pool of available talent.

Still, hiring is never easy, regardless of what else is going on in the broader market. Respondents are evenly split on whether things have got easier, harder or stayed the same. In terms of the latter, the number of respondents who say the talent market is 'unchanged' has remained stable over the past four years at around 35%.







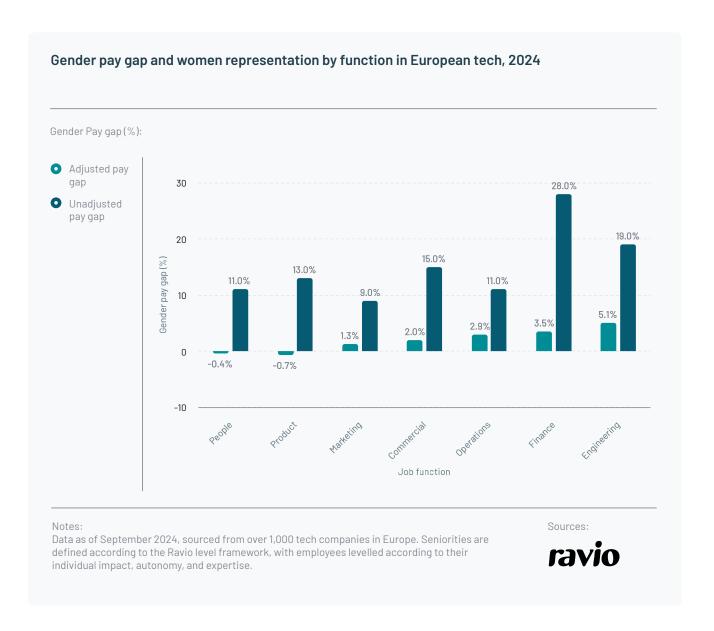
## Pay (and seniority) gaps prevail

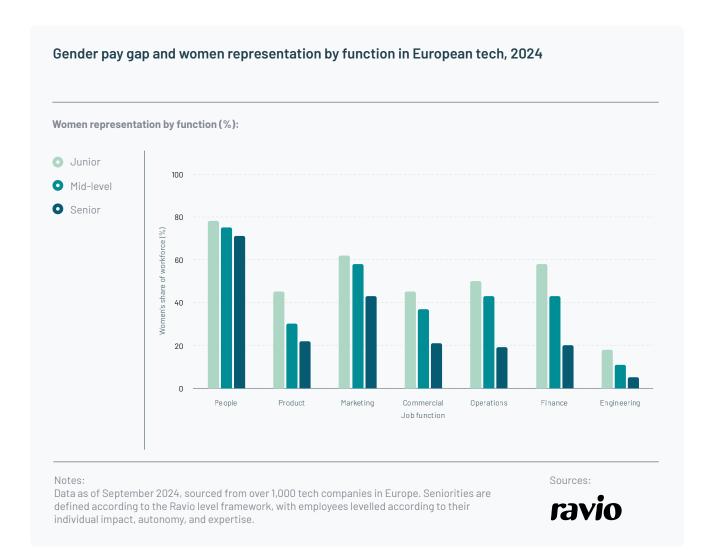
Europe's tech talent scene has grown leaps and bounds in the last decade, but some problems remain unsolved. When it comes to pay equality, notable wage gaps between men and women are still being reported in engineering and finance roles at European startups.

This problem is better understood by unpacking unadjusted and adjusted pay gap data. The former refers to the raw difference in median earnings between men and women, while the latter also takes into account broader factors affecting salary such as job level, job function, or the country they perform their work in. Adjusting the raw data to account for these helps us paint a like-for-like comparison and answer the question of whether men and women are receiving equal pay for equal work.

When zooming in on the finance and engineering functions, the high unadjusted pay gaps are driven by a lack of women in senior positions, whilst the high adjusted pay gaps point to a genuine pay equity issue, where men are paid more than women even after adjusting for factors like role, seniority, and location. We see a lack of female representation in the engineering function in particular, with women making up just 5% of executives.

By contrast, the people and marketing functions stand out as having high female representation and low adjusted and unadjusted pay gaps.





## Which sources are tech companies tapping for talent?

Trends in the engineering talent pool show a deepening of the bench of engineering talent available to companies building in Europe. Hiring patterns have fluctuated in response to market conditions, with a notable dip in 2020 likely as a result of the pandemic, followed by a rebound in the peak years of 2021 and 2022. A year later, the rising cost of capital encouraged firms to be more cautious about spending, including on hiring tech talent. This year, hiring for engineering roles has picked up again.

This vital talent pool - the backbone of most tech companies - has shifted over time towards more experienced sources, with tech now seen as a path chosen by more of our best talent. In 2015, 25% of all new hires came from other tech companies, compared to 38% today. This also represents a 170% increase since 2015 in terms of absolute talent movement.

While they account for a small share of the overall talent movement, large tech companies such as Microsoft or Amazon now contribute twice as many hires as they did in 2015. Non-tech firms remain one of the largest contributors of engineering talent, with 50% of new hires in 2024 coming from these firms.

The number of first-time jobseekers has fallen as a contributor to the total, as more established talent experiences the market pull of tech. Worryingly, the overall pipeline of new graduates has continued to fall this year, despite new hires across all other experience levels increasing year on year. Graduate hiring is a positive leading indicator of future talent availability, and the impact of the reduction in tech graduate programmes is likely to be felt a few years down the line.



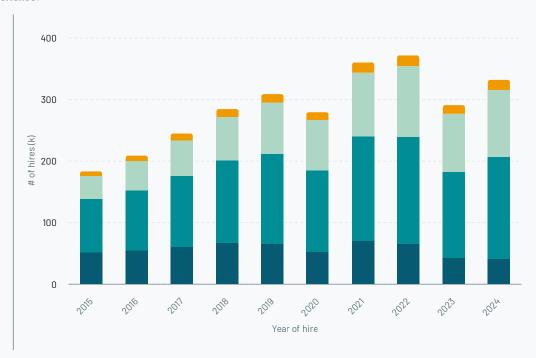




#### Count of engineering hires into European tech companies by previous experience, 2015 to 2024

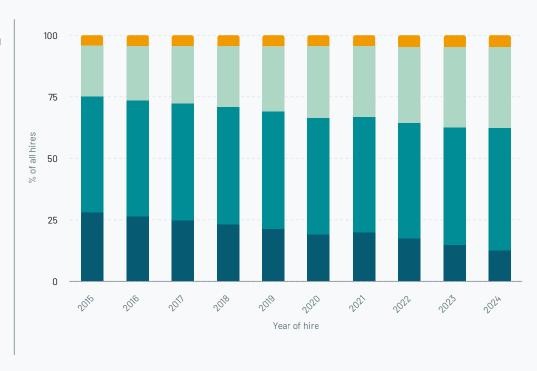
#### # by previous experience:

- Working for big tech
- Working for a startup
- Working for a non-tech company
- First job



#### % of total:

- Working for big tech
- Working for a startup
- Working for a non-tech company
- First job



#### Notes:

Data is as of 30 September 2024. 2024 is forecasted by adjusting for reporting lag and by extrapolating data as of September 2024. Big tech is defined as companies with more than 10,000 employees.

Sources:

atomico° Powered by

### **Tech talent nations**

In absolute terms, the UK, France and Germany have maintained their positions as the top tech nations over the past decade. However, compared to 2015, the tech race to the top has heated up, with several nations moving ahead in terms of employees per million inhabitants.

Finland has maintained its position at the top since 2015. It crossed the 10,000 per million population threshold a decade ago - a feat that only four European nations have now caught up with - largely due to the fact that Nokia, Europe's largest tech employer, is based in the country.

Even more remarkable is the growth of runner-up Estonia. The country has seen its tech workforce increase almost tenfold in the past decade, from more than 1,000 to almost 11,000 per million people. Estonia has played a major role in the creation of some of Europe's most famous unicorns, such as Bolt, Wise and, of course, Skype.

Despite significant differences, both of these 'small' nations have made innovation an imperative. Technology is a key factor in their ability to drive economic growth. Their governments play a crucial role in funding this innovation, not only through support for R&D and favourable tax regimes, but also through the adoption of technology across public services.





The biggest thing we need to do is change our mindsets, and recognise that entrepreneurship can help create even better, thriving and robust societies.

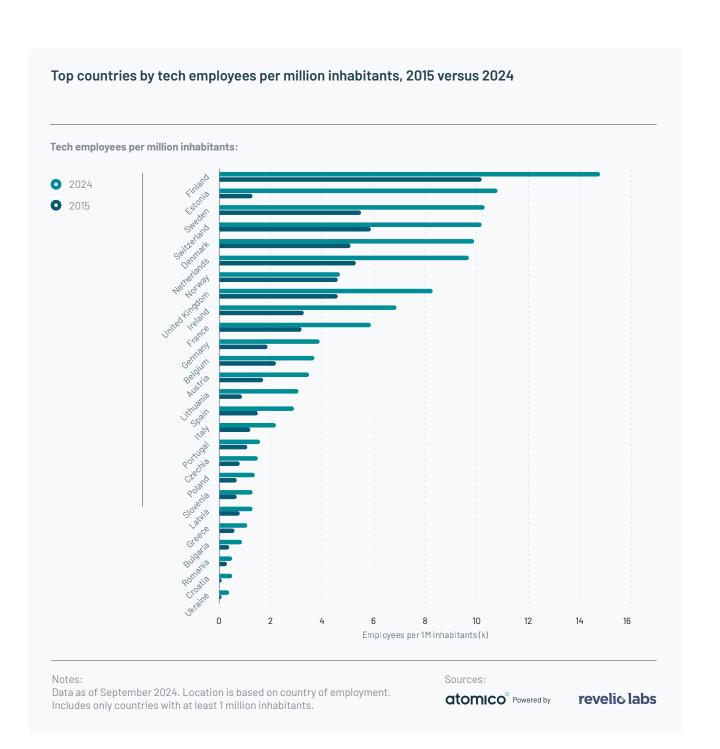
We have great ideas in Europe around how to think about culture and society, and we want to build the values that we have. But one thing we can learn from America is the "can do" attitude and a mindset that celebrates entrepreneurship, and couple this with thinking big. We need to get to the point where we feel like we can build companies that can go to Mars or the next generation of computing platforms. We still have a little bit of imposter syndrome thinking that we can do it. So we have a lot to build on, but we need to celebrate entrepreneurship and we need to dare to go big.

**Daniel Ek** CEO & co-founder, Spotify









atomico°

## Top countries by tech employees per million inhabitants, 2015 versus 2024 Tech employees in total: 0 2024 **O** 2015 100 200 300 400 500 # of tech employees Sources: Notes: Data as of September 2024. Location is based on country of employment.

Includes only countries with at least 1 million inhabitants.

atomico° Powered by





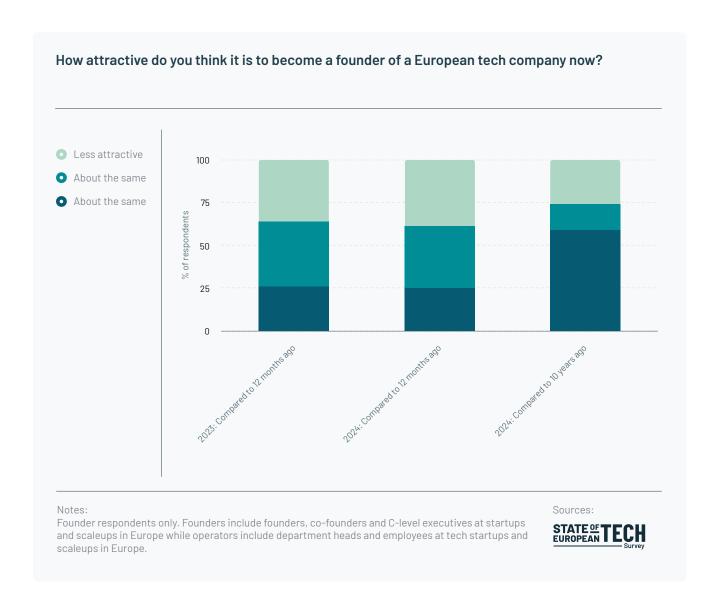


## Times have been tough, but founders remain optimistic

The past few years have been tricky for founders, marked by fundraising challenges and tough decisions around staffing. Understandably, this has led many founders to question whether current market conditions are conducive to embarking on the entrepreneurial journey.

This year, 39% of respondents said now is a less attractive time to become a founder compared to 12 months ago, which is a slight regression on last year's 36%. Only a minority of founders think we're out of the woods, with just 28% saying things are better than last year.

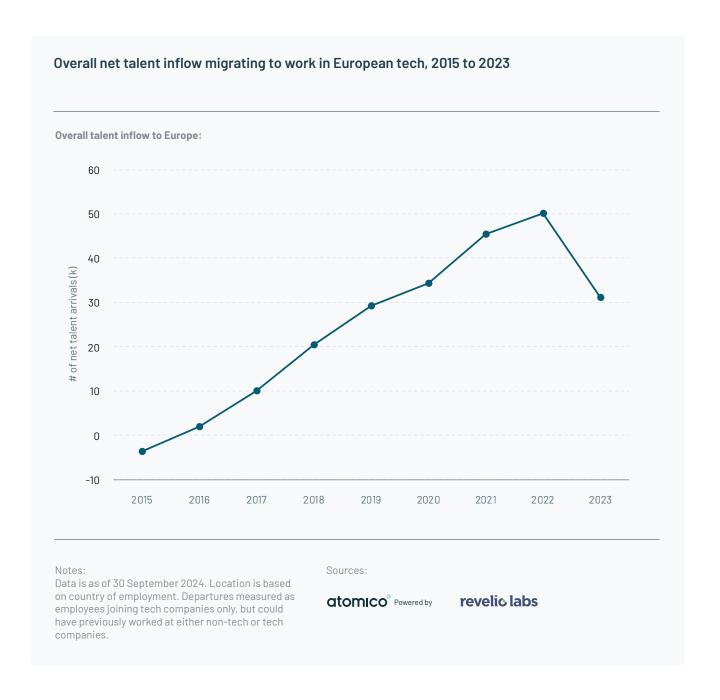
But looking at the bigger picture, the outlook is much more positive. When asked what things are like today compared to 10 years ago, the vast majority -59% – say it's a better time to be a founder, despite recent setbacks.



## European tech talent growth is net positive overall

While most of the new tech jobs will have been filled by those within the country, the inflow of tech talent into Europe from around the world is a strong indicator of Europe's standing in the global tech industry. For reference, out of the 3.5M people working in tech as of 2024, close to 80% will have originated from Europe. The remaining 20% will have come from the US, China, India or even Brazil, which have been some of the top contributors over the years.

Since 2016, the continent has been a net beneficiary of talent - that is, it has attracted more people on balance than it has lost. But since 2022, Europe has lost more talent than it has gained from the US, Australia and Canada. If European tech can't become more competitive, it risks missing out on the valuable perspectives and networks that these professionals bring.







#### Overall net talent inflow migrating to work in European tech, 2015 to 2023 Top talent contributors to Europe: United States India 15 Australia Canada # of net talent arrivals (k) 10 Brazil China South Africa -5 -10 2015 2016 2017 2018 2019 2020 2021 2022 2023 Sources: Notes: Data is as of 30 September 2024. Location is based on country of employment. Departures measured as employees joining tech atomico Powered by revelio labs



non-tech or tech companies.

companies only, but could have previously worked at either



Europe's technical talent pool has grown phenomenally, 24% year over year since 2015. But what's truly remarkable is how this talent is being deployed.

From Al pioneers in Paris to deep tech innovators in Berlin, we're seeing founders tackle humanity's biggest challenges. With over 35,000 early-stage startups active across the continent, Europe isn't just growing talent, it's transforming it into world-changing companies.

#### **Andreas Chatzakis**

Director, Startups, AWS (EMEA)

## **Competition for tech talent is fierce**

The net flow of talent from the US to Europe has gone from negative to positive - and back again. The overall trend has been positive, as the outflow of talent has been declining for most of the period, but competition for the most experienced and scarce talent remains fierce.

When the data is broken down by experience level, the net flow of junior talent from the US to Europe has steadily increased over time. Mid-level and senior talent, however, has started to decline over the past 24 months.

In terms of function, technical employees, labelled as 'tech', are moving to the US in greater numbers. We find the usual suspects among the top talent movers - big tech companies such as Google, Microsoft, Amazon or IBM dictate the tech talent flows.

This loss of talent could be linked to the tech layoffs seen around the world in 2022, where visas may have been lost along with jobs, or perhaps "back to work" policies initiated by a number of large tech companies are forcing remote workers to return to the office. Since then, the numbers have trended closer to balance, but remain subdued.

To stem the flow of senior (and tech) talent out of Europe, startups and scaleups need to consider how their offers and prospects – including salaries, equity compensation and benefits – compare to what's available abroad. But it doesn't stop there. There is also a need to increase Europe's competitiveness to ensure that the best and brightest talent choose to build in Europe rather than elsewhere.







#### US to Europe net talent migration by job seniority and type, 2015 to 2023

#### Net talent migration by job seniority:

- O Mid
- Upper mid (including manager, team lead, director, head of)
- Senior
- Junior



#### Net talent migration by job type:

- Tech
- Product & design
- Sales & marketing
- Finance & back office



Data is as of 30 September 2024. Location is based on country of employment. Departures measured as employees joining tech companies only, but could have previously worked at either non-tech or tech companies.

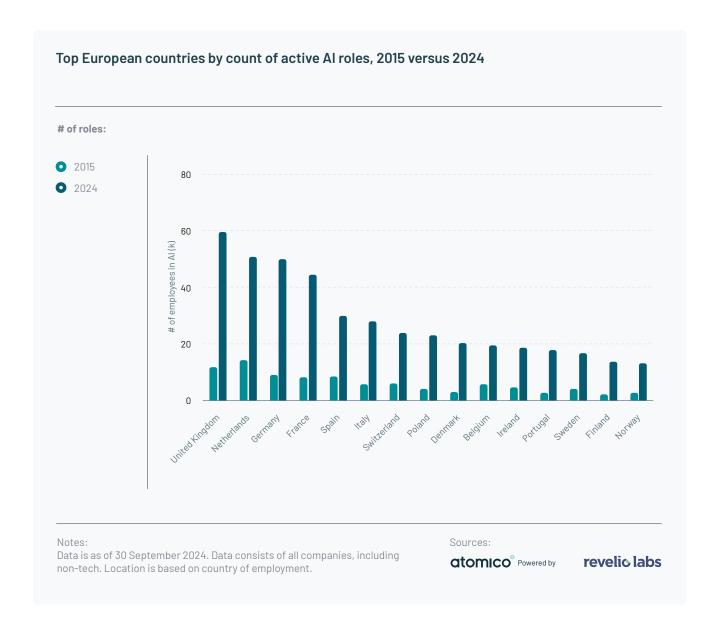
Sources:

atomico Powered by

## Clusters of AI talent are forming across Europe

Europe's Al talent landscape is almost unrecognisable today compared to a decade ago. Back in 2015, there were small pockets of Al talent scattered across the continent. Since then, there has been a widespread increase in Al roles across Europe, with clear centres of excellence emerging across the continent. This trend is indicative of the strategic importance of Al to future economic growth, with the increase in roles reflecting the growing demand for expertise.

The UK leads the way with nearly 60,000 active Al roles — an impressive five-fold increase on the 12,000 positions in 2015. The Netherlands and Germany follow with similar leaps of 3x and 5x respectively. Relative to population size, countries like Ireland benefit from hosting the European headquarters of large US tech companies.

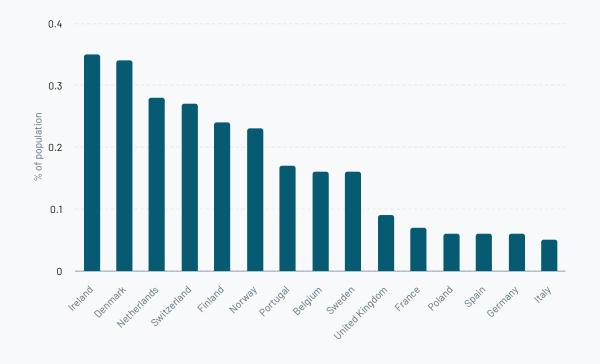






#### Top European countries by count of active Al roles, 2015 versus 2024

% of population for 2024:



Notes:

Data is as of 30 September 2024. Data consists of all companies, including non-tech. Location is based on country of employment.

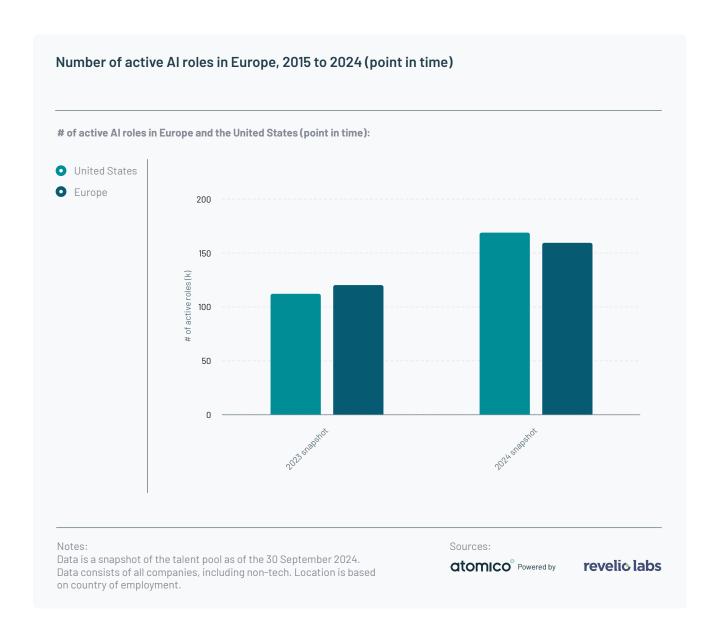
Sources:

atomico Powered by

## **Tight race for AI talent**

Over the past 10 years, the rise of Al adoption has led to more than a six-fold increase in Europe. Last year, Europe was ahead when we took a snapshot of the number of active Al roles in the region, while this year the trend has reversed in favor of the US.

There is a tight race for AI talent, and the US is in a sprint. It appears that companies based in the US are hiring for these roles faster than in Europe. While Europe is home to world-renowned academic hubs — including Oxford University, the Max Planck Institute for Informatics and ETH Zurich — that have long fostered these skills, companies in the region might be missing a trick if they are not taking full advantage of it.



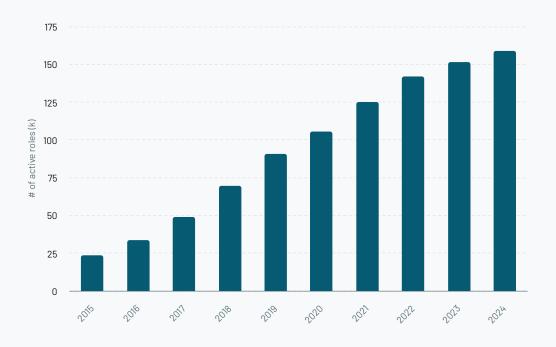






#### Number of active AI roles in Europe, 2015 to 2024 (point in time)

# of active AI roles in Europe 2015 to 2024:



Notes:

Data is a snapshot of the talent pool as of the 30 September 2024. Data consists of all companies, including non-tech. Location is based on country of employment.

Sources:

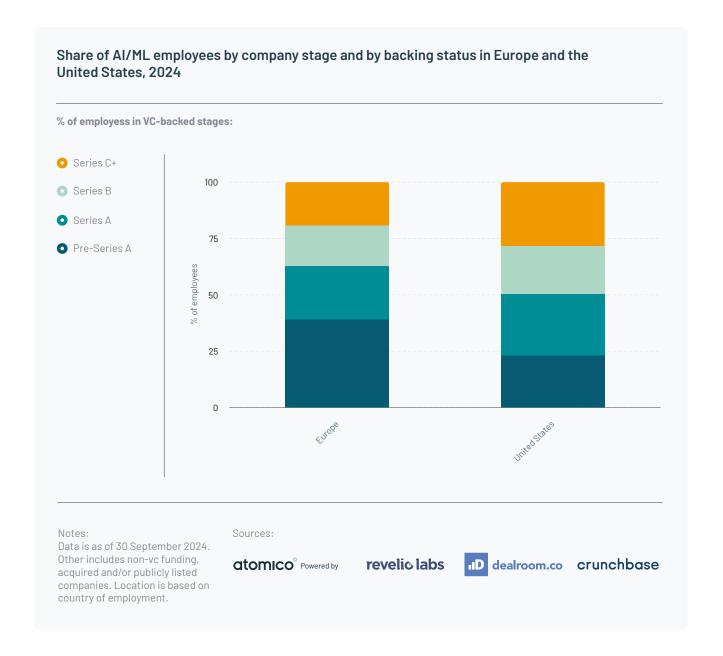
atomico Powered by

# Can Europe translate its Al talent into highly-funded companies?

Europe is neck-and-neck with the US in terms of the growth of its overall Al talent pool. In Europe, private venture-backed companies hire around 13% of the total Al talent pool, compared to 16% in the US. The majority of talent in the US is concentrated in either large publicly traded tech companies or other private, non-VC-backed companies.

When we segment this data to look only at venture-backed companies, Europe is more skewed towards early-stage startups. When broken down by funding stage, the majority (39%) work in pre-Series A companies, compared to 23% in the US. This is in line with the broader trend in the talent base, with 40% working in pre-Series A companies.

This data reiterates the critical importance of local, growth-stage capital in Europe to support teams as they develop into leading Al companies. This will be crucial for the region to scale the impact of its rich Al startup ecosystem.









### Share of AI/ML employees by company stage and by backing status in Europe and the United States, 2024 % of employess by backing status: Other 100 Private VC-backed Unfunded 75 tech startups % of employees 50 25 Notes: Sources: Data is as of 30 September 2024. Other includes non-vc funding, revelio labs atomico Powered by dealroom.co crunchbase acquired and/or publicly listed companies. Location is based on country of employment.





We've got world class universities, some amazing Al science and research here in Europe. Being able to tap into that has been fantastic.

There's so much opportunity for talented engineers now that if the startup fails, they're not going to be left high and dry. There's such an ecosystem to to support. The willingness of people to jump into to tech start-ups to to get building, to iterate, to grow or fail fast, has really blossomed and allowed us to build the team that got our first prototype to get a very quickly.

#### **Alex Kendall** Co-founder, Wayve

# European founders are behind around 10% of US tech startups

In the US, the percentage of companies being founded by European expats has risen.

While the figure had remained relatively stable since 2015, hovering between 7% and 9%, it climbed notably following the pandemic. In 2021, the share of new US companies with at least one founder who previously worked in Europe rose to 11%, before hitting a peak of 12% in 2022. Although the number has levelled at 11% again, they remain higher than a decade ago. In other words, European founders are powering at least 10% of US innovation.

Conversely, the share of European companies being set up by US founders has always been lower, but still represents a meaningful number at around 6% across the period. While 2017 saw the percentage peak at 7%, coming nearly to par with the European founders starting companies in the US, the delta has since widened.

While more European founders are heading to the US to set up companies than vice versa, the numbers suggest it is far from a mass exodus. Having said that, it still represents a meaningful number of companies — on average each year, this talent leakage leads to at least 800 companies starting in the US instead of Europe.

#### United States companies with European founders and European companies with United States founders by founding year, 2015 to 2024 % of companies founded: Share of US companies with at least one European founder 12 Share of European % of all companies founded companies with at least one US founder 2015 2 0 1 6 2 017 2018 2019 2020 2021 2022 2023 2024 Sources: Data is as of 30 September 2024. To adjust for lags in reporting, we compare revelio labs atomico Powered by snapshots of data at different points in time, which allows us to estimate future growth of current figures by extrapolating differences between time points. 2024FY is based on data adjusted for lag effect and extrapolated based on data as of September 2024. Location is defined by first country of employment.

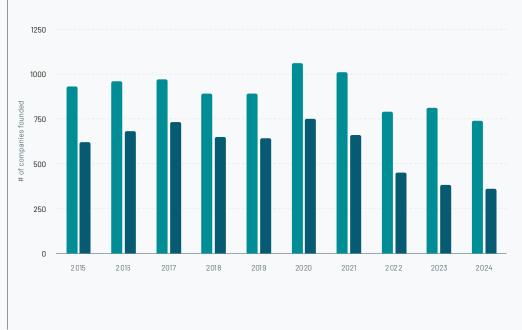




#### United States companies with European founders and European companies with United States founders by founding year, 2015 to 2024

#### # of companies founded:

- US companies with at least one European founder
- European companies with at least one US founder



Data is as of 30 September 2024. To adjust for lags in reporting, we compare snapshots of data at different points in time, which allows us to estimate future growth of current figures by extrapolating differences between time points. 2024FY is based on data adjusted for lag effect and extrapolated based on data as of September 2024. Location is defined by first country of employment.

Sources:

atomico Powered by

## Europe has more founders starting companies than the US

Tech entrepreneurship in Europe is as attractive a career path today as it was a decade ago, despite the economic ups and downs seen over that period.

So far in 2024, we have already identified 16,000 unique founders who have started companies, which is on par with 2015 levels. We can expect this number to continue to grow as more founders update their experience over time. For example, since last year we have identified nearly 2,000 additional founders who started their businesses in 2023.

Europe has also consistently seen more founders starting companies than the US.

For many, this is not their first rodeo. Serial founders with two or more businesses under their belt now make up 9% of the founder pool, up from 6% in 2015. These repeat founders bring invaluable experience to their next ventures, while also mentoring new generations of talent.

#### Number of founders starting companies per year in Europe and the US by previous founding experience, 2015 to 2024 30 US serial founders 25 US repeat founders 20 # of founders(k) US first-time founders 15 Europe serial founders 10 Europe repeat founders 5 Europe first-time founders Enlobe nz Enlobe 12 Enlobe US Enlobe S 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 Sources: Notes: Data is as of 30 September 2024. Location is based on where company is incorporated. To adjust for lags in reporting, we compare snapshots of data at revelio labs atomico Powered by different points in time, which allows us to estimate future growth of current figures by extrapolating differences between time points. 2024YTD is based on data adjusted for lag effect and extrapolated based on data as of September 2024.



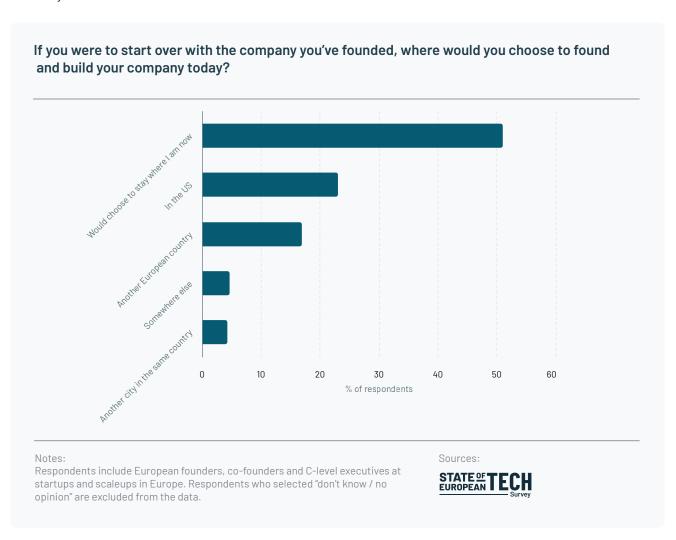




## **Europe attractive but US on the horizon**

If they had it to do over again, would Europe's founders still choose to set up their businesses here? The answer is yes. In a huge vote of confidence in the continent's startup ecosystem, more than 50% of founders told us they would start their company in the same country they are in now, while 17% said they would change countries but stay in Europe.

This is in line with the results of our first survey in 2015, and shows just how much Europe's founders believe in the local ecosystem.

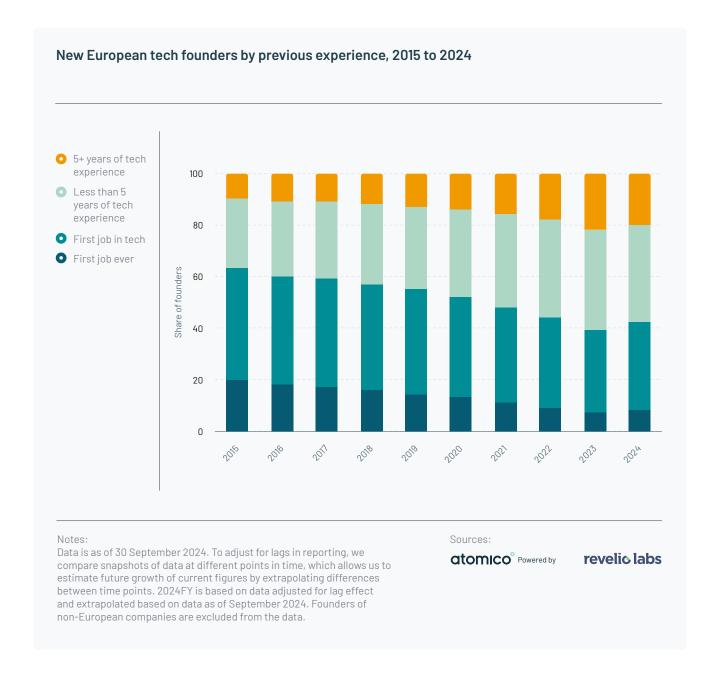


## Europe's founders are more experienced than ever

In Europe, the share of founders with five or more years experience in the tech sector has doubled over the past decade.

In 2015, just 10% of founders fit this description. Today the figure is 20%, while the share of entrepreneurs whose first ever job was founding a company has more than halved to 8%.

This shows us how robust Europe's tech sector has become over the past decade. Aspiring founders now have more opportunities to train up in the sector and learn from the best before setting up. In fact, since 2015 there has been a near three-fold increase in the share of founders with more than 10 years of prior experience in the tech industry.





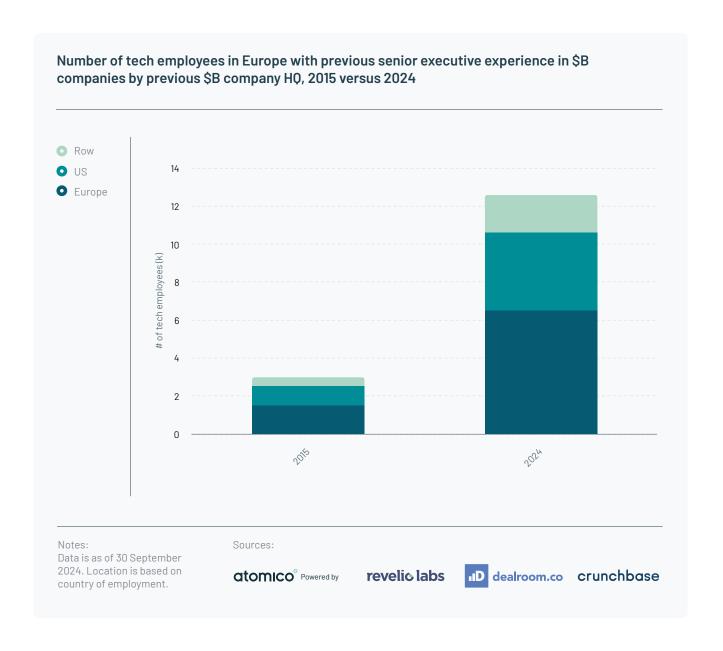


## More senior tech talent than ever has unicorn leadership experience

Tech professionals with senior leadership experience at billion-dollar companies are becoming an ever-more common feature of Europe's talent market.

Today, over 12,000 tech professionals in Europe list a senior leadership role at a billion dollar-plus company on their CV – roughly four times as many as in 2015.

Most are honing their skills at local companies, with established European firms such as Booking.com providing a training ground for new generations of leaders. But there is also a deep pool of experienced senior talent being trained by international companies, who are then recycling the knowledge and networks gained within the European tech ecosystem. Almost a third of these executives have worked for US unicorns, with Airbnb, YouTube and Facebook being the most common former employers. A further 16% have worked for companies headquartered elsewhere in the world, with Canada's Shopify and China's ByteDance contributing significant amounts of senior talent to the European ecosystem.



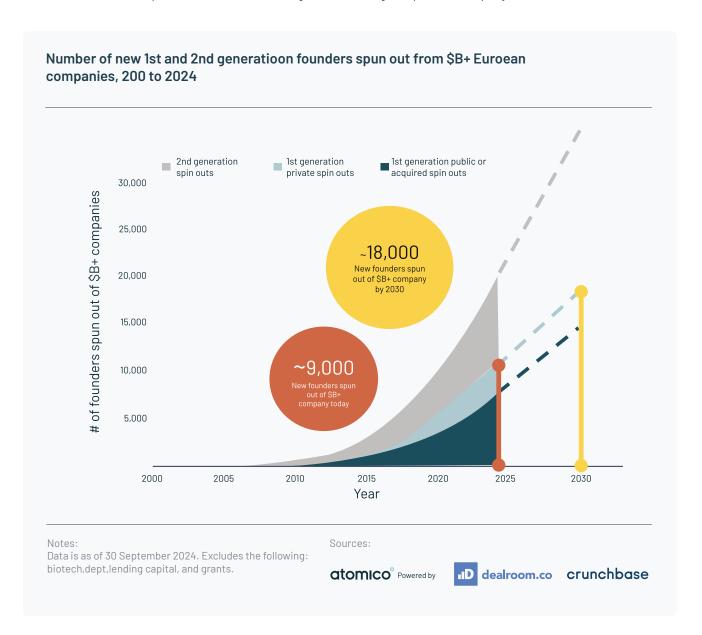
## Startups are spinning out exponentially from Europe's top companies

The compounding effect of Europe's technology flywheel becomes clear when we look at how many new companies are spun off from billion-dollar success stories.

This graph shows the exponential rate at which this is happening. Since 2000, more than 9,000 new companies have been spun out of \$1B+ European companies. By 2030, we could expect this number to have multiplied to around 18,000.

Unicorn companies that achieve exits are the primary drivers of this flywheel. Exits unlock both capital and talent, fueling further growth and putting the flywheel firmly in motion whereby outsized outcomes ripple their benefits through the wider ecosystem. The founders that emerge from these companies have a head start thanks to the knowledge and networks they have absorbed by working with best-in-class teams and founders.

But that's not all — the companies they found go on to generate their own spinouts, too. There are an additional 8,500 founders in Europe who can trace their origins back to a 'grandparent' company worth \$1B+.









## Exits do speed up talent recycling

Exits are crucial for creating the liquidity needed to grease the talent flywheel. The majority (75%) of new companies founded by the alumni of \$B+ companies are started after the exit event, not before.

Source

### atomico

Powered by



crunchbase

revelio labs

Of particular note is that the rate of new company creation for exited \$B+ companies is double that of their private peers. The average private \$B+ company in our dataset has spun out 17 new founders while an exited peer lands at 33.

Source

#### atomico

Powered by



crunchbase

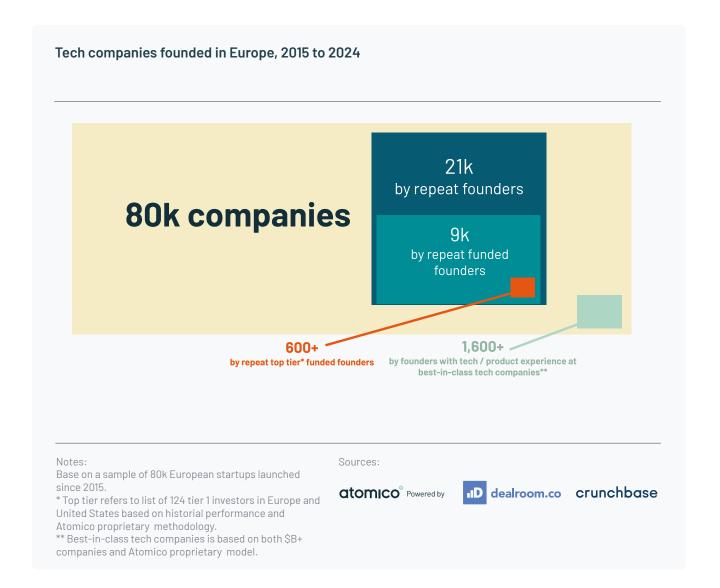
## Success stories from last decade have turned belief into mafias...

The recycling of talent continually raises the bar for the entire ecosystem, as one generation of successful founders nurtures the next. The past decade has been instrumental in instilling the belief that great companies can come from anywhere. The last decade has shown the multiplier effect of an extensive alumni network.

Skype is a prime example, with more than 900 companies founded by its alumni around the world. Members of the so-called 'Skype Mafia' have even formed their own clusters of next-generation founders. The Al savings app Plum, for example, was founded by a former Wise employee — and Wise itself was co-founded by a Skype alum.

First, we see that among the impressive quantity of tech companies founded in Europe since 2015 — more than 80,000 — a quarter have been started by repeat founders. Of these, around 600 were started by repeat founders who also received funding from top-tier investors.

There are also more than 1,600 companies started by founders with previous experience in engineering or product roles at some of the world's best technology companies. This is one aspect of the continuous recycling of talent that drives the ecosystem forward.









## ...Proving the talent flywheel is what determines Europe's future billion-dollar successes

Founders with experience at top technology companies represent only a small proportion of the total founder pool. Those who are repeat entrepreneurs or who have previously secured backing from Europe's top VCs make up an even smaller number.

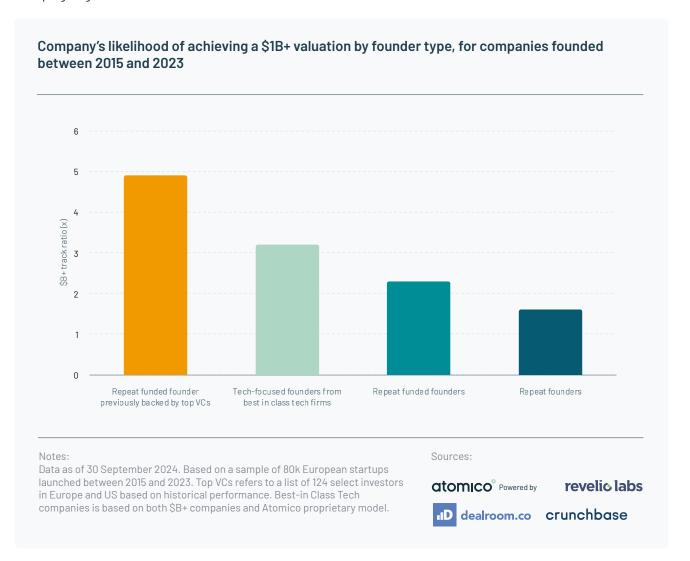
Yet when it comes to which of Europe's new companies are most likely to reach a billion-dollar valuation, these founders are vastly overrepresented.

It's logical that attributes such as having founded a company before or being backed by a top-tier investor would lead to a higher likelihood of success. Indeed, repeat founders are 1.6 times more likely to achieve a billion-dollar valuation with their next company, and those previously backed by top VCs are almost five times more likely.

First-time founders can also outperform. Those with previous experience in a technical or product role at a world-class technology company are 3.2 times more likely to build a billion-dollar company themselves.

These findings underscore the value of networks, knowledge and expertise acquired along the way that can be leveraged for better results.

The bottom line is that success breeds success — and that's why it's important to keep the talent flywheel in Europe going.

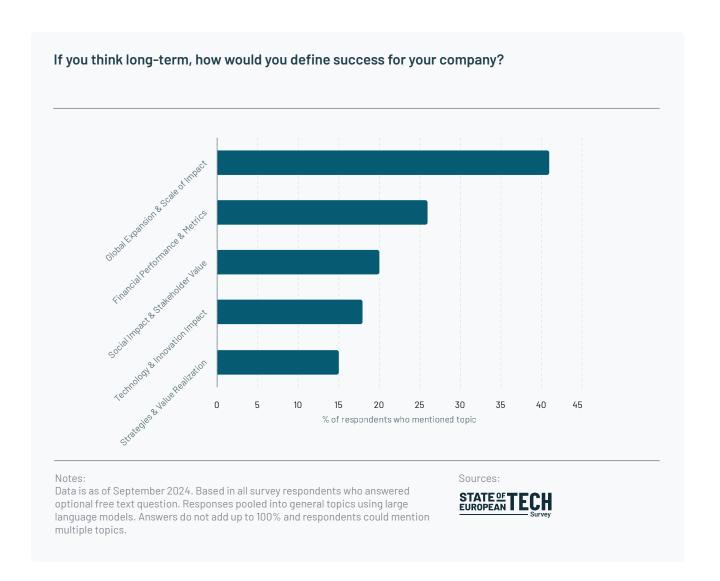


## European founders are as ambitious as ever

European founders continue to shoot for the stars. Notably, beyond the goals of revenue targets, market leadership and big exits, many founders cite making a positive impact as their ultimate goal.

For 41% of respondents, their ambition is not to build a business, but to "leave a social legacy with a significant environmental and financial contribution". Some respondents told us they will achieve success when their brand is "ubiquitous". What struck us as we read through the most ambitious statements from the thousands of responses was this clear alignment of their success with positive outcomes for the planet - for example, one respondent mentioned "permanently removing 1 gigatonne of CO2 per year, profitably", another is looking to "build a generational business that can reduce electricity costs by 95%" or "remove gigatonnes of CO2 every year".

The ability to impact society is also evident in some of the metrics communicated by founders – "1 billion happy users and 1,000 happy employees", or having "the largest market capitalisation in Europe".







## Investors







## Investors

Here, we look at how Europe's investor landscape has shaped up over the past decade. From angels and venture capital firms to large institutional investors, we dive into who is backing the venture asset class, how their perspectives changed over time and what their priorities are going forward.







### **Europe's investor bench** nearly 6,000 strong

The number of unique investors participating in European venture rounds has more than doubled since 2015, providing founders with a much more diverse pool of capital to access.

### \$75B growth funding gap prevails

The continent has levelled up the volume of capital invested, although growth-stage success stories are still in large part funded by investors from outside Europe.

### 66% of first cheques in come with operational experience

The majority of angels investing into European startups today are startup founders themselves. A flywheel is now in full swing where founders recycle capital, expertise and networks into the next generation of European success stories.

### Only 0.007% of UK & **Ireland pension AUM** gets invested in VC each year

Not all pension funds are pulling their weight and regional differences prevail in European pension fund's commitment to VC investing. To help bridge the growth funding gap, DACH and UK & Ireland will need to lean in.

## **Summary**

Over the past two years, investors have faced a challenging fundraising environment, with profits stalling and in some cases returning to levels last seen five years ago. However, despite the macroeconomic pressures, Europe's venture ecosystem has matured significantly over the past decade, both in terms of quantity, with the investor and fund base expanding, and quality, with LPs noticing the increased sophistication of GPs. For those funds with capital to invest, the market opportunity is also stronger than ever.

However, Europe's reliance on international capital at the growth stage raises concerns about its capacity to develop competitive, homegrown champions. While progress has been made, unlocking additional growth funding is critical for Europe to scale promising startups and increase its capacity to fund its own success. Encouragingly, European VCs are stepping up, with record numbers of large funds being raised in 2023, underscoring their growing ability to back local success stories.

Government initiatives and pension funds have the potential to play pivotal roles, but significant regional disparities remain, particularly in markets like the DACH region. While liquidity concerns still deter some LPs from committing, experienced investors see long-term potential in European venture. If Europe continues to diversify its funding sources and fill the growth-stage funding gap, it will be better positioned to compete globally.

## Europe's investor bench continues to expand

Over the past decade, Europe's venture capital landscape has undergone a significant transformation, with the continent becoming a magnet for a diverse and international community of investors. So far in 2024, nearly 6,000 unique investors from Europe, North America and Asia have invested capital on the continent. At a regional level, the change is also notable, with the number of investors at least doubling across all regions and even tripling in the Nordics over this period.

Looking specifically at investors based in Europe, the growth since 2015 highlights how far the ecosystem has come. Back then, just 2,100 unique European-based investors participated in rounds. By 2024, that number had risen to more than 4,000. And within the subset of very active investors (who make five or more investments per year), we have also seen a significant increase of 54% since 2015.

International investors also continue to be a significant driver of overall investment activity, accounting for 30% of the unique European investor pool in 2024, up from 24% in 2015. Four times as many North American investors are backing CEE startups in 2024 compared to 2015, while the number of Asian investors in the Nordic region has increased five-fold. These foreign investors play an important role in connecting European tech with further global capital, expertise and new market opportunities.

But there is still room for growth. While the number of investors in Europe has grown tremendously, it still lags behind the US ecosystem, which had more local investors in 2015 than Europe has today.



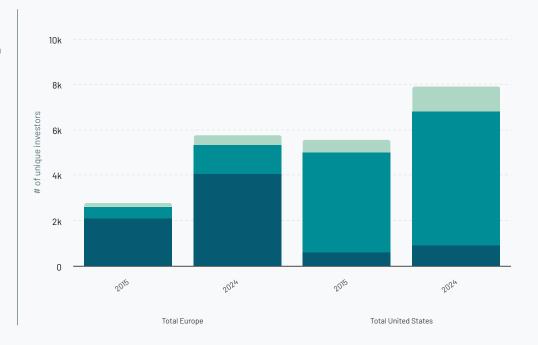




#### Number of unique investors investing in European tech by investor HQ region, 2015 versus 2024

#### All active investors, Europe versus United States:

- Asia
- North America
- Europe

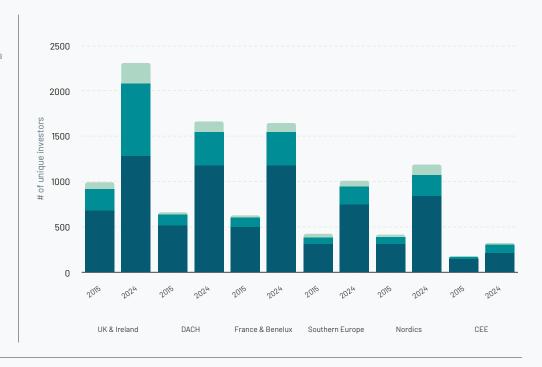


#### All active investors, Europe regions:

Asia

North America

Europe



Data is as of 30 September 2024 and extrapolated to full year based on average share of realised investors by September in the past three years. Excludes the following: biotech, debt and grants.

Sources:

atomico Powered by



crunchbase

## Multiplier effect of superangels

Outsized success stories lead to outsized impact for local startup ecosystems. This manifests itself both in the number of investments the founders of these companies make, but also their contribution to building their local market. Topping the leaderboard is Taavet Hinrikus, the co-founder of Fintech giant Wise. He has made more than 90 investments to date with roughly half based in either the UK or Estonia, the two key Wise hubs.

It's a recurring theme that many of Europe's top angel investors with backgrounds building \$1B+ companies focus most of their investment activity in their home countries. For example, Guillaume Lestrade, the cofounder of photography marketplace Meero, has made more than 80% of his 50+ mapped investments into companies based in France, which is also home to Meero's core operations. The same can be said about Copenhagen-based Just Eat co-founder Jesper Buch, who has built a portfolio focusing almost exclusively on Danish startups.

The multiplier effect that one successful exit can have on its local ecosystem (and beyond) cannot be stated enough.

#### Top angel investors among European \$B+ company founders

(Co-) Founder name	\$B+ company name	# of known angel investments	\$B+ company founding location	% of local investments out of total
Taavet Hinrikus	Wise	90+	United Kingdom / Estonia	53%
David Helgason	Unity	70+	United States / Denmark	53%
Guillaume Lestrade	Meero	50+	France	81%
Tom Blomfield	Monzo	40+	United Kingdom	60%
Jesper Buch	Just Eat	40+	Denmark	92%
Alexander Chesterman	Cazoo	40+	United Kingdom	90%
Nicolas Brusson	BlaBlaCar	30+	France	44%
Maximilian Tayenthal	N26	30+	Germany	68%
Stefan Jeschonnek	SumUp	30+	Germany	45%
Francis Nappez	BlaBlaCar	20+	France 92%	

Notes:

All time investments as of September 2024. Based on publicly available investment data only.

Sources:

atomico

**#**PitchBook₃



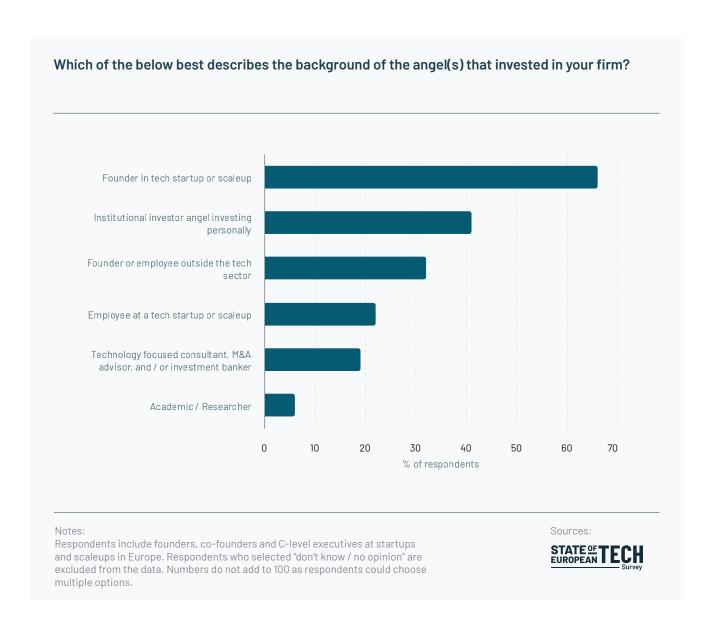




## First cheque comes with operational experience

A critical component of the startup ecosystem is the all-important first cheque that helps many companies get off the ground. Founders now represent the majority of angel investors - who are normally the ones making these very early investments — in European startups. In fact, almost 66% of startups surveyed have an angel investor who fits this description.

These investors are of particular importance in any startup ecosystem, reinvesting not only capital but also valuable domain expertise and personal networks into the next generation of company builders.







Angel investing shifted from a fragmented network of early supporters to a robust and influential part of the venture ecosystem.

Successful European founders are turning to angel investing, bringing deep industry knowledge, networks, and strategic value to startups. Syndicates democratise access, enable smaller investors and increase diversity in thought. Yet, gender diversity remains a challenge. To drive momentum, let's continue to empower a broader representation among founders, GPs, and LPs, alongside a more pan-European approach.

By reducing barriers like the scattered legal entity landscape, we can foster a streamlined, cross-border investment landscape, enabling efficient capital flow and talent mobility throughout Europe's startup ecosystem.

#### **Julia Dous**

Investor, Talent Advisor and Evangelistas

## Founders value partnership and brand alignment

Across all the founders surveyed, alignment of vision and purpose is what they most want from an investor. The importance of this increases with the founder's experience in the industry, with 40% of entrepreneurs who have been in the industry for more than a decade choosing this, compared to 29% of those who have been in the industry for less than five years.

Most founders are looking for investors who can be a long-term partner as they pursue their growth ambitions, while VCs have a different view of what it takes to win. Interestingly, while founders place significant weight on vision alignment, VCs have consistently ranked this factor lower over the years we have asked this question.

However, one of our readers pointed out that it may not be as different as it seems. "Most VCs would understand that their reputation is tied to their brand, but founders don't seem to value this as much as VCs think. What founders value is alignment of vision/purpose. They want to know that VCs understand them and will work with them to create the future," says James Clark, Marketing Director at Molten Ventures. The more VCs communicate about their vision and purpose, the easier it is for founders to proactively seek out the VC brands with which they are most aligned.



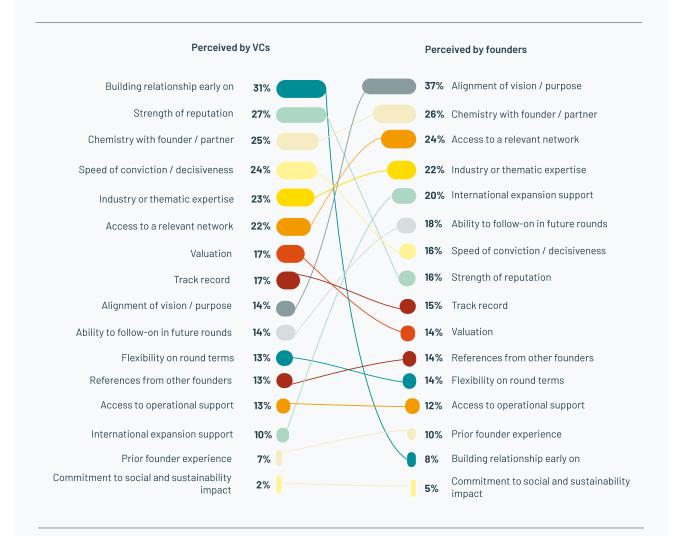




Another area that may be underestimated is the need for greater support for international expansion, where there is a 10 percentage point difference between the responses of VCs and founders. European start-ups typically need to expand outside their home market fairly early in their scaling journey and clearly value investor support and experience in scaling previous portfolio companies.

For both groups, valuation ranks relatively low, suggesting that strategic alignment and operational support trump financial terms in investment partnerships. As the pace of investment continues to accelerate, alignment with founders will be key to winning the most competitive rounds.

Over the past 12 months, and thinking generally about market, what in your opinion have been the most decisive factors to win a competitive deal situation (VCs)? What are the most important considerations when selecting an investor to lead your next round (Founders)?



#### Notes:

Founder and VC respondents only. Respondents who selected "other" are excluded from data. Numbers do not add to 100 as respondents could choose multiple options.

Sources:



## Investments in European VC have tripled in the decade

Since 2015, a total of \$154B of funding has been raised by European VCs. This is roughly a 3x increase compared to the estimated \$54B raised over the prior decade.

\$154·B

Source

atomico

Powered by



### Still a challenging VC fundraising landscape

Europe's VC fundraising environment is showing signs of recovery after hitting a five-year low in 2023. VC fundraising is a slow process, and the reported funding numbers reflect the efforts of VCs over the last year or more of fundraising. Therefore, the reported funding numbers in 2023 are a lagged view of market sentiment and we are only now seeing the shift in sentiment from the peak years reflected in the numbers.

Since 2015, total VC fundraising has been on a steady upward trajectory, peaking at over \$25B in 2022. Last year was a stark contrast to this activity, with H1 fundraising falling to \$6.3B, a significant change from the \$15.9B raised just six months earlier. Overall, VC fundraising in 2023 was down by more than 40%. Overall, VC fundraising in 2023 was down by more than 40% and H1′24 results show a continued decline of 8% on the previous year.

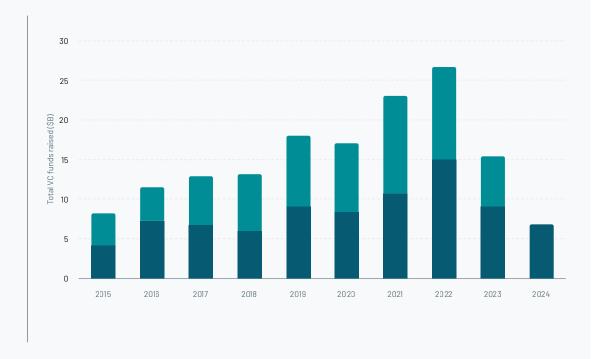






#### Overall VC funds raised (\$B) per year, 2015 to H1'24





Taken from the European Data Cooperative, developed by Invest Europe. EDC data converted at EUR:USD of 1.0885, the rate on 17 July 2024. The data shows incremental amounts in each year for venture funds, not only final closing.

Sources:



## Fundraising timelines inch back to long-term averages

Over the past decade, US VC funds have been quicker to raise successive funds. On average, it has taken European VCs roughly 10 months more to raise consecutive funds than their US peers, averaging 3.2 years versus 2.4 years in the US.

2021 saw a significant acceleration in Europe, matching US VC's timelines for the first time, followed by a subsequent cooling as market conditions changed. The same pattern played out a year later in the US, with 2022 being the speediest fundraising year on record.

Facing the new market reality, funds on both sides of the ocean have had to readjust expectations, with median timelines now merging back to 10-year averages. This aligns with LPs' preferences too, as it provides them with greater time diversification.





The last 12 months have seen a continued slow pace of both deploying capital in private markets and returning capital to LPs via exits.

Substantial dry powder remains tied up in funds, and as such, LPs have been increasingly selective in their private market allocations. The flight to quality has continued in 2024, with LPs focusing on key VC relationships. It has been observed that managers are using this 'down time' in M&A activity to address weaker performers in their portfolio in advance of their next raise.

#### **Gavin Rees**

Head of Strategic Fund Solutions, HSBC Innovation Banking UK







#### Median years between funds for European and United States VCs, 2015 to 2024

- O Europe (10-year average)
- United States (10-year average)
- Europe (median)
- United States (median)



Notes:

Data is as of 30 September 2024.

Sources:

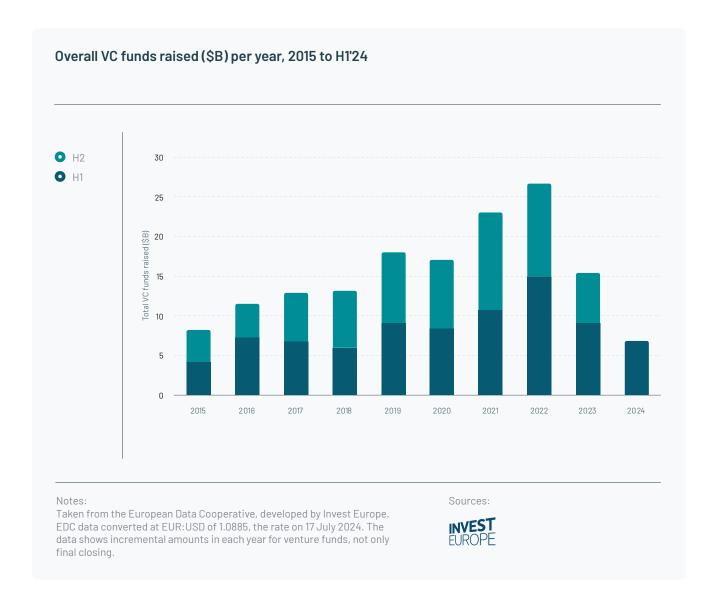
**#**PitchBook.

## Dry powder availability beginning to flatten

Over the past decade, the total dry powder — the amount of committed but unallocated capital available to venture capitalists — has increased significantly. Including growth funds, data from Invest Europe shows there has been a threefold increase in dry powder between 2015 and 2023, from \$34B to \$104B.

This growth curve is now beginning to flatten, likely reflecting the challenging fundraising environment that is starting to show up in the numbers. While the availability of dry powder increased by 44% between 2018 and 2020, it rose by a more modest 13% between 2021 and 2023.

Nevertheless, European venture funds have access to a significant amount of deployable capital, suggesting GPs still have meaningful firepower to invest in current and upcoming cohorts of European startups and scaleups.









## A decade of growth in VC investments

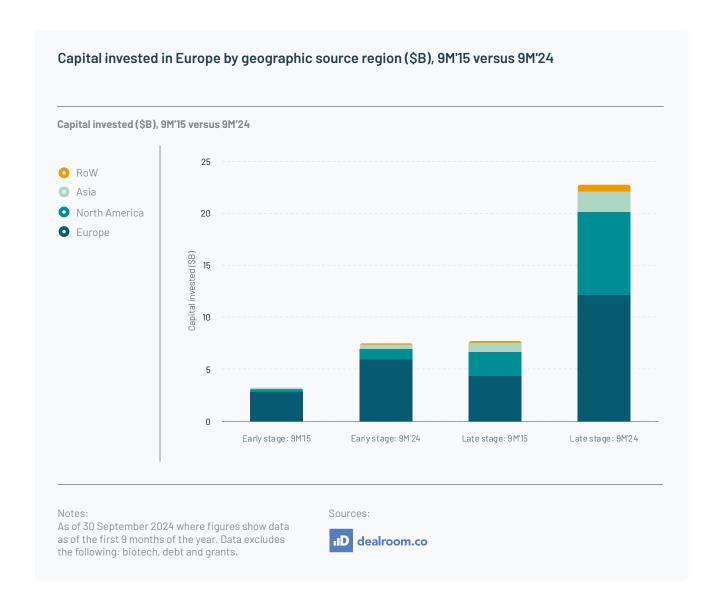
The volume of capital invested in European early- and growth-stage startups has increased significantly since 2015, more than doubling for the former and tripling for the latter.

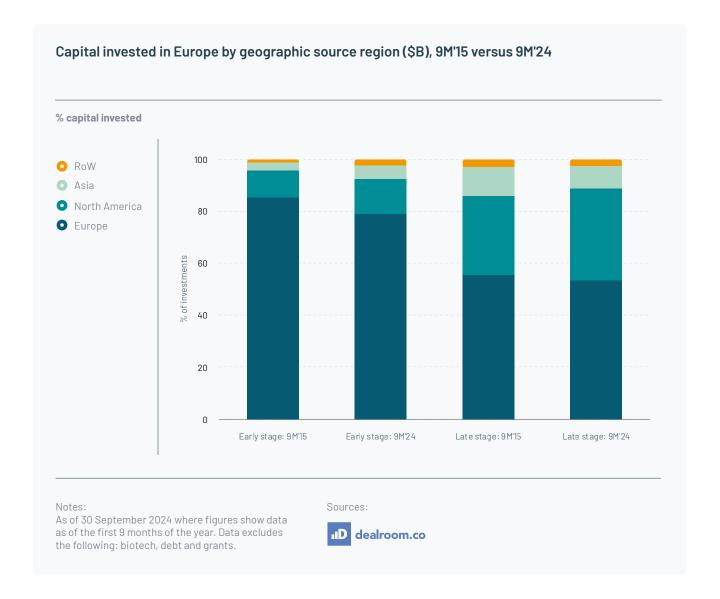
Of the \$30B invested so far this year, European investors have contributed 60%, or more than \$18B. This is a more than two-fold increase from the \$7B equivalent in 2015.

While the lion's share of funding is allocated to growth-stage companies, European VCs remain the primary source of capital for the early-stage tech ecosystem, accounting for almost 80% of funding, a level relatively similar to 2015.

At later stages, European founders rely on an international investor base. After withdrawing in 2023, US investors contributed \$9B to European startups in the first three quarters of this year. This is down significantly from the peak of \$34B in 2021, reflecting a slowdown in new investments in line with the pullback of overall investment volumes in Europe.

Similar to 2015, non-European investors together account for 47% of total funding, and US investors now account for 35% of the European growth funding pool, up from 30% a decade ago. Once startups raise \$15M+ rounds, they increasingly rely on a global investor base to fund their next stage of growth.





## VC funds are scaling to meet the opportunity set

Recent discussions around Europe's investor base have centred on the decline in overall funding raised in 2023, and the lack of funding available at the growth stage. But they have missed an important trend: that VC funds are scaling up to meet the opportunity set.

The median value of VC funds that closed in the first half of this year is \$85M, building on the record highs set in 2023. This is more than double the \$37B median fund size seen in 2015, and speaks to the growing opportunity set in Europe, where GP and LP investors alike recognise the potential.

Established (and repeat) European fund managers are building the much-needed capital layer to support the growing number of later-stage companies. Several  $\[ \le 500 \text{M} + \text{VC} \]$  firms announced their latest fundraises in 2024, demonstrating their ability to continue attracting institutional funding, even in a challenging market. The share captured by  $\[ \le 250 \text{M} + \text{VC} \]$  funds has been trending up from 30% in 2015 to 53% in 2023, with the number of associated funds having quadrupled in that time frame. Data from the first half of 2024 shows the same trend playing out, with  $\[ \le 250 + \text{sized VC} \]$  funds accounting for 54% of all capital raised.

Although they only account for 14% of total dollars raised, smaller funds of €100M or less play a vital role too, accounting for 55% of VC funds by count in 2023. These new or emerging fund managers are a leading indicator of future dry powder for European venture, as they will attract larger pools of capital to Europe as their track records grow.



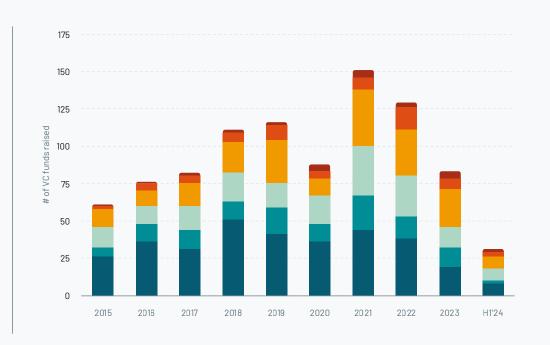




#### Number of VC funds raised per year by fund size, 2015 to H1'24

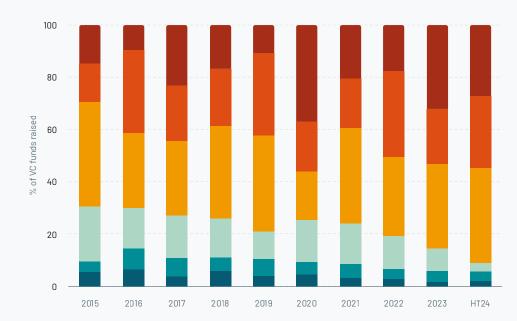
#### # of funds:

- **○** > €500M
- £250 500M
- O €100 250M
- €50 100M
- €25 50M
- < €25M



#### % of VC funds raised:

- > €500M
- £250 500M
- O €100 250M
- €50 100M
- £25 50M
- **○** < €25M



#### Notes:

Taken from the European Data Cooperative, developed by Invest Europe. EDC data converted at EUR:USD of 1.08848, the rate on 17 July 2024. The data shows final closing data only.

Sources:



### **Europe's top GPs announce large funds**

Back in 2015, there was just one \$500M+ fund in Europe. Today that picture is very different, and despite a difficult fundraising environment, the number of these funds is increasing.

The top 10 largest funds in 2024 now have a combined value of \$6.8B, and this growing pool of available funds speaks to the ongoing maturity of the European venture landscape. The prevalence of larger funds, fuelled by increased capital availability, is a leading indicator of the growth of Europe's tech ecosystem.

London retains its status as Europe's venture capital powerhouse, home to seven of the 10 largest funds in Europe, but funds in Stockholm, Amsterdam and Vienna also feature in the rankings. As these larger-scale, multi-stage funds proliferate, they create more opportunities to support founders with European capital from the early stages all the way through their growth and scale-up lifecycle.

## Maturing of the GP ecosystem

The maturing of the ecosystem is especially evident when looking at the number of large vehicles European VCs have been able to raise. Eight \$500M+ funds had already been announced by September this year, while only one fund was raised above that level in 2015.

8 x

Source

**PitchBook** 







Name	Size of fund (\$M)	Fund name	Previous fund name	Previous fund size (\$M)	Fund location	Other office locations
Index Ventures	1,500	Index Ventures Growth VII	Index Ventures Growth VI	2,000	London (UK)	San Francisco (US), New York (US), Geneva (Switzerland)
Index Ventures	800	Index Ventures XII	Index Ven- tures XI	900	London (UK)	San Francisco (US), New York (US), Geneva (Switzerland)
Atomico	784	Atomico Growth VI	Atomico V	N/A*	London (UK)	Paris (France), Berlin (Germa- ny), Stockholm (Sweden)
Balderton Capital	685	Growth Fund II	Growth Fund l	680	London (UK)	N/A
Accel	650	Accel London VIII	Accel Lon- don VII	650	London (UK)	Palo Alto (US), San Francisco (US), New York (US), Bangalore (Indiaâ€∢)
Balderton Capital	615	Early Stage Fund IX	Early Stage Fund VIII	600	London (UK)	N/A
Creandum	541	Creandum VII	Creandum VI	469	Stockholm (Sweden)	Berlin (Ger- many), San Francisco (US), New York (US)
Innovation Industries	536	Innovation Industries Fund III	Innovation Industries Fund II	202	Amsterdam (Netherlands)	Eindhoven (Netherlands)
Atomico	485	Atomico Ven- ture VI	Atomico V	N/A*	London (UK)	Paris (France), Berlin (Germa- ny), Stockholm (Sweden)
20VC	399	20VC Fund III	20VC Fund II	140	London (UK)	N/A

Data is as of 18 October 2024. Showing funds located in Europe only. Atomico V combined a dual strategy of Venture and Growth with \$820M.

Sources:

atomico°





Earlier this year, we raised one of the largest funds focused on European tech ever, and what was notable in that process was the growing appetite from an increasingly global investor base. Europe's tech ecosystem is thriving, and the international community have realised this. The pandemic might have led to a volatile period for tech companies, however it's clear that Europe today remains a firm fixture on the global stage, with VC returns on par or ahead of Silicon Valley for some vintages.

Global leaders in AI – like Mistral, Wayve, ElevenLabs and Photoroom – are being born out of Europe, and there's a great deal of optimism for what the next era of European innovation looks like.

**James Wise**Partner, Balderton

## **European Growth funding gap prevails**

Although European investors have made leaps in their ability to back local growth-stage success stories, many later-stage companies need to turn to foreign investors. If Europe is to reduce its reliance on growth stage foreign capital to a level similar to othermature ecosystems such as the US or China which self funds to the tune of 80%, European investors would need to step up significantly.

In fact, if we look back between 2015 and today, Europe would have needed an additional \$75B in rounds of more than \$15M to meet this 80% benchmark. This equates to half of the total capital raised by European VCs over the past 10 years.

Why does it matter? In the Talent chapter, we explore how this funding gap leads to a material talent leakage in favour of the US-closing the funding gap is one way of addressing this issue, which is critical to the success of our ecosystem.







Over the past decade, the funding gap across \$15M+ rounds is equivalent to \$75B.

dealroom.co



Putting it differently, for each company raising funding from a European lead investor, another is turning to the US for their capital need. This represents 1,000+ companies that turned to the US to secure a lead investor since 2015.

Source

Source







Institutional capital from European pension funds and government LPs could be the fuel that European tech needs to achieve its potential.

With even a fraction of these assets, Europe could revolutionize late-stage funding for innovation.

**Ylan Steiner** Partner, Orrick

## Local LPs are vital in a fragmented capital market landscape

A local base of LPs remains as important today as it was a decade ago, with European GPs still raising the vast majority of their funds from domestic partners. This speaks to the broader challenge posed by a fragmented European capital market, which hampers the ability of VCs to raise capital across borders.

In 2023, local LPs contributed 65% of the capital raised by European GPs, a figure that has remained stable over the past 10 years. Cross-border European investments have become somewhat more common, accounting for 22% of capital raised in 2015 and 23% in 2023. By region, the developments since 2015 are particularly striking in Southern Europe, where all funds were raised from domestic LPs a decade ago. Today, the region's GPs are tapping a much broader base of European investors. Similarly, in the DACH region, the share of funding raised from North American LPs was negligible in 2015, but rises to 20% in 2023.

While cross-border fundraising has increased, it's still relatively low and shows that VCs are heavily reliant on raising in their home market to be successful. This poses a particular challenge in parts of Europe where the LP base is not as deep and experienced in venture investing.



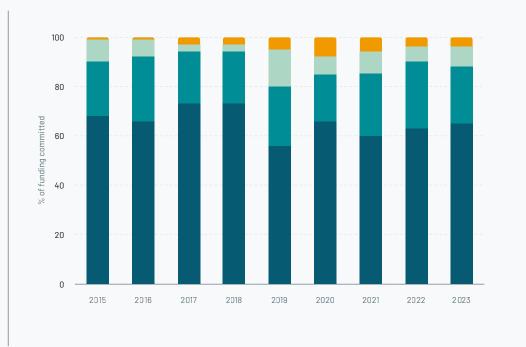




#### % of funding committed in Europe by geographic source region, 2015 to 2023

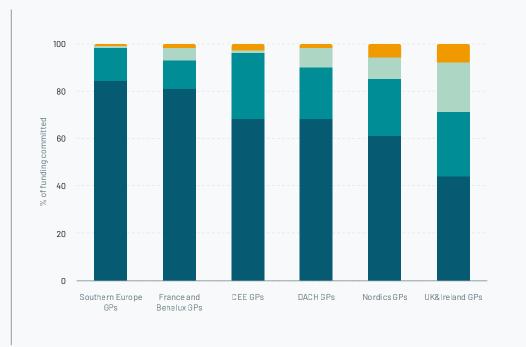
#### **Overall Europe:**

- Rest of world
- North American
- European
- Domestic



#### By region:

- Rest of world
- North American
- European
- Domestic



Taken from the European Data Cooperative, developed by Invest Europe. EDC data converted at EUR:USD of 1.08848, the rate on 17 July 2024.

Sources:



## Government funding: an important anchor for the ecosystem

Across regions and stages, government capital has played an important role in seeding the next generation of investors. Every dollar invested by government entities into European VCs has helped to unlock an additional \$4.8 from other sources of LP capital.

Source





## Government funding committed (\$B) to VC funds by LP region, 2015 to H1 2024

A new era of government initiatives could be on the horizon, with the Al boom, energy transition and the ongoing European productivity crisis incentivising public bodies. Since 2015, governments have contributed more than \$25B to European venture capital funds, with support set to increase significantly in 2023. Last year, governments invested \$0.42 for every \$1 invested by institutional investors, compared to \$0.13 in 2022.

The topic of startup investing continues to gain traction in government circles. Mario Draghi's recent report on European Competitiveness warns that unless innovation is accelerated, Europe risks falling further behind the US in areas such as Al. A key recommendation is to increase the budget of the European Investment Fund (EIF) as part of a broader €800B package to boost European competitiveness.

Government action can act as a catalyst for start-up investment, with initiatives such as the Tibi initiative in France, WIN in Germany and the Mansion House reforms in the UK helping to shine a light on the sector. However, diversified sources of funding are important to reduce overreliance on specific investors and potential regulatory requirements that come with government funding.

Indeed, the heavyweight EIF is already a significant supporter of the European venture asset class, contributing more than half of all government funding to startups over the past decade. The France & Benelux region, which the EIF calls home, committed \$1.5B in government funds in 2023, bringing the total committed since 2015 to \$14.5B.

Interestingly, government funding in Southern Europe increased from less than \$600M in 2022 to \$1.5B in 2023, highlighting local and EU-led efforts to boost the region. From large pan-European measures such as the extension of the European Tech Champions Initiative (ETCI), to more localised deep-tech-focused support (such as the Southern Europe Entrepreneurship Engine), policymakers are looking to close the funding gap.

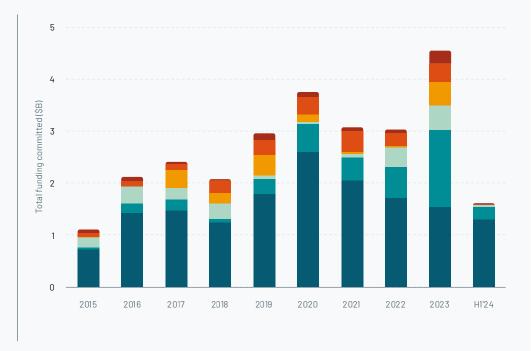






#### Government funding committed (\$B) to VC funds by LP region, 2015 to H1 2024

- Nordics
- UK & Ireland
- CEE
- DACH
- Southern Europe
- France & Benelux



Taken from the European Data Cooperative, developed by Invest Europe. EDC data converted at EUR: USD of 1.0885, the rate on 17 July 2024.

Sources:







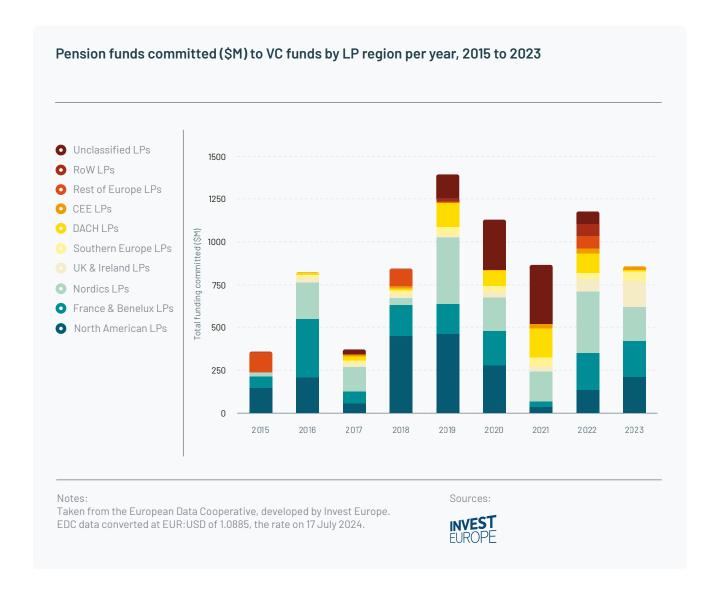
Governments and other public funding sources can pioneer asset classes and play a catalytic role in attracting private capital by taking a lead role in building market intelligence and creating critical mass in the early phases of market development.

#### **Uli Grabenwarter** Director Equity Investments, EIF

## Pension funds double investments in European VC

Pension funds can play an important role in decreasing Europe's funding gap. They have doubled their investments over the past near-decade. In 2023, they contributed \$858M to European VC funds, up from \$359M in 2015.

There are significant regional differences in this activity, though. LPs from just four regions — the US, France & Benelux, the Nordics and the UK & Ireland — made up the significant majority of pension fund contributions to European VC in 2023. This highlights the untapped potential in other parts of Europe, particularly the DACH region, where pension funds have reduced their VC fund allocations to below 2016 levels.



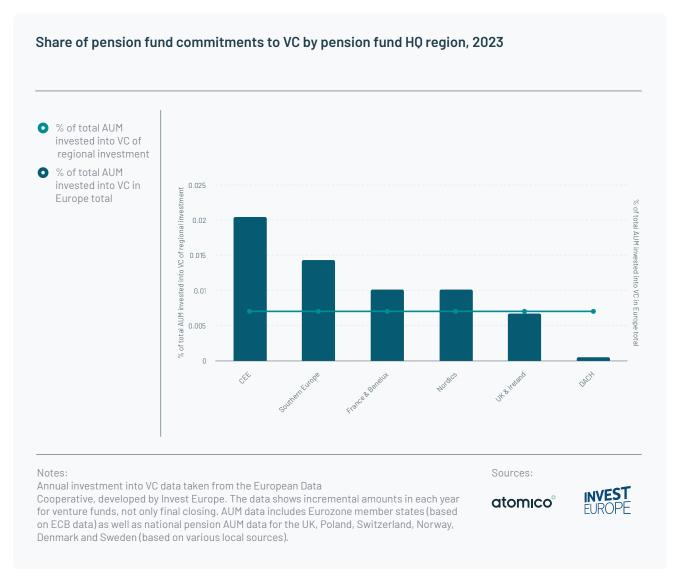






## Pension fund allocation to VC is negligible

European pension funds have total assets under management (AUM) of \$9.6T. But when it comes to the percentage invested in venture capital, the picture is bleak across the board. Despite a robust local startup ecosystem, pension funds in the UK & Ireland allocate just 0.007% of AUM to VC. It appears that pension fund allocation to venture is close to a rounding error.



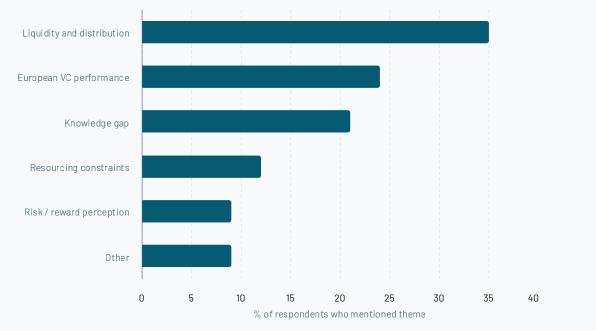
### What's on LPs' minds?

One in three LPs responding to this year's State of European Tech survey cite the lack of liquidity and distribution as some of the key barriers preventing more LPs from making their first investment in European VC. As one LP succinctly put it: "The asset class is attractive... on paper." This focus on liquidity and exits, and why it is so highly valued, is heavily influenced by current market conditions and the fact that exit markets, particularly on the IPO front, have been weak.

While Cambridge Associates benchmarks show that European VC asset class returns are in line with their US counterparts, LPs remain highly focused on the asset class's realisations and how that translates into track record, with 24% citing this as a hurdle. While some also cite 'risk / reward perception' as another barrier, a large proportion of LPs (21%) feel that there is still a knowledge gap for many of their peers. More education is needed, as well as more data on returns and performance. Over time, as firms mature and large exits take place, European GPs have the potential to strengthen the case for high returns and dispel lingering doubts about Europe's ability to compete with other major markets.

In the 'other' category, the fragmentation of the European market is also cited, resulting in a perceived lower potential outcome for companies emerging from Europe, as well as an additional administrative burden for all players in the ecosystem. Another LP says: "It is far too expensive and a bureaucratic nightmare to launch a fund in Europe, which suppresses the number of potentially interesting emerging managers."

# In your opinion, what are they key obstacles stopping your peer LPs in making their first European VC investment?



#### Notes:

Data is as of September 2024. Based on all survey respondents who answered optional free text question. Respondents' responses were mapped to all applicable themes. Numbers do not add up to 100% as respondents' responses can be mapped to multiple themes.

Sources:

STATE OF TECH EUROPEAN TECH



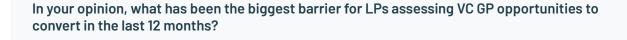


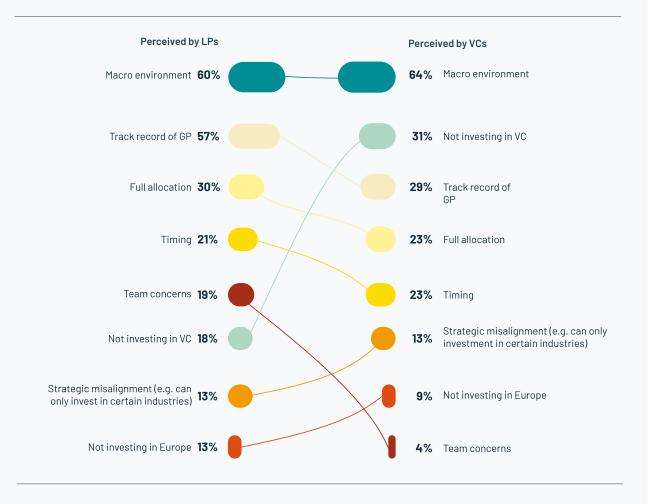


## Macro environment weighs on LP decisions, as do VC track records

The wider macroeconomic environment continues to weigh on LPs' minds when deciding where to allocate funds. In our survey, both LPs and VCs highlighted the macro environment most frequently as the biggest barrier to LPs converting on VC investment opportunities in the last 12 months. For LPs, this was closely followed by their assessment of the track records of GPs (57%).

Meanwhile, VCs are more likely to look at LP-specific considerations, placing less weight on track record (29%) and concerns LPs might have about the team, with just 4% ranking the latter as a barrier compared to 19% of





#### Notes:

LP and VC respondents only. Respondents who selected "none of the above" are excluded from the data. Numbers do not add to 100 as respondents could choose multiple options.

Sources:

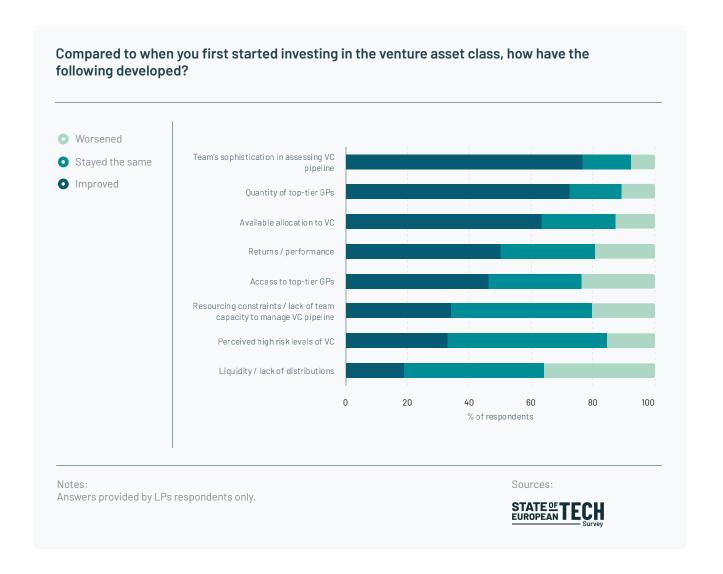


## European GPs are levelling up, but LPs want more liquidity

Experienced LPs say Europe's GPs have levelled up over their time in the industry.

Investors with more than 10 years in the industry note broad improvements across several factors, with 72% saying the number of top-tier GPs has increased and 46% saying access to them has also improved. The majority (77%) say their own teams have become more sophisticated in assessing VC opportunities.

However, despite the overall optimism, macroeconomic factors including a difficult exit environment have taken a toll. Roughly a third (36%) of LPs with more than 10 years of experience state that liquidity has become a more pressing issue since they started in the industry, compared to the much steeper 72% of newer LPs seeing conditions worsen in this area.







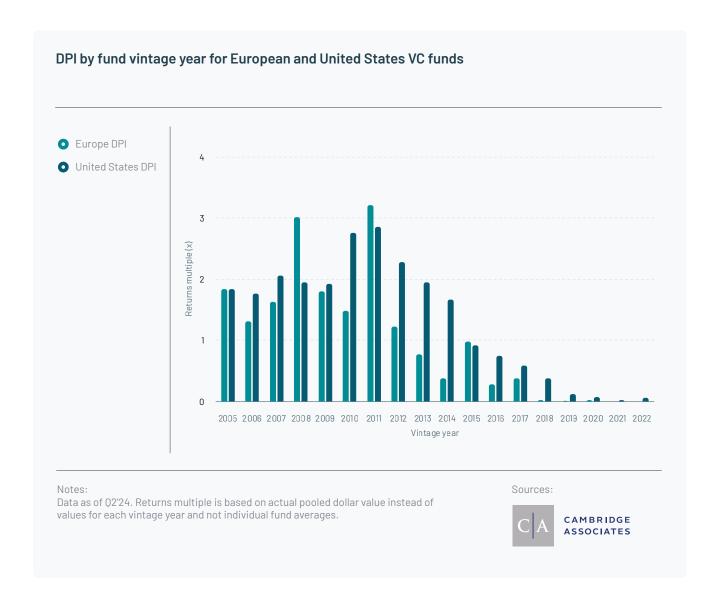


## DPI: a gold standard measure of success for LPs

Distributions to paid-in capital, or DPI, is an important measure of success for LPs. At the beginning of a fund's life — before any distributions have been made — this ratio will be less than one. As the fund generates returns and distributes capital to investors, the DPI will increase. For LPs, a higher DPI not only indicates better returns, but also affects their liquidity and ability to make further investments.

Using this metric to look at the performance of historical vintages paints a mixed picture. US and European GPs have achieved DPI of 2x or higher in some vintages prior to 2011. More recent vintages have been affected in both regions, but US GPs appear to have been more active and systematic in taking liquidity when markets were buoyant compared to their European counterparts.

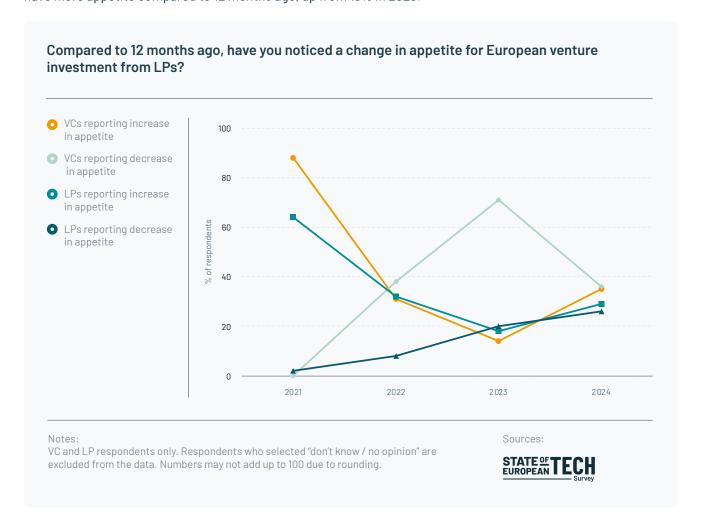
Robust and diverse exit sources are important for consistent DPI across vintages. Thriving public markets are key to successful IPOs, as is an engaged and deep pool of potential buyers for start-ups and scaleups, whether they are strategic corporates or financial sponsors. A variety of buyers can provide exit opportunities across the scale spectrum. As we explore in the Outcomes chapter, there are many ways to create liquidity and thus generate DPI.



## LP appetite for venture capital on the rise again

In our survey, both VCs and LPs respondents are registering an increase in LP appetite, the first rebound after two years of more negative sentiment.

In 2024, LPs reported a positive shift in sentiment towards European venture capital, with 29% saying they have more appetite compared to 12 months ago, up from 18% in 2023.



## Long-term view for venture capital is key

Experienced, long-term investors in European venture capital tend to have a more positive outlook on the asset class than their less experienced counterparts. In fact, 66% of LPs with 10 or more years of experience say their appetite has increased since they started investing in venture. Close to 60% of experienced LPs also say their organisation invests a higher percentage of AUM into the asset class than when they started participating.

Less experienced LPs and VCs are more cautious. Only 53% of LPs and 38% of VCs with less than five years of experience report increasing appetite for venture capital, and almost half of this group of LPs say their organisation's allocations haven't shifted.

These charts reveal the role experience plays in shaping investment outlooks in European venture capital, with seasoned LPs not only expressing more confidence, but increasing their allocations. It also speaks to the short-term negative sentiment surrounding the asset class currently, which experienced investors are less prone to be influenced by, having stood through different market cycles.



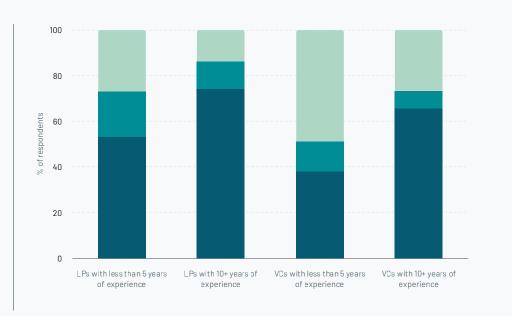




When you started (assessing) VC, have you noticed a change in appetite for European venture investment from LPs? How has your organisation's/program's allocation to the Venture asset class as a percentage share of total AUM changed since first investing in VC?

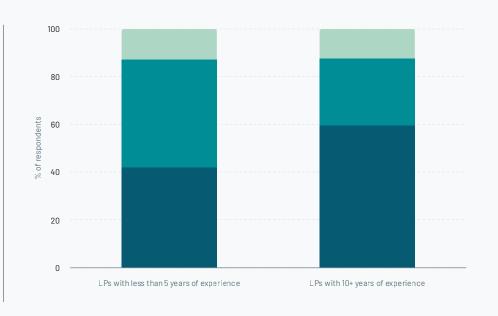
#### Change in LP appetite:

- Decreased appetite
- Stayed the same
- Increased appetite



#### Change in AUM allocation:

- Decreased
- No change
- Increased



#### Notes:

Taken from the European Data Cooperative, developed by Invest Europe. EDC data converted at EUR: USD of 1.08848, the rate on 17 July 2024.

Sources:





# Outcomes











# Outcomes

Extraordinary outcomes have taken place in Europe over the past decade, but the continent's full potential is yet to be reached. In this chapter, we look at recent trends in exit activity and explore Europe's attractiveness as an IPO destination.









### Europe's tech ecosystem is worth \$3.2T

The total value of Europe's tech ecosystem is five times larger today than it was a decade ago, rising from \$560B to more than \$3T today.

### 165 \$1B+ exits since 2015

There are now 15 countries in Europe that are home to a company that has achieved an exit valued at \$B or more. These aren't distributed evenly, though: nearly half of the 165 \$B+ exits over the past decade took place in the UK.

### 47% say Europe lacks liquidity needed for **IPOs**

A pressing issue for the ecosystem is making it more appealing for public tech companies. Nearly half of bankers cite liquidity as a barrier to attracting more successful large-cap tech IPOs.

### **Summary**

The value of Europe's tech ecosystem has grown fivefold over the past decade, now worth close to \$3.2T across both private and publicly listed tech companies. Europe has also demonstrated its ability to not only support founders from idea to \$B+ valuation, but to IPO too, with a number of high-profile listings taking place over the last decade.

European M&A and IPO transactions have consistently unlocked value for the ecosystem, though activity has slowed recently. With greater LP demand to generate liquidity, investors are exploring other paths such as secondaries or continuation funds.

Despite the value created, challenges persist. Many high-profile IPOs continue to list in the US, drawing talent and capital away from Europe. The structural differences — such as a fragmented European capital markets, the lack of deep-pocketed public equity investors, or the lesser competitiveness of European IPO markets — deter companies from choosing Europe as their listing venue, resulting in economic output and talent shifting overseas.

While Klarna has filed paperwork for a US listing, a number of tech firms — including Revolut, and Bolt — are still awaiting market conditions conducive to IPOs and, with structural reforms, Europe could ensure it retains its talent and capital. By addressing these challenges, Europe can strengthen its tech ecosystem, enhancing its appeal as a global destination for IPOs and tech investments. With a pipeline of 100+ companies poised for public markets, the next decade could see an even greater unlock of capital and talent back into the ecosystem, driving Europe's tech growth forward.

# Europe's tech ecosystem is worth more than \$3T

The total value of Europe's tech ecosystem has seen a fivefold increase over the past decade, rising from almost \$560B in 2015 to be worth close to \$3.2T today. That's an increase of more than \$2.6T.

The \$3T threshold was last crossed in 2021, when public tech companies saw their share prices soar and private valuations also rose. While the public markets have traditionally been an important driver of value in Europe's tech ecosystem, the tables have now turned. Now the growth story is centred on the private tech universe, which has been steadily rising over the past decade, pushing the ecosystem past the \$3T threshold despite economic headwinds along the way.

This is partially a consequence of tech companies choosing to delay IPOs following 2022's market correction, instead waiting for more favourable market conditions. As a result, there are now more companies than ever poised for IPOs, at a time where liquidity events are sorely needed by investors.

When these companies do go public, they could unlock a new phase of growth for Europe's tech industry, enabling LPs to reinvest in European tech and keep the value creation flywheel spinning.



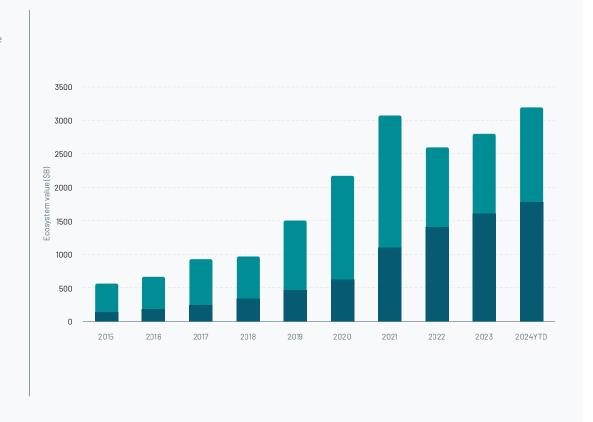




#### Private and public markets tech ecosystem value (\$B), 2015 to 2024YTD

Public

Private



Private market data from Dealroom.co excludes the following: biotech, debt, and grants. Based on data up to 30 September 2024. Public markets data as per S&P Capital IQ Platform, as of 14 October 2024, for illustrative purposes only. Values are based on companies headquartered in Europe.

Sources:

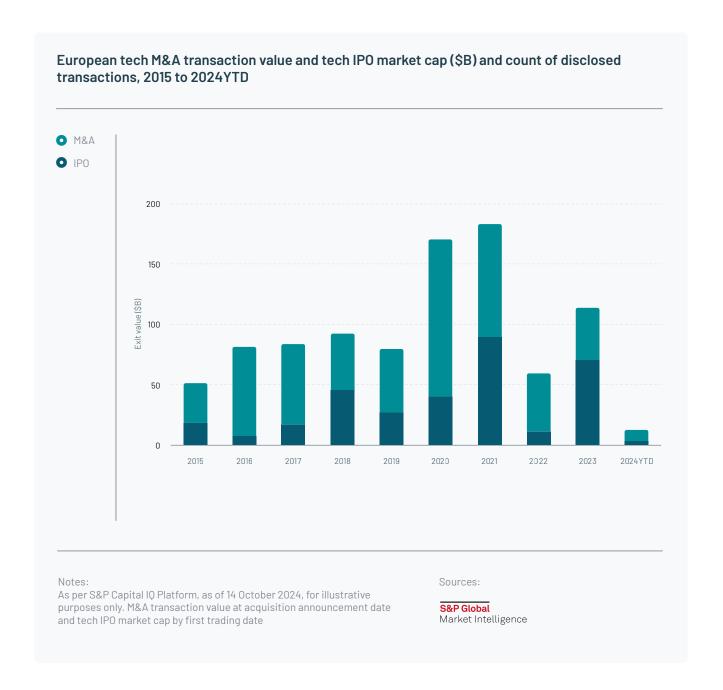
S&P Global Market Intelligence



# Positive long-term outlook, short-term under pressure

Over the past decade, M&A and IPO transaction values in Europe have steadily increased, consistently surpassing the \$50B per year threshold, aside for 2024YTD. While some level of activity has persisted over the past two years, transaction volumes across both M&A and IPOs are at their lowest point in the past decade as liquidity routes remain subdued post correction.

A handful of blockbuster transactions are driving the overall transaction value. In 2023, ARM's \$65B IPO alone accounted for 92% of the total IPO value, while in 2020, the \$45B IHS M&A deal represented 35% of that year's total M&A activity.







# **Growing track record of exits**

The volume exits reached in Europe has grown by more than 150% in the decade. With a total of \$925B value released since 2015, this is a significant step up from \$391B the decade before. Total M&A value has gone to \$604B and IPO value to \$321B, compared to \$291B and \$100B from the previous decade, respectively.

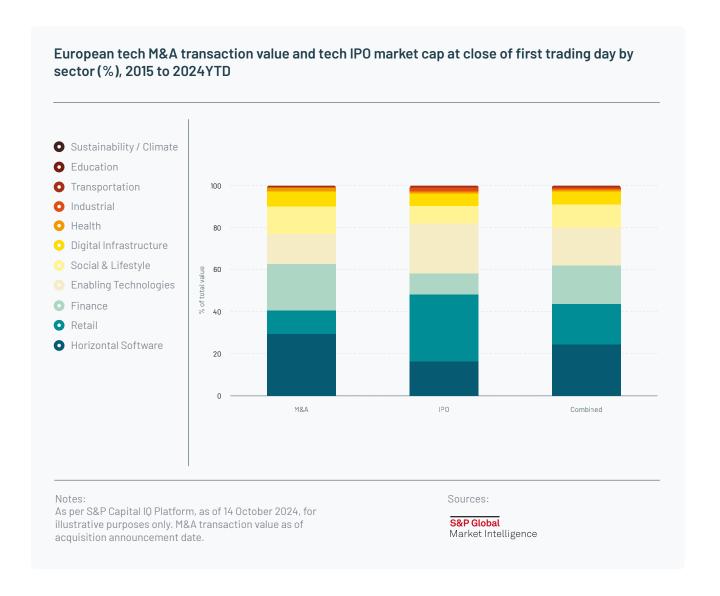
Source

S&P Global Market Intelligence

## Value creation spans industries

Exits are a more common event in some sectors than others. Three — Horizontal Software, Enabling Technologies and Finance — have generated the vast majority of value in the European M&A and IPO markets over the past decade.

Since 2015, Horizontal Software has contributed 24% of the value generated across both markets, and accounted for the largest share of M&A transaction value (29%). Enabling Technologies — which includes technologies like AI and semiconductors that underpin further innovation — follows. The sector has accounted for 24% of the IPO market by value since 2015. A significant portion of this can be attributed to chipmaker ARM, whose \$50B+ IPO in 2023 was the largest exit of the past decade. Third in line is Finance, where the IHS Markit acquisition is driving its share of M&A transactions to 22%.













We proved that it's possible to build a global tech company from Europe and have a huge financial outcome.

I think that was important; it showed other founders that it is possible. For me, it validated the case for European tech and my personal mission to continue to help build it. I did not think people should have to go to Silicon Valley to build tech companies. Really great companies can come from anywhere, and I especially believe they can come from Europe.

#### Niklas Zennström

Co-founder of Skype, CEO & Founding Partner of Atomico

## **Billion-dollar hubs**

Europe has witnessed billion-dollar companies emerge across 30 unique countries, reflecting the continent's broad entrepreneurial reach. As these companies grow and advance along their funding journey, many will eventually reach the point of an IPO or acquisition. However, given exits naturally take longer to achieve than a \$B+ valuation or of course a company formation, it's perhaps unsurprising that only 15 European countries to date have seen a billion-dollar exit. This trend underscores the time it can take for these high-value businesses to reach liquidity events, even as they continue to expand and scale.

This cluster of countries is centered on Western Europe, stretching as far east as Poland and as far south as Italy. But even among this cluster, exits aren't evenly distributed. Almost half of all \$B+ exits over the past decade took place in the UK alone, including the two biggest exits Europe has seen since 2015: IHS Markit's \$45B acquisition in 2020, and ARM's blockbuster IPO in 2023, which closed its first day of trading with a market cap of \$65B.

Sweden comes next, having been host to Europe's third-biggest exit when Spotify went public via a direct listing in 2018. Germany follows, with Berlin-based AUT01 being the the seventh largest exit in Europe over the past decade, followed by Delivery Hero's 2017 IPO. Poland also follows, home to top 10 exited company Allegro.







#### Number \$B+ exits by country, 2015 to 2024YTD



Notes:

As per S&P Capital IQ Platform, asof 14 October 2024, for illustrative purposes only. Excludes biotech.

Sources:

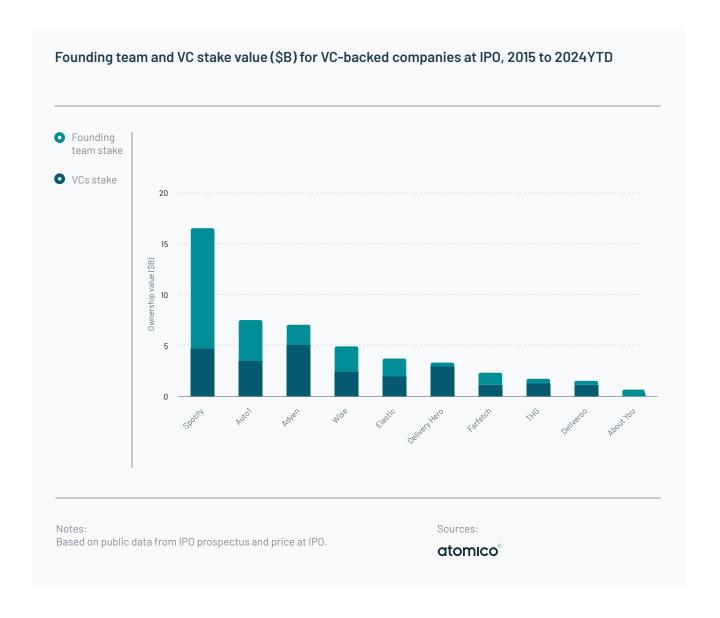
S&P Global Market Intelligence

### Recycling capital back into the ecosystem

Looking at the 10 biggest VC-backed public exits since 2015, we were able to map a combined \$50B of value across founding teams and disclosed VC stakes at the time of IPO. While this is not representative of the overall value created by these companies for their backers, much of which is undisclosed, it speaks to the scale of these outcomes for founders and investors and what it means for a local ecosystem.

On average, these companies have taken 10 years to go from founding date to IPO, with the fastest being Delivery Hero in six years and the longest being THG, which took 16 years.

Founding teams have benefitted from \$25B or 23% of the value created across these deals as a whole, although the biggest event in terms of providing value to company builders was Spotify's direct listing, where the founder's Daniel Ek's and co-founder's Martin Lorentzon combined ownership was valued at \$11.8B. Exits are equally important for VCs to generate returns for their LPs. Across the top 10 VC-backed public exits, \$24B (22%) of value was reaped by the VC backing the companies. For example VCs holding the most valuable stakes at the time of Adyen's IPO had participated in rounds totalling \$270M across Series A and B. In turn, their stake was worth \$4.4B, representing a 16x+ increase.





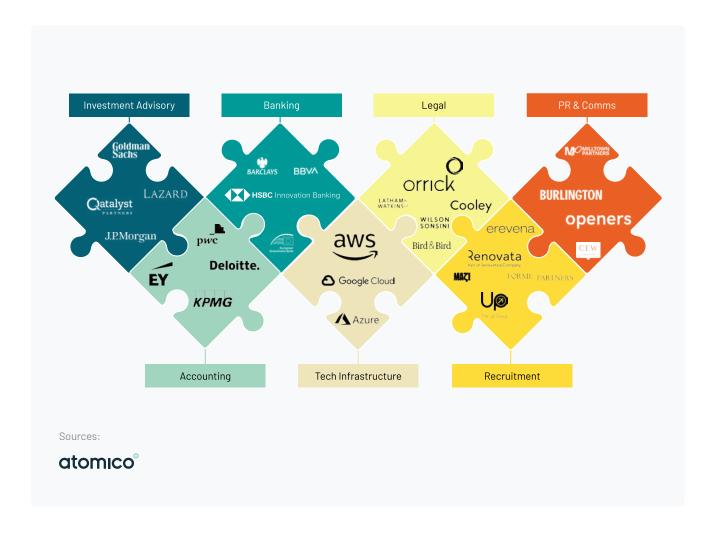


## It takes a village to complete an exit

Exits don't happen in a vacuum. An ecosystem of partners and services is essential to complete these transactions — but their work is not often shouted about, because it happens in the background.

Today, a growing number of professional service providers are bringing this expertise and sophistication to Europe's tech sector. From bankers and lawyers to PR specialists, many firms have carved out unique niches by positioning themselves as trusted advisors to high-growth tech companies and their VC backers.

Specialists like these are a critical ingredient for the ecosystem, bridging business across borders, increasing velocity and unlocking greater outcomes for the European tech ecosystem. They also play an important role in advocating for European tech firms — ensuring the best outcomes and fairest deal terms when acting on behalf of sellers.

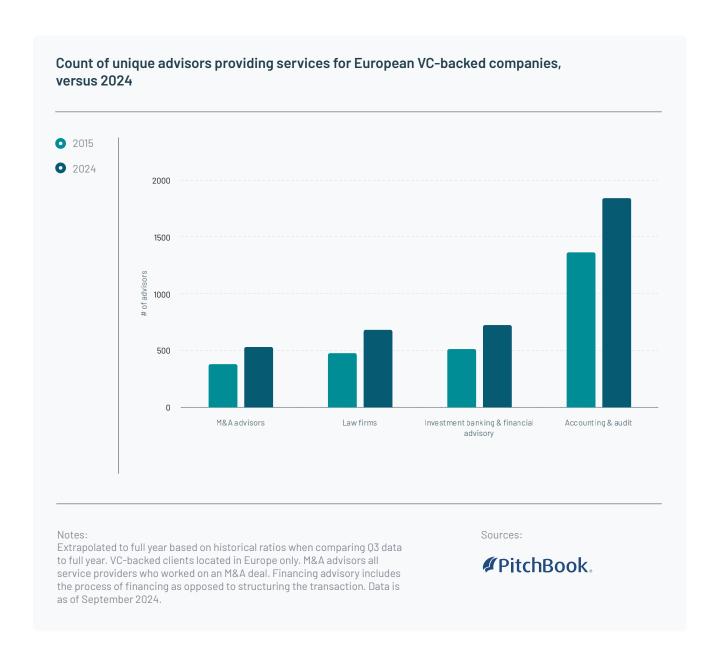


# A growing network of experts on hand to support tech transactions

To achieve the best outcomes, specialist expertise is needed to help startups and their investors navigate all stages of the exit process — from legal structuring and financial due diligence, to communicating the transaction to employees, stakeholders, and the public.

The number of unique European tech transaction advisors has stepped up significantly since 2015, reflecting an increasingly mature ecosystem with more high-stakes transactions taking place. The number of law firms providing services to tech companies has grown the most, up by 43% today compared to 2015. The count of M&A advisors has increased by 39%, and accountants, which make up the biggest segment of the specialist pool, by 35%.

A combination of these players is needed to see a deal through, and the expanding advisor network reflects the volume of sizable, complex, and cross-border transactions taking place in Europe's tech ecosystem.



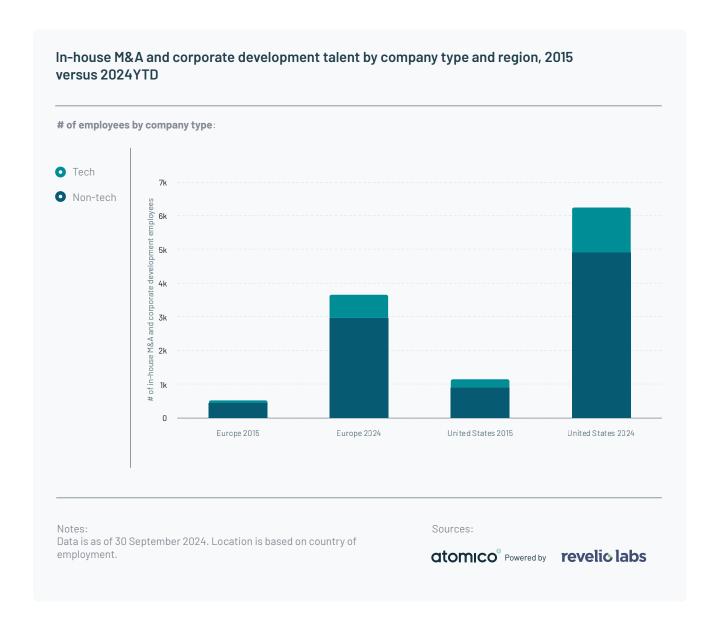




# The startup exit supporting ecosystem is maturing

Professional advisors guide tech companies through the exit process, while on the acquirer's side, a strong base of corporate development talent is also needed to identify and pursue acquisition opportunities.

In Europe, these roles are increasingly common, with a deep pool of talent being built. There are now seven times as many in-house corporate development roles in Europe than in 2015, however the vast majority of that growth has come from the non-tech sector. Putting this differently, the US has 94% more corporate development and M&A talent in its tech industry than Europe, but achieves 218% more \$B+ M&A outcomes. A larger network in Europe could help unlock greater efficiencies for executing high-value exits.



# In-house M&A and corporate development talent by company type and region, 2015 versus 2024YTD

% of employees by company type:

- Early stage
- Growth stage
- Public



Notes:

Data is as of 30 September 2024. Location is based on country of employment.

Sources:

atomico Powered by

revelio labs



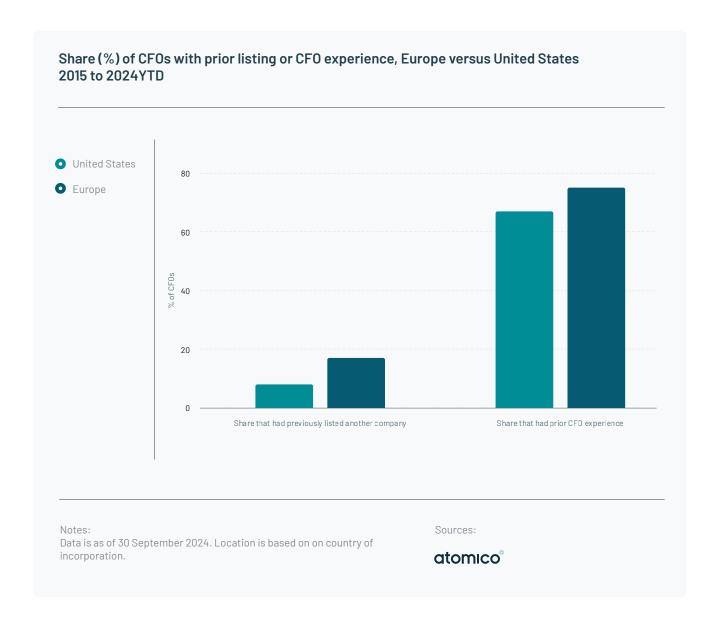




### **Europe has top-tier CFO talent**

CFOs play an important role in the IPO process and a new CFO hire at a late-stage company can be a sign that a company is readying itself for a market debut. Atomico's proprietary analysis of a sample of CFOs involved in \$B+ listings in the US and Europe shows that most CFOs who take a company public join less than two years before the IPO filing. Our analysis also found that while the pool of CFOs with experience listing \$1B+ companies is three times deeper in the US, Europe stands out with the experience level of its CFOs.

Three quarters of CFOs who have taken \$B+ companies public in Europe over the past decade previously lead the finance function of another company. Meanwhile, although it's not common for CFOs to have led multiple IPOs, 17% in Europe have at least one other IPO under their belt, compared to 8% of their US counterparts.







In a landscape where investors are re-evaluating exit routes, access to dynamic European public markets is crucial—not only for scaling tech companies but also for safeguarding Europe's long-term competitiveness in innovation.

At Euronext, we have long embraced the challenge and are committed to bridging Europe's market fragmentation by providing seamless, pan-European access to liquidity. However, more needs to be done. The Savings and Investment Union initiative presents a pivotal opportunity to further these efforts, building on the progress made through the Listing Act to better channel European savings into equity investments. This shift is essential to empowering tech companies with the capital they need to grow and succeed within Europe's competitive ecosystem.

**Delphine d'Amarzit** CEO, Euronext Paris

# Europe's talent pool is growing as fast as the US...

More than half of VC respondents say they have proactively been seeking liquidity opportunities for their portfolio in the last 12 months. However, challenging market conditions have made this process more complex and lengthy than expected. In fact, 74% of VCs note that achieving liquidity has taken longer than initially anticipated, underscoring the heightened hurdles faced in today's market.

Source











# Investors and founders explore new strategies to unlock liquidity

With the IPO window yet to reopen, investors and founders are considering other ways to create liquidity, although details of these activities are often underreported.

In 2024, investors have been selling parts of their stakes in secondary transactions, ahead of potential listings in 2025. In October, UK challenger bank Monzo confirmed it was preparing a secondary share sale that would value it at nearly \$6B, while Revolut shareholders reportedly sold \$500M of equity in August, valuing the company at \$45B. Conversely, some funds have emerged to take advantage of the opportunity by adopting a strategy focused on secondary tech transactions.

VCs are also exploring different ways to provide liquidity to their LPs. Several prominent funds in both the US and Europe, such as Lightspeed, General Catalyst or HV Capital in Germany, have announced continuation funds. These are designed to provide optionality for LPs looking to access their capital sooner, while offering potentially greater upside for those with more patient capital willing to roll their stake into the new fund.



#### **HV Capital**

HO: Germany Launched continuation fund in 2022



#### **General Catalyst**

HO: United States Launching continuation fund



#### Lightspeed

HO: United States Launching continuation fund



#### **Arcven Capital**

**HQ: Netherlands** Secondaries VC fund



#### **Flashpoint**

HQ: United Kingdom VC with secondary fund



#### Giano Capital

HO: Switzerland Late stage investor with secondary fund



# Nordic Secondary Fund

HQ: Denmark Secondaries VC fund



#### eToro

HQ: United Kingdom \$120M secondaries transaction in 2023



#### Revolut

HQ: United Kingdom \$500M secondaries transaction in 2024



#### Kilo Health

HQ: Lithuania \$78M secondaries transaction in 202



#### **Qonto**

HQ: France \$220M secondaries transaction in 2023



#### Mentimeter

HQ: Sweden \$68M secondaries transaction in 2024

# Narrowing of the growth stage discount in secondaries

Selling partial stakes via the secondaries market is one way to start generating distributions and crystallising returns until the full exit event takes place — although it can come at a cost. In the face of difficult market conditions, many investors are finding that potential buyers are still seeking larger discounts today compared to a year ago. Responding to our survey, VCs report that secondary offers are coming in at higher discounts, with half of Seed and early stage portfolios more discounted than they were 12 months ago.

Growth stage portfolios, however, are reporting the highest share of 'less discounted' offers at close to 40%, likely due to improving public markets positively influencing late-stage valuation expectations.

Of course, the diversity of results also speaks to each VC portfolio having unique challenges and opportunities. Hence, the survey responses can provide a pulse check on the state of the market. The fact secondary buyers are prepared to pay more for growth-stage portfolios now versus one year ago is a positive sign.





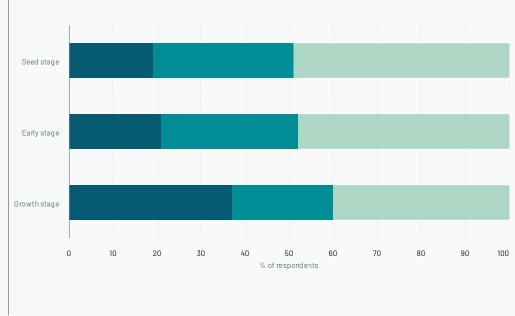


#### How do the average discount ranges being offered for secondaries in your portfolio today compare to those you saw 12 months ago?



Flat

Less discounted



#### Notes:

VC respondents only. Respondents who selected "don't know / no opinion" or stated they are not actively involved in fund strategy processes are excluded from the data. Numbers may not add up to 100 due to rounding.

Sources:



# Providing liquidity is a balancing act

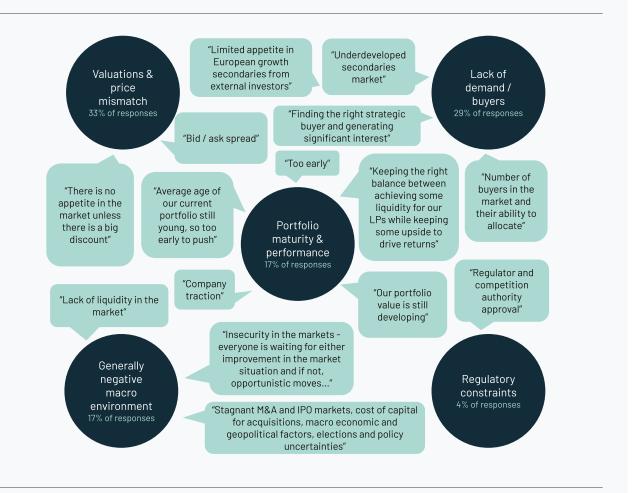
Rising interest rates and broad economic uncertainty are fuelling the current liquidity drought, but VCs are also facing specific challenges in the exit market. When asked why liquidity routes are so constrained, respondents highlighted a few additional factors: a mismatch between valuations and expectations, a lack of buyer demand, and the trade-off that comes with selling 'early'. Some respondents noted that now simply doesn't feel like the right time to sell, as they risk leaving significant future upside on the table.







#### In the last 12 months, what have been the biggest limitatiomns to being more active with selling down portfolio positions?



#### Notes:

Based on all survey respondents who answered optional free text question. VC respondents only. Reponsodents who selected "don't know / no opinion" are excluded from the data. Respondents responses were mapped to only one theme. Numbers may not add up to 100% due to rounding.

Sources:



### IPOs market conditions worsen

IPOs are especially powerful events in any tech ecosystem. Beyond unlocking capital for reinvestment, these events shine a spotlight on the ecosystem, creating momentum that can extend well beyond a single company's debut.

Yet, IPOs have been notably scarce recently. Given recent market volatility, many companies have delayed their exit plans, opting to strengthen their financials while awaiting more favourable IPO conditions. How long that wait will be remains uncertain.

Half of the M&A advisers and investment bankers surveyed say conditions for IPOs have worsened over the past year. Among those with more than a decade of experience who can compare today's conditions with those of 10 years ago, the majority (55%) see a deterioration.

Meanwhile, a majority of experienced respondents report long-term improvements that have strengthened alternative exit routes, offering encouragement to VCs and LPs eager to see structural gains that support capital distributions. In fact, 54% of respondents say that conditions for individual company secondaries have improved, and 52% report positive trends for GP-led secondary solutions, opening up new paths for liquidity amidst the IPO slowdown.







#### To what extent have you seen the conditions for the following paths to liquidity for VC investments change? Change in IPO conditions by timeframe: Worsened To day versus 12 months ago Unchanged Improved Today versus 10 years ago 10 20 30 50 60 70 80 40 90 100 % of respondents Today versus 10 years ago: Other paths to liquidity: Worsened Individual company secondaries Unchanged Improved GP-led solutions (e.g. continuation funds) Strategic M&A Buyout/Financialsponsor-led M&A 0 10 20 30 40 50 60 70 80 90 100 % of respondents Notes: Sources: VC and technology focused consultant, M&A advisor, and / or investment banker respondents only. Today STATE OF TECH versus 10 years ago only includes respondents with more than 10 years of experience. Respondents who selected "don't know / no opinion" are excluded from the data. Numbers may not add up to 100 due to rounding.

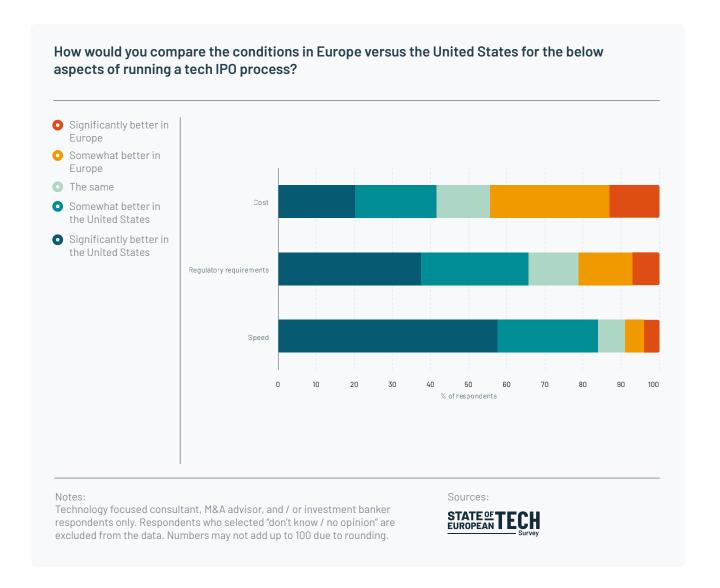


# European stock market listings hindered by perceived structural issues

When European companies choose to go public on the US markets, the local ecosystem loses out. This challenge has long held Europe back, as its stock exchanges struggle to retain tech firms that often prefer to list across the Atlantic.

Consultants, M&A advisors, and investment bankers — key influencers in listing decisions — generally view the IPO process in Europe as less competitive than in the US. Nearly 60% believe that completing an IPO is significantly faster in the US, and 65% agree that regulatory requirements are more favourable there.

On costs, however, Europe and the US are more evenly matched, with 44% of professionals finding Europe the more cost-effective option, compared to 41% who prefer the US.









### Market multiples recovery yet to reach Europe

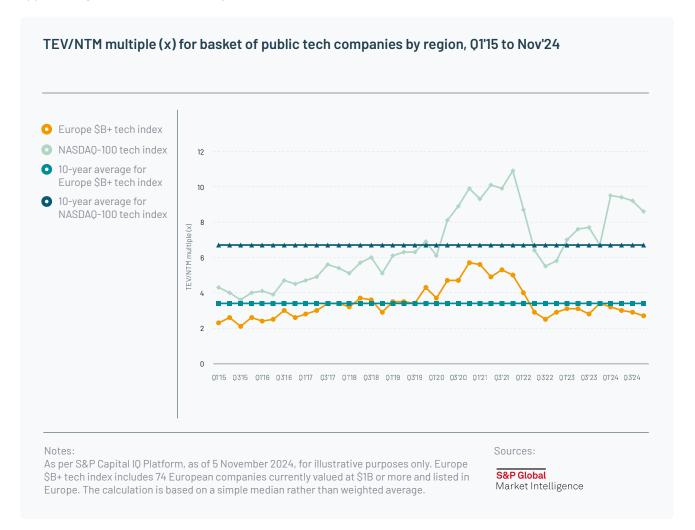
The NASDAQ-100 tech index, a basket of the world's biggest tech companies listed on the US stock exchange, started decelerating in the end of 2023, but has had a strong recovery since. In the first quarter of 2024, the median multiple across the list of NASDAQ-100 tech companies has bounced back to highs last seen in 2021, reflecting strengthened investor confidence in tech growth prospects. While markets have cooled off again since, the tech multiple still remains well above its ten year average.

On the other side of the pond, European public \$B+ companies listed locally in Europe are still hovering around the 10-year average, and the rally experienced by the NASDAQ-100 tech index is not visible.

While it might be tempting to get drawn into the headline numbers, with headlines at times anchoring on the significant delta in multiples between the two benchmarks, it is important to understand the differences between the underlying companies driving these figures.

The NASDAQ-100 tech index includes the world's biggest tech companies like Apple, Microsoft and Nvidia. Their combined total enterprise value for the top five sums to \$13T, significantly ahead of the European listed equivalent, where the top five sum to \$0.8T. The difference in scale is significant, with all NASDAQ-100 tech constituents' TEV at \$10B+ while only 23 of the 74 mapped European \$B+ companies surpassing this milestone. This tail end of mid to small cap listings in Europe is driving the lower multiple in Europe, while the top 10 European listings trade close to the US median.

This comparison ultimately highlights underlying structural challenges. For example, if ARM had chosen to list in Europe, it would have stood as the region's highest-multiple billion-dollar company, with a multiple approaching 30x at the time of analysis.



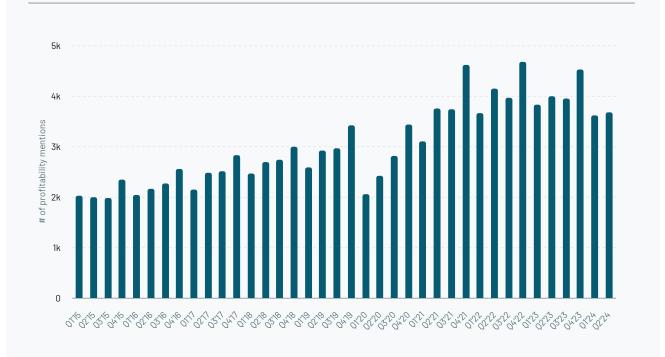
## The goal posts for public markets have moved

One reason why IPOs have become rarer is that the bar for going public has been raised. An example of this is the steady increase in the mention of "profitability" in quarterly earnings calls. Across all listed tech companies, it's clear that it's increasingly a priority. Since 2015, references to profitability have increased, peaking in late 2023 as higher interest rates began to impact the market.

A few years ago, it wasn't unusual for tech companies to go public while still being a few quarters or even years away from profitability. But with the rising cost of capital, unprofitable companies are now a tougher sell. It's not surprising then to see that public market investors are increasingly looking for companies to report at least one quarter of cash profitability and to outline a clear path to adjusted operating profitability before listing. There are still exceptions, though. For example, US-based social media platform Reddit saw a share price rally after its recent IPO, even without reaching profitability (although it has since achieved this milestone).

However, the trend is clear: time to IPO is expanding as investors expect more from private tech companies — be it profitability or even revenue target closer to \$200M (versus \$100M just a few years ago).

# Profitability mentions in European and United States tech company earnings transcripts by quarter, 01'15 to 02'24



#### Notes:

S&P Global Market Intelligence Quantamental Research. Data as of 9 October 2024. Based on Textual Data Analytics of Earnings Call Transcripts available for public technology companies (excluding biotech). The analysis averages to 632 firms per quarter for European and US firms.

Sources:

S&P Global
Market Intelligence



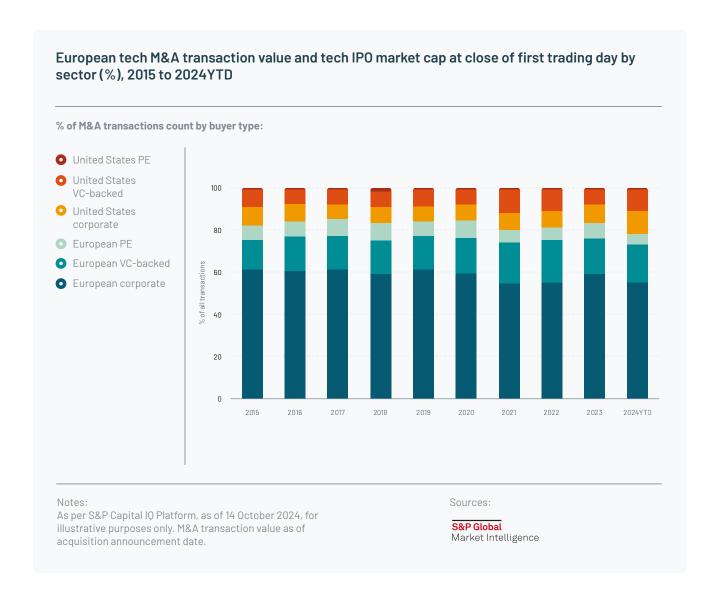




# European corporates are most active acquirers but shy away from large M&A

Over the past 10 years, European companies have consistently led the way in acquiring technology companies on the continent, accounting for 54% to 61% of the total number of transactions. European VC-backed tech companies follow, accounting for 14% to 20% of transactions. Notably, their share is growing, which bodes well for the development of the local ecosystem. Corporates and VC-backed companies from the US each account for around 10% of acquirers of European companies, while private equity firms from either Europe or the US are buyers in only a small number of transactions.

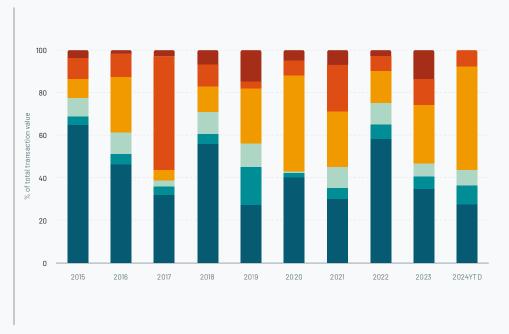
While European corporates are the biggest buyers of European tech by deal count, US corporates punch well above their weight when we compare buyers by overall transaction value. This, combined with higher transaction sizes on average, speaks to the bigger risk appetite of US buyers and their willingness to engage in bold M&A initiatives. Their share of spending has been increasing over time, too. In 2015, they accounted for 9% of transaction value while for this year so far this has increased to 48%.



# European tech M&A transaction value and tech IPO market cap at close of first trading day by sector (%), 2015 to 2024YTD

% of M&A transactions value by buyer type:

- United States PE
- United States VC-backed
- United States corporate
- European PE
- European VC-backed
- European corporate



Notes:

As per S&P Capital IQ Platform, as of 14 October 2024, for illustrative purposes only. M&A transaction value as of acquisition announcement date.

Sources:

S&P Global Market Intelligence





The M&A landscape for tech in Europe is at an inflection point, driven by a mix of market consolidation, strategic investment in AI, and regulatory pressures.

As valuations stabilize and cross-border opportunities grow, Europe is poised to be a hub for transformative deals that redefine its tech ecosystem.

**Katie Cotton**Partner, Orrick





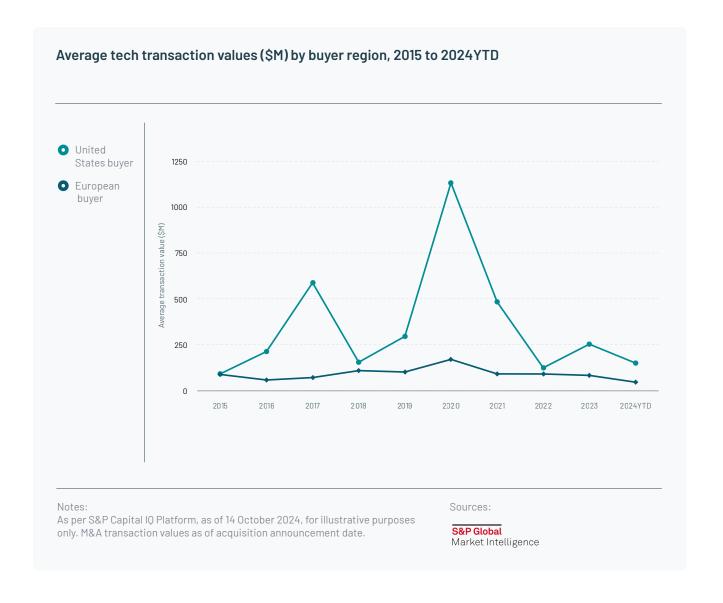


# When US firms come to Europe, they spend big

The average transaction values paint a clear picture — US firms are much more likely to take big steps on outlier-sized transactions than European firms. The average transaction value stands at \$150M for US buyers versus \$45M for European ones.

While fewer US corporates are actively pursuing tech acquisitions in Europe, those that do are making meaningful investments. So far this year, the median transaction value for European tech acquisitions by US corporates stands at nearly seven times the European corporate buyers median.

Interestingly, the acquisition price for European and US VC-backed buyers has been much closer this year, with median deal values at \$36M and \$33M, respectively. This marks a shift from pre-2021 trends, when the latter typically paid twice as much, and from 2021 to 2023, when they were willing to pay up to six times more than their European counterparts.

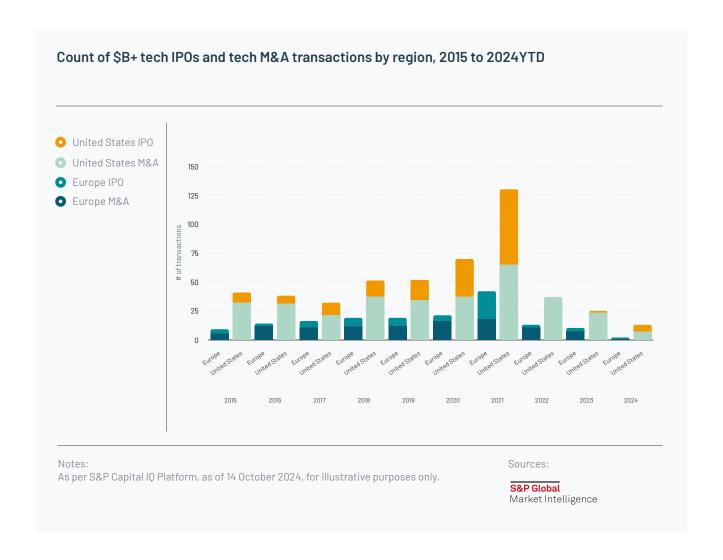


# High-profile M&A transactions hit decade low, IPOs offer glimmer of hope

Europe and the US have followed similar exit trends in recent years, with 2021 standing out as a bumper year: 130 \$B+ exits in the US and 42 in Europe. Since then, growth has flattened, and 2024 is on track to be the lowest year in a decade for billion-dollar exits in both regions.

As of mid-October, just two \$B+ exits have been recorded in Europe — Planisware and BETA CAE — compared to 10 in all of 2023. The same can be said about the US, with 13 exits so far this year, down from 25 last year. Yet, the contrast is sharp — while the US exit market is struggling, Europe is facing an even steeper decline.

Despite these challenges, there are some positive signs. The US IPO market is showing signs of recovery, with six billion-dollar tech IPOs already this year, compared to just two in 2023, offering a glimmer of hope for liquidity in the tech ecosystem.









# Nearly 20 outsized exits for Europe every year

Over the years, a significant number of \$B+ exits have happened in Europe, averaging to 17 per year since 2015.

Source

**S&P Global** Market Intelligence

17

# 165 \$B+ exits for the ecosystem

Since 2015, a total of 63 \$B+ IPOs have taken place in Europe, along with 102 M&A transactions valued at \$1B or more, but there is still significant room to grow.

Source

**S&P Global** Market Intelligence

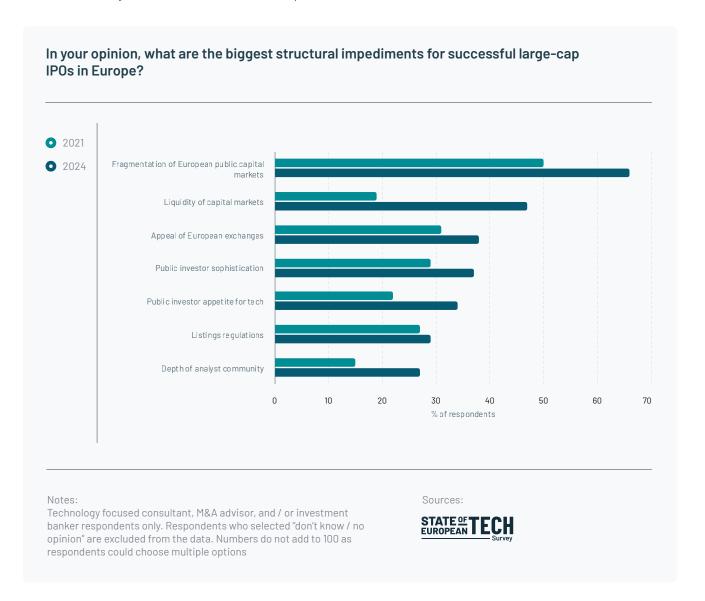
165

# Perceptions of Europe as an IPO destination are getting worse

The issue of Europe's attractiveness as an IPO destination has become more pressing since 2021, when we last asked respondents for their views on this issue. While this shift can be partly attributed to the overall subdued market — where a drop in activity tends to encourage people to cast a critical eye — addressing these concerns is essential for Europe to reach its full potential.

The success of Europe's tech ecosystem is closely tied to its ability to tap into deep and liquid public capital markets. Yet, almost half of M&A professionals and tech consultants we surveyed say this is a problem for Europe, as seen in the lower trading volumes on our stock markets compared to the US. There has been a significant negative shift in sentiment here since 2021, when just 19% of respondents selected this answer. Another drawback is Europe's fragmented capital markets, cited by 66% of respondents, with no obvious tech listing destination in Europe compared to the Nasdaq in the US.

Sentiment has also shifted regarding Europe's analyst community, with 27% of respondents concerned about its lack of depth, compared to 15% in 2021. This is something of a chicken and egg scenario — if there are fewer notable companies listing in Europe, there will in turn be fewer analysts covering the sector. Analyst coverage is an important decision–making tool for institutional investors and funds, and thus a key component of a successful flywheel that attracts further capital.





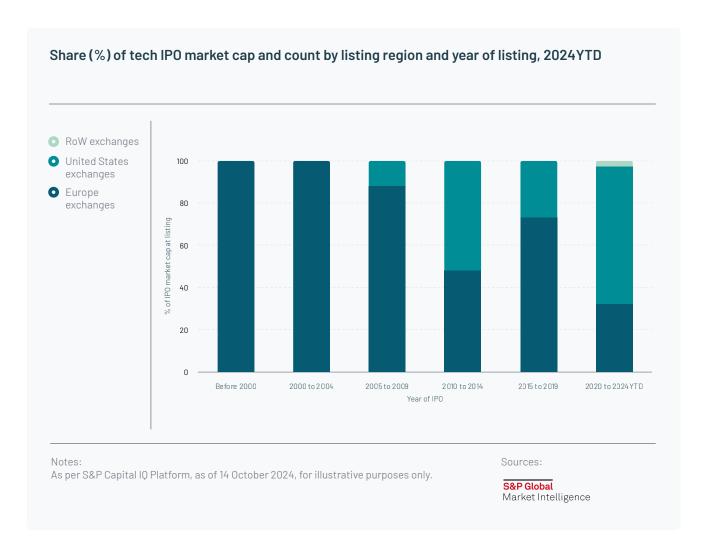




## US pull on European listings is growing

While the majority of European companies choose to IPO in Europe, a growing share of high-profile IPOs are opting to list in the US. A recent example is ARM, the UK-based tech giant that bypassed London to go public in New York last year. ARM's decision contributes significantly to the record-breaking share of European IPO value listed on US exchanges, with its IPO alone representing roughly a third of the total \$180B European IPO value listed in the US - which, in turn, makes up about 65% of the total IPO exit value of European companies over the last five years.

The decision to list in the US can increase the likelihood of the relocation of talent, knowledge and ultimately economic output as the centre of gravity shifts overseas. Calls for action to make Europe more attractive for marquee IPOs are intensifying, and ignoring them could mean watching more of Europe's potential leave the continent.



## Biggest listings going to the US

Since 2015, 11 European companies have gone on to be listed at \$B+ valuations in the US — representing 17% of all European \$B+ IPOs. The most prominent of these is ARM, but the list also includes Adevinta, Trivago and Opera.

11

Source

**S&P Global** Market Intelligence

# **Public markets power law**

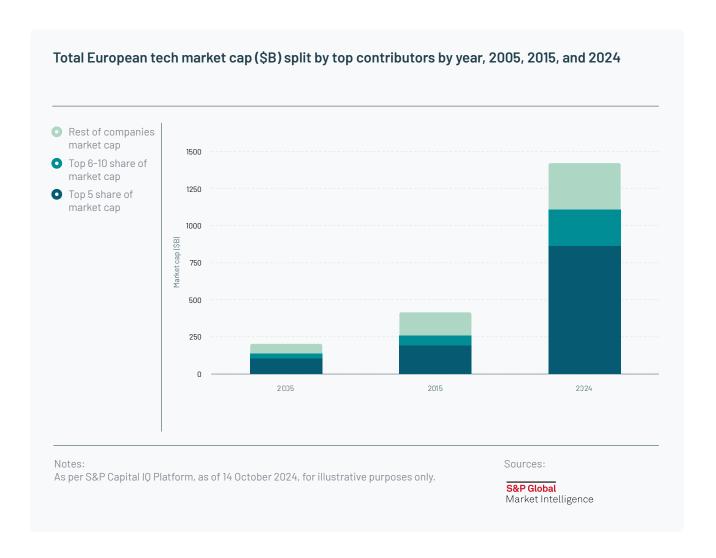
A power law distribution is evident in the European public tech markets, with the top five companies — ASML, SAP, ARM, Prosus, and NXP Semiconductors — making up 61% of the total tech market cap this year.

ASML and SAP stand out as longstanding pillars of the European tech sector, consistently among the top companies since 2005, when their market caps were just \$9.2B and \$52B, respectively. In fact, at \$357B and \$227B as of October 2024, they represent 25% and 16% of the total market capitalisation of European companies, respectively.









## A sixth of value created by European startups is lost to US relocation

A recent academic study found that 6% of 11,000 European venture-backed startups founded between 2000 and 2014 relocated across borders as of 2021. Why does relocation matter? The study was able to show how headquarters relocation has negative consequences on the European flywheel – as it leads to material leakage of talent, knowledge, capital and economic output ultimately. Relocated successful startups employ, on average, 65% of their workforce outside their founding country at the time of the IPO – with 56% located in the US, 35% in the founding country and 9% in other countries. This compares to 92% of employees located in the founding country of those companies that have not relocated their headquarters versus 4% in the US and 4% in other countries.

The majority (85%) of the companies that relocated migrated to the US. Based on the company valuations at the time of exit via initial public offering (IPO) or acquisition, relocating startups accounted for a disproportionate 17% of total startup value. This aligns with our prior research where we found that \$B+ companies are more likely to list in the US.

17%

Source

Stefan Weik Ann-Kristin Achleitner Reiner Braun









In European tech, we are made painfully aware on a daily basis of the deficits and supposed inferiority of our ecosystem. No single market.

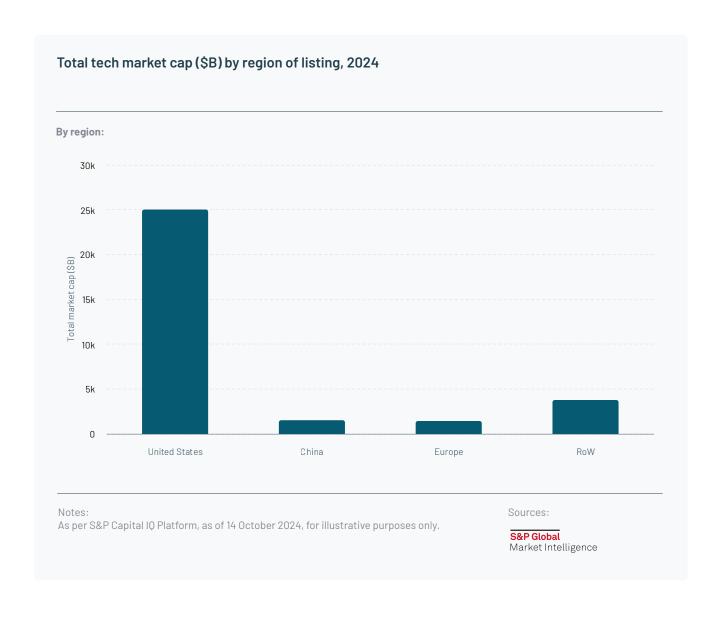
Difficulties to invest across borders or oceans. Few of our own institutional investors deploying capital in Europe. Billions sitting unused in savings accounts. And yet here we are, persevering, working the problem, breaking it down like founders and piece by piece, putting the puzzle together. We have solved the awareness problem in Brussels. Finally. Now it's time for solutions. Too much time has been wasted.

**Clark Parsons** CEO, European Startups Network

### **US stock market dominates tech listings**

The dominance of the US stock market continues to draw foreign tech firms looking to go public, as seen in UK chipmaker ARM's decision to list on Nasdaq — a move that sparked reflection on Europe's standing as an IPO destination.

A look at market cap by region highlights the US's lead, with its \$25T market cap dwarfing that of any other country or region. This dominance fuels a cycle where the US market attracts more listings, including from foreign companies eager to tap into its liquidity and investor demand. As a result, home exchanges in other regions, like Europe, are left out. Europe currently trails China by a small margin, with a total market cap of \$1.4T that is shared across a fragmented set of local exchanges across the region.



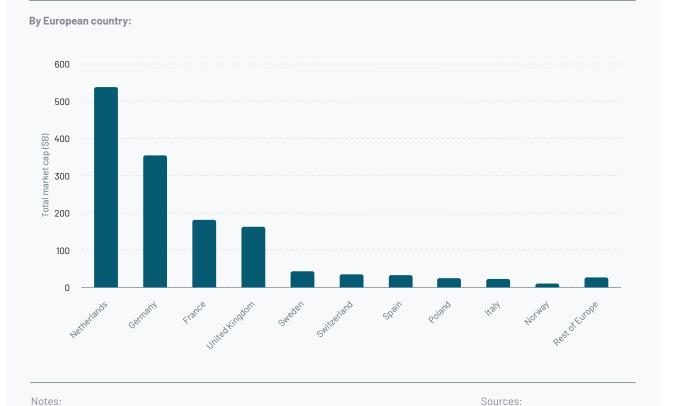






#### Total tech market cap (\$B) by region of listing, 2024

As per S&P Capital IQ Platform, as of 14 October 2024, for illustrative purposes only.



atomico°

**S&P Global** Market Intelligence

# Fragmentation leaves no natural IPO destination

Tech companies are drawn to exchanges with a critical mass of investors and market participants who understand their growth potential and the value of their offerings. However, Europe's fragmentation limits this appeal. The continent comprises numerous countries, each with distinct stock markets or regional exchanges, resulting in market capitalisation being dispersed across multiple venues and lacking a central hub for tech IPOs.

Euronext Amsterdam stands out as the leading European exchange by tech market cap, its position is bolstered by a few major tech players, such as semiconductor supplier ASML and Adyen, one of Europe's most valuable companies in the payments space. Holding 23% of the total market in tech, Euronext stands higher than the equivalent for the New York Stock Exchange at 14%, but far behind NASDAQ at 67%.





Europe has the companies to become global champions listed on European exchanges.

It has significant potential for more IPOs, supported by its robust capital markets. Three of our IPOs in 2024 are among the EU Top 10. Overall, the regulatory requirements in the US are not more favorable and it is not more cost efficient for European companies to list in the US. However, we urgently need to unlock more private capital and further enhance the capital market ecosystem for companies to list. Important first steps have been made, but we need to be more ambitious and act swiftly.

**Thomas Book** 

Executive Board Member, Deutsche Börse







#### Top exchanges by tech share in total market cap

European ranking by tech market cap	Global ranking by tech market cap	Exchange	Country	Market cap (\$B) in tech	Tech share (%) of total exchange market cap
1	9	Euronext Amsterdam	Netherlands	\$538B	23.10%
2	10	XETRA Trading Platform	Germany	\$345B	0.70%
3	11	Euronext Paris	France	\$180B	5.10%
4	13	London Stock Exchange	United Kingdom	\$138B	0.20%
5	21	OMX Nordic Exchange Stockholm	Sweden	\$41B	2.50%
6	24	SIX Swiss Exchange	Switzerland	\$33B	0.20%
7	25	Bolsas y Mercados Espanoles	Spain	\$32B	2.40%
8	27	Warsaw Stock Exchange	Poland	\$23B	0.10%
9	28	London Stock Exchange AIM Market	United Kingdom	\$22B	24.30%
10	29	Borsa Italiana	Italy	\$21B	0.10%

Notes: As per S&P Capital IQ Platform, as of 14 October 2024, for illustrative purposes only.

Sources:

S&P Global Market Intelligence

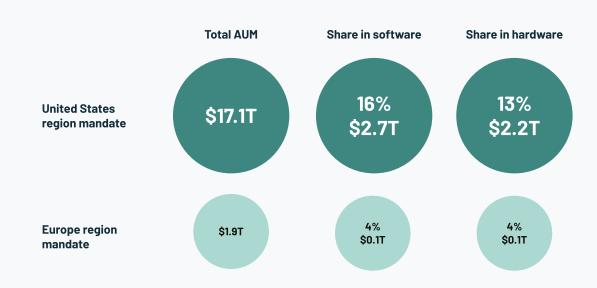
### **Deep-pocketed US public equity investors**

The scale of assets under management (AUM) of public equity funds with a US mandate far exceeds those held by those with a European mandate (including funds with a national mandate for a European country, such as the UK or Germany). Funds with a dedicated US mandate report a total AUM of \$17T, which is nine times greater than the \$1.9T held by funds with a dedicated European mandate.

The scale gap in terms of available capital for European-listed tech companies is compounded by the fact European funds have a much smaller allocation to software or hardware technology compared to their US peers.

These numbers are aligned to the negative sentiment of investors and advisors shared in this year's survey relating to Europe's lack of deep capital pools for public companies. The overall depth of available capital for tech and growth remains a significant challenge for European technology companies aiming to maximise value as they enter the public arena and seek to continue their growth journey as enduring public companies.





Notes

The categories "Software" and "Hardware" correspond to ICB Sectors "Software and computer services" and "Technology hardware and equipment" for companies in which the funds invest.

Sources: LSEG Lipper



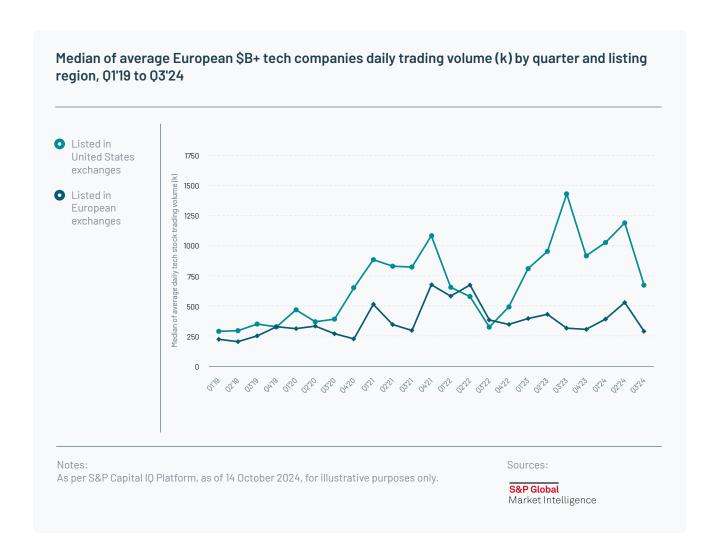




## **European companies listed in US benefit from** higher trading volumes

Comparing median trading volumes — which give a clearer picture of typical trading activity — it is clear that European stocks worth \$1B or more have higher trading volumes on US exchanges. Higher trading volumes indicate greater market liquidity, allowing investors to trade shares more easily without significantly affecting share prices. Lower trading volumes, on the other hand, can lead to greater volatility as individual transactions have a greater impact.

Despite the volatility that has affected both the US and European markets since 2023, in the long term it is clear that European companies that choose to list in the US are able to tap into deeper pools of capital.

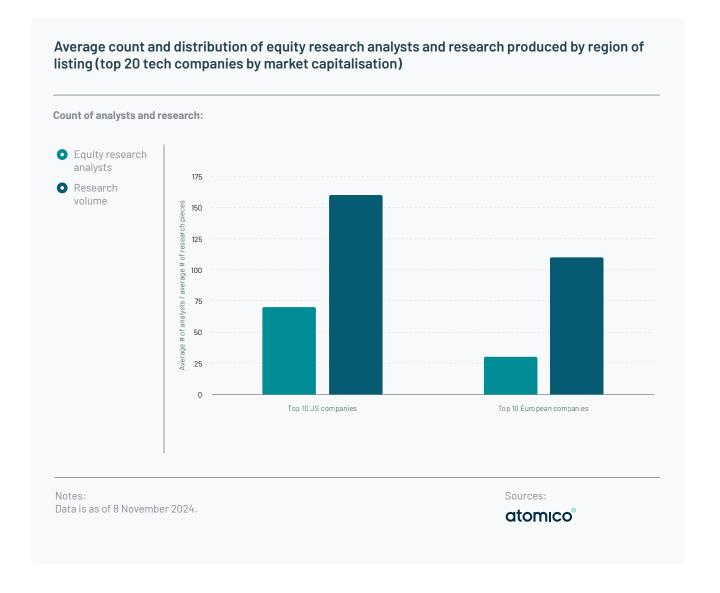


# European tech equities are lacking a deep equity research pool

We compared the number of active equity research analysts covering the top 20 technology companies by market capitalisation in Europe and the US. Across these 20 companies, we identified 489 unique analysts who have issued recommendations, a proxy for stock market coverage. We collected their self-reported location to identify the region they belong to in relation to the region of the company's listing exchange they cover.

The most valuable companies in the US are covered by 2.5 times as many analysts - the top 10 US companies have an average of 66 active analysts covering them, while the top 10 European companies have an average of 26 active analysts covering them. One limitation of this analysis is that the top 6 companies in the US have larger market capitalisations of \$1T+, which makes it more difficult to make a like-for-like comparison with the European top lists. However, Netflix's market cap of nearly \$300B is similar in size to European companies ASML and SAP, which have 34% and 48% fewer analysts covering them respectively. As a result, more research is published on US companies.

Europe's most valuable listed tech companies are also less likely to be covered by a global analyst group than those in the US, with 73% of analyst coverage coming from the region, compared to just 63% for the US top 10, where more analysts from Asia cover US listings.



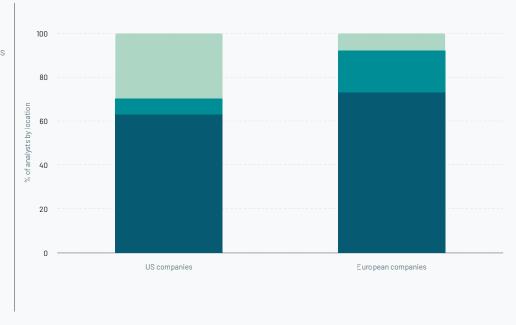




Average count and distribution of equity research analysts and research produced by region of listing (top 20 tech companies by market capitalisation)

Share by region of listing and of analysts:

- Covered by RoW analysts
- Covered by US/ European analysts
- Covered by local analysts



Notes:

Data is as of 8 November 2024.

Sources: atomico°

### European companies are getting ready to IPO

After a quiet period on the IPO front, there is a growing list of European companies that have voiced their intentions to go public. Several fintechs — Revolut and Zopa — have confirmed they are ready and waiting for the IPO window to reopen, while ride-hailing company Bolt is targeting a 2025 IPO. Klarna, whose IPO announcement has been much awaited, has just filed paperwork to go public in the US.

Preparing for a market debut is a substantial undertaking that can take years, involving everything from gathering financial data and optimising operations for profitability to selecting the right listing venue. Addressing some of the structural challenges highlighted in this chapter could be crucial in encouraging more of these companies to list in Europe.

Revolut

Revolut

HQ: UK

**Bolt** 

**Bolt** 

HO: Estonia

celonis

**Celonis** 

HQ: Germany

**FLiXBUS** 

**Flixbus** 

HQ: Germany

Klarna.

Klarna

HQ: Sweden

Personio

Personio

HQ: Germany

Vinted

Vinted

H0: Lithuania

ZOPA

Zopa

HQ: United Kingdom







### More than 100 \$B+ IPO candidates

Solving the exit markets' structural challenges matters more than ever as Europe has never had a deeper pipeline of companies that are at or approaching the scale, maturity and profile to be ready to transition into the public markets. Our analysis has identified more than 100 potential IPO candidates at or close to the necessary scale and maturity. More than a third (37%) of these companies have already made crucial CFO hires as they gear up to be ready for a public listing.



Source

atomico°

# atomico

Proudly supported by







