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# STATE OF EUROPEAN TECH21

### The definitive take on European tech

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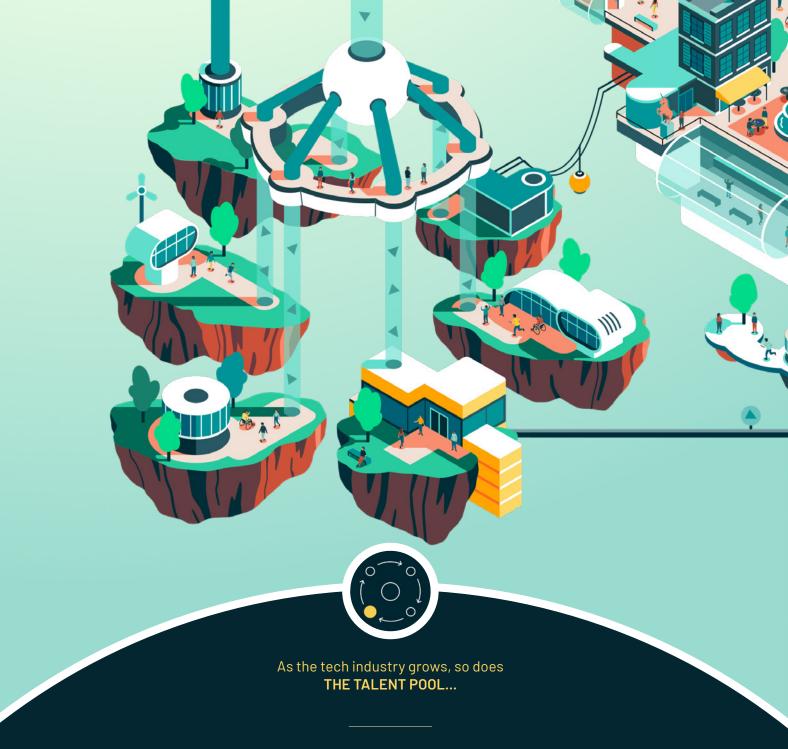


### Record growth drives new milestones

Europe is firmly positioned as a global tech player in 2021, with a record \$100B of capital invested, 98 new unicorns, and the strongest ever startup pipeline, now on par with the US. European tech is creating value at its fastest pace, adding \$1 trillion in just 8 months. While geographical differences in maturity level remain, talent mobility and distributed success is powering newer hubs.







### Talent is betting on tech

The European tech talent pool is deeper and more experienced than ever, as talent is recycled across the continent. Yet there is still a way to go; talent acquisition tops the list of challenges for founders, alongside fundraising. Many founders - particularly those from under-represented backgrounds - are finding it as hard as ever to access capital.







## European entrepreneurs are shaping their own path

European tech has become a breeding ground for companies across all sectors. From frontier tech to crypto and enterprise SaaS, European founders can build successful companies from Europe. A new generation of entrepreneurs is putting social and climate impact at the core of their mission. The ecosystem is aware of the need to improve diversity and inclusion, but has much left to do to make that happen.







# Investing in Europe is more attractive and dynamic than ever

VC has become the leading funding mechanism for entrepreneurs, but to stay competitive, VCs have to keep innovating. As the opportunity set matures, global investors are doubling down: from seed rounds to public markets, there are now more international investors and buyers active in Europe. While investors across the board have more conviction in European tech, pension funds still lag behind on their allocation to tech.







### Outcomes defy expectations in private and public markets

Europe continues to produce more tech IPOs than the US, \$1B+ IPOs are becoming the norm, and record-breaking exit activity reached an astonishing \$275B in deal value. Still, Europe is only in the first innings of its tech journey, with all indicators now pointing towards many trillions in value to be added over the next decade, even in a conservative scenario.







### From stumbling blocks to building blocks

European tech is on a strong trajectory, with venture capital delivering consistently benchmark-beating returns. However, funding, talent and policy are all critical components we must continue to fine tune. With more collaboration across private and public sectors, we can supercharge the next decade for tech. And with better accountability from founders and investors, we can deliver more on inclusivity and sustainability.







**CHAPTER** 

# A word from our partners



#### **CHAPTER 1**

#### **ARTICLES**

01.1 A word from Slush

01.2 A word from Orrick

01.3 A word from Silicon Valley Bank

01.4 A word from Baillie Gifford









# 01.1 A word from Slush







2021 will go down in the history books as the year when European tech proved its last doubters wrong and joined the big league. We are on track to cross \$100B in capital invested in a single year—more than doubling last year's figure. To have done so in these challenging times is a great display of resilience in history.

However, we're just getting started. The ubiquitous effect of companies like Spotify and Klarna in Sweden or Skype in Estonia proves that success breeds further success. It's telling that it took 7 years for Europe to get its first 10 unicorns, 7 more to add 50, while the last 7 years have generated another 260.

Back here in Finland, we recently received the news that US food delivery giant DoorDash is acquiring Wolt in a record-breaking €7B deal. I cannot wait for all the companies that will be built on the back of the capital, talent, and know-how that this will release in the years to come.

While we are right to be proud of our ecosystem in a year like this, we shouldn't settle here. Next, we need to harness the exceptional efficiency at which scalable technology companies are able to solve problems in pursuit of truly moving humanity forward. To do so, we need to reimagine how entrepreneurship works.

#### 01

Firstly, we need companies to be built by founders and operators that represent the full extent of human heterogeneity. After all, people solve problems that they themselves face. Despite evidence showing that diverse teams perform better, all-male founding teams raised 91% of all capital this year. It's deeply frustrating that, over the 7 years that we have produced the State of European Tech, we've barely seen any improvement in this figure. I wrote it last year and will write it again; going forward, we will have to move from talk to action. Anything less would be unacceptable.

#### 02

Secondly, we need to understand the difference between change and progress. Change is inevitable and erratic. Progress is deliberate and disciplined. I don't feel like I'm exaggerating when I say that the continued prosperity of our species depends deeply on our ability to laserfocus our efforts on problems that truly matter. To that end, it's been exceptionally encouraging to see over \$31B invested in purpose-driven tech companies in Europe in the last five

#### 03

Thirdly, we need to build the future that we've long imagined. Nuclear fusion, quantum computing, and general Al have been almost here for decades. Going forward, we all need a reminder that startups exist to take extraordinary risks that, when successful, change the future beyond recognition. Europe has tremendous untapped potential to produce cutting-edge technologies based on discoveries in engineering, physics, medicine, and beyond. While it will take effort and discipline to address the structural issues that are

holding us back, it's clear that the best days for Europe remain ahead of us. In fact, at Slush we very much feel like it's Day 1. As such, we at Slush are more inspired than ever by our mission - to help and create founders that change the world.



Miika Huttunen CEO, Slush









# 01.2 A word from Orrick







Now is a watershed moment for the tech and venture ecosystem across Europe and around the world. Europe is attracting record levels of investment and growth, with the innovation economy positioned to take the lead in tackling today's systemic societal challenges.

For many founders, 2021 was another year of change, with their operations, team management, corporate values and fundraising pace all under increased scrutiny by regulatory bodies. As the pandemic forced adaptation, a new hybrid talent model accelerated the decentralisation of teams across Europe. Tech companies are uniquely placed to embrace this new multicultural and multilocation-based approach.

European tech is on track to break the \$100B milestone of capital invested in a single year - nearly three times the level in 2020. Rapid investment and big exits are now the norm. The total number of tech companies scaling to \$1B+ in Europe has ballooned from 223 last year to 321 - up by a staggering 44%.

Fintech investment has led the charge, rising by 159%, with total investment of nearly \$15B, while planet-positive investments are dominating the fast-growing purposedriven space.

With ESG scrutiny topping stakeholder agendas, the startup community is laying the foundation for long-term value-focused metrics. Many are embracing growth with purpose and investors are pouring more money than ever into socially driven and planet-positive investments. But all tech companies and investors would do well to pay close attention to setting up good governance and understanding European disclosure requirements (see Articles 8 and 9 in the Sustainable Finance Disclosure Regulation (SFDR)).

Diversity, equity and inclusion will be a key ESG metric going forward, and the ecosystem as a whole has work to do. Despite evidence showing that mixed and diverse teams perform better, they captured only 9% of the capital raised in 2021 (source: Dealroom). Yet, there's reason for optimism: Compared to 12 months ago, women and ethnic minorities find working for a European tech company more attractive than men or white individuals, with 73% of women and 75% of non-white individuals reporting increased satisfaction.











#### **COMPETITION IS FIERCE**

2021 was a year of record numbers both on VC funds being raised and capital available to deploy in Europe. As a result, we saw a big change in the investment landscape, greater competition for the best deals, more unicorns created than ever, and a considerable increase in valuation and the size of funding rounds. A Series A round three years ago would easily be a seed round today. And regardless of preferred stage of entry, valuation and cheque size inflation are two of the main consequences of increased competition to win deals.

Additionally, cross-border VC investment is rapidly expanding. While it is common to see U.S. investors clamouring for access to the best European deals, we are now seeing an increase in leading European funds, such as Atomico, deploying capital into the United States. With the easing of overseas investment restrictions, we expect to see more of this activity in 2022 and beyond.

Setting aside investor appetite, there will undoubtedly be a renewed emphasis on what additional resources VCs can bring to founders when competing to win deals. Given the highly competitive investment climate, venture funds will distinguish themselves by providing founders with the right talent and human capital, strategic commercial solutions and insight. Accordingly, these value-added offerings, combined with an ethos not only to deliver returns but also to create long-term value, are of paramount importance.

#### AN EMPHASIS ON PLANET **POSITIVE**

BlackRock CEO and Chairman Larry Fink recently stated: "It is my belief that the next 1,000 unicorns won't be a search engine, won't be a media company. They'll be businesses developing green hydrogen, green agriculture, green steel and green cement."

Over \$31B has been invested in purpose-driven tech companies in Europe in the last five years, representing 15% of all funding and a 57% increase year-on-year. Planetpositive investments - defined as companies working to make sustainable use of the planet's resources - captured 11% of total funding overall in 2021, with clean energy and climate tech startups capturing the lion's share of funding.

#### FINTECH & FINANCIAL **INCLUSION**

Nearly 1 in 3 private European tech companies are fintech companies, including 4 of the 10 tech companies in Europe with the highest valuation.

Fintech companies are levelling the playing field and increasing financial inclusion. By helping low-income customers and micro- and small enterprises, fintechs have empowered people and enterprises not only to respond to the pandemic, but also to rebound, rebuild and recover.











#### INNOVATING WITH A VISION

Tech companies with vision and intent garner more attention from investors and attract the best people. Just as VCs are competing for deals, tech companies are competing for talent, with employee retention a key issue for founders to address.

We're incredibly grateful to Atomico to again invite Orrick to partner on this report, which is now recognised as the industry benchmark, and we are happy to see it continue to highlight the issues we collectively need to address.

We look forward to continued collaboration with the European tech community and helping to build a resilient ecosystem that not only thrives but also contributes to solving the many challenges this period has exposed.

#### ABOUT ORRICK

#### Creators. Visionaries. Underdogs. The Daring.

Orrick counsels more than 3,000 high growth tech companies, as well as the most active funds, corporate venture investors and public tech companies worldwide. We help you disrupt. We help you build. We protect you. We help you win.

We are the No. 1 most active law firm in European venture capital and No. 4 globally (PitchBook), top 20 for global M&A and PE (Mergermarket) and advisors to seven of the top 15 global private equity funds. We offer destination practices in other areas that are important to tech companies' success: privacy and cybersecurity, intellectual property, payments, and beyond.

Nothing inspires us more than helping tech companies innovate. We share that same vision, not only in our legal advice but also in the way we deliver our services. That's why Financial Times selected us as the Most Digital Law Firm in 2020 and Most Innovative Law Firm in North America three times, and runner-up twice, in the last five years.



Chris Grew, Partner, **Technology Companies** Group | Orrick









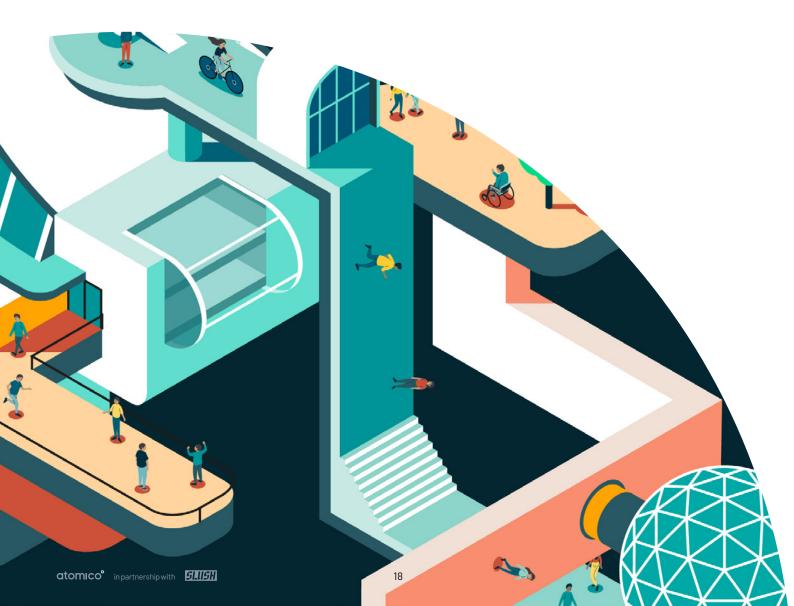
# 01.3 A word from Silicon Valley Bank





STATE OF TECH 21

In a year that can be best described as record breaking, European innovation has continued to establish itself as a global destination for all things innovation. Coming off what was already a record 2020 despite the pandemic, we have seen almost every aspect of our innovation ecosystem grow as it has matured into an established global hub for technology. Whilst we have adapted to new challenges, the traction, velocity, and diversity of our ecosystem remain our key strengths.



#### Here's what Silicon Valley Bank ('SVB') is seeing:

#### 01.

Europe is creating global market category leaders that are rivalling those of the US, as valuations reach record highs amid a thriving scaleup ecosystem.

Europe's scaleups have now matured into global market leaders, having expanded overseas, and increased their valuations over the past 12 months, something we should celebrate. In most sectors, the size of the addressable market is large and growing. We are also seeing greater inflows of capital from multiple destinations, especially with late-stage investors willing to pay a premium to participate in pre-exit rounds. From this increased liquidity and an increasingly active secondaries market, comes a recycling of wealth, talent, and experience back into the ecosystem to support the next generation of startups, VC funds and the wider innovation economy creating a growth engine for Europe.

#### 02.

As innovation takes a leading role in Europe, we find it is becoming an ever more competitive market as international investors gain ground.

In 2021, we have seen more activity from international investors than ever before, with close to one in four deals involving some form of international investment according to this report's data. European VCs are having to become more competitive in their value propositions and agile in their approach, as competing with established US VCs has now become the norm. These new strategies deployed by European VCs aim to ensure European investors remain the dominant presence from very earlystage through to pre-exit rounds. With the ecosystem maturing, we can expect to see further innovation, and new entrants, within the VC and investor community. Whilst competition between VCs may see some losing out on deal flow, the ultimate winners remain company founders, as demand to invest in European innovation is at record levels.

#### 03.

We must support diversity to help increase our probability of success and make Europe increasingly competitive.

The European tech community is making some progress to include entrepreneurs and investors with diverse backgrounds and experiences, but we must do more to put words into action if we are to make significant headway on diversity, equity, and inclusion within our sector. Progress is being made through organisations SVB partners with such as, ColorinTech, Diversity VC, The Newton Program and Atomico's SOET report. Specifically, it's encouraging to see further evidence that mixed and diverse teams perform better but we need to ensure they also increase their share of the total capital invested way beyond the current levels of 9% outlined in the report. This will go a long way to help make the innovation ecosystem an attractive place to work, build and scale a business.







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#### 04.

Looking ahead to 2022, we are optimistic that the ecosystem will continue to grow, mature, and diversify, and we herald the beginning of a golden era for European innovation.

The robust activity across our broader innovation economy will continue to attract record investment fuelled by global fundraising and record levels dry powder. We also expect policy makers to recognise that promoting a healthy innovation ecosystem requires collaboration when it comes to talent, investment in ESG & DE&I, frictionless international trade, clear and scalable regulation and the sharing of technologies and best practices to help developing countries level-up. The ability to grow these businesses into global recognised leaders is a key strength of the ecosystem. SVB passionately believes we are entering a golden era for the European innovation ecosystem and the best is yet to come over the next decade.



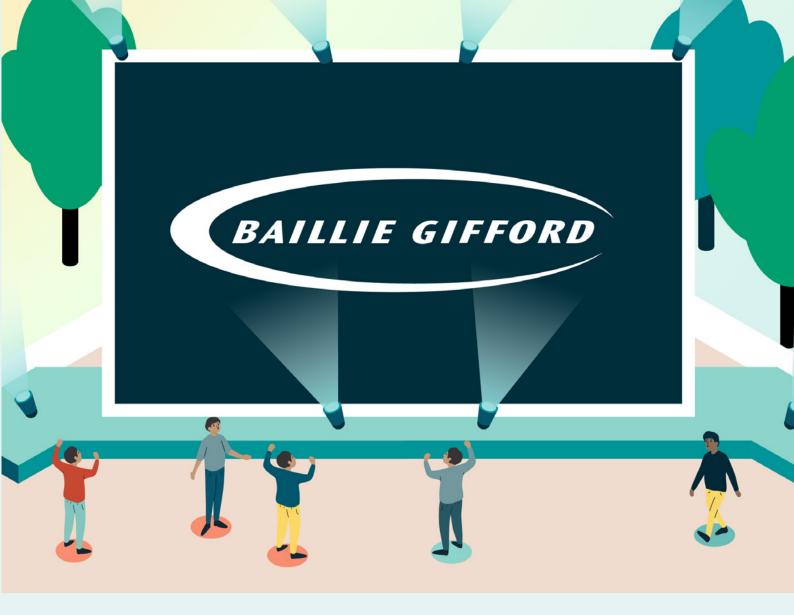
Erin Platts Head of EMEA, President of UK Branch, Silicon Valley Bank











# 01.4 A word from Baillie **Gifford**







This past year has been yet another period of unpredicted and extraordinary disruption. This, however, is the nature of exponential growth and complex adaptive systems. Whether it's the spread of a virus, network effects, or accelerating learning curves, the speed and magnitude of change tends to be grossly underestimated. With the ubiquity and convergence of technologies today, we should, however, expect more to come. Hopefully, this will be much more beneficial for society.

This year's State of European Tech report provides tremendous optimism that Europe will play an increasingly material and important role in shaping this positive disruption. For too long, Europe's great companies and entrepreneurs have struggled without adequate funding and strategic support. It is now time for Europe's tech ecosystem to show it can build world leading companies and lead the way to a more sustainable future.

Our philosophy at Baillie Gifford is to seek out, and invest in, the world's most exceptional growth companies over long periods of time. It matters less whether a company is private or publicly listed so it's been a real privilege to continue supporting companies like Spotify, HelloFresh and Wise, as they have made that transition. Given the benefits, it's encouraging to see more providers of capital widen their timeframes and think about the relevance of IPO dates.

The unquoted space is wonderful though. There's a level of ambition and understanding of how to grow at scale which is less visible in public markets. Add record levels of funding across the board and the environment for younger European tech companies to thrive becomes much more fertile. The hundred or so newly minted tech unicorns this year bear witness to this. Not long ago, it would have also been unbelievable to think that companies like Northvolt would be able to raise \$2.75bn as they did in June. Its mission to build the world's greenest batteries will help drive Europe's energy transition, but it also shows clearly that we have the resources and broad support to help Europe's companies make an outsized contribution to society's most pressing need.









When it comes to public markets, Europe has been described by some as having a 19th century index. While it might be true that its composition has been slower to transform than some other markets, we are now witnessing a profound change in attitude and a much richer tech-focused opportunity set. The health of the IPO market helps, as do role models like Adyen, Zalando, and Delivery Hero. We do of course also have ASML, Europe's most valuable tech company, and arguably one of the most important companies in the world. Since its founding in 1984 and IPO in 1995, it has been an epic story of European collaboration, innovation, and engineering excellence. Success begets success and these examples help provide inspiration to the next generation of tech entrepreneurs.

Let's be clear though, many challenges remain. European tech still suffers from a lack of diversity, talent leakage, and unsupportive government policy. Public company boards and investors also need to contribute more thoughtfully. Far too often we hear about the pressure to demonstrate profitability too early, which fundamentally undermines companies that should, and would rather, invest in growth.

That said, we have everything we need to overcome these challenges. In doing so, we will likely witness the greatest transformation of European market leadership in decades. The future for Europe's tech companies has never looked this good.



Stephen Paice Head of European Equities, Baillie Gifford





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**CHAPTER** 



# Europe, a global tech force

This year, Europe hit its stride

#### **CHAPTER 2**

## Record growth drives new milestones, both achieved and unmet

Europe is firmly positioned as a global tech player in 2021, with a record \$100B of capital invested, 98 new unicorns, and the strongest ever startup pipeline, now on par with the US. European tech is creating value at its fastest pace, adding \$1 trillion in just 8 months. While geographical differences in maturity level remain, talent mobility and distributed success is powering newer hubs.

#### **ARTICLES**

#### 02.1 Kicking into full gear

European tech is projected to break through \$100B invested in a single year - 10x the level that got us excited in our first report in 2015. 2021 is a year of mega-rounds - with over 152 \$100M+ rounds by September.

#### 02.2 Europe's next act

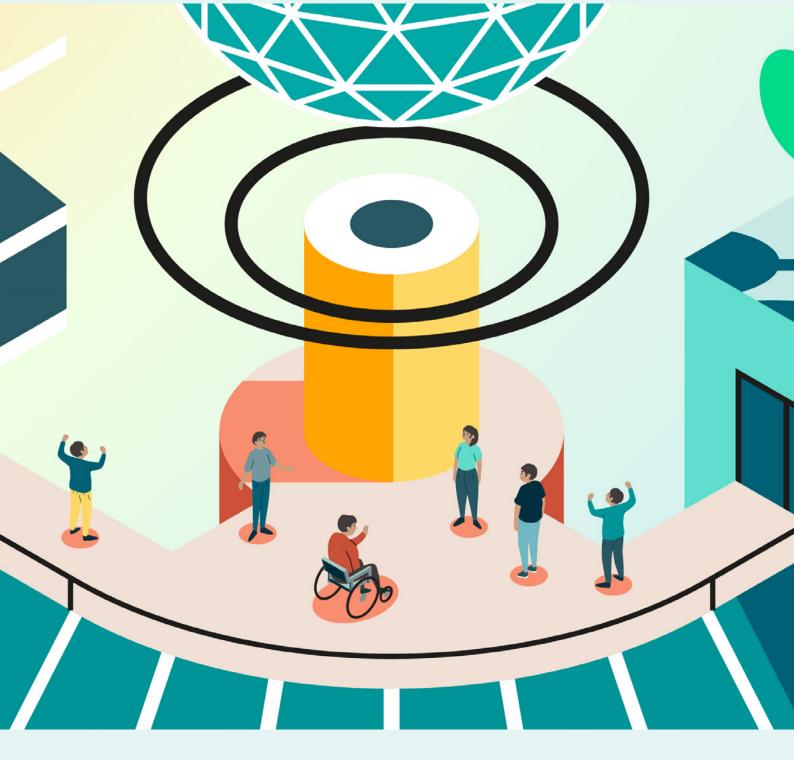
Even though its share of the global venture pie is expanding, there is still massive room for Europe to grow. Planet Positive and Deep Tech companies represent the fastest growing segments, and investors are interested. But VCs and founders have different views on macro risks.

#### 02.3 45 shades of Europe

London is still on top for tech investment - but founders believe physical location could be losing its importance. Estonia retains its place as the most entrepreneurial country in Europe - but raising capital is still hard for most. B2B, crypto & web3 and the creator economy are cementing as European strengths across the board.







# 02.1 Kicking back in full gear



## Europe is growing faster than ever, leaving major milestones in the rear view mirror

European tech is on track to reach \$100B invested in a single year, and optimism is picking up. 2021 is a year of record growth for both unicorn generation and megarounds, and new companies are raising funding faster than ever.

#### **INSIGHTS**

#### Crossing the \$100B mark

Led by \$250M+ rounds, European tech is on track to cross \$100B in capital invested in a single year, for the first time.

#### Europe unicorn count is soaring

Technology companies in Europe grew faster than ever, with another 98 reaching unicorn status so far this year. The decacorn herd (\$10B+) also doubled in size: 26 European companies now hold that status.

#### The total value of the European tech ecosystem crosses \$3T

It took decades to reach a value of \$1T in December 2018, but the next two were reached in record time. Where to next?



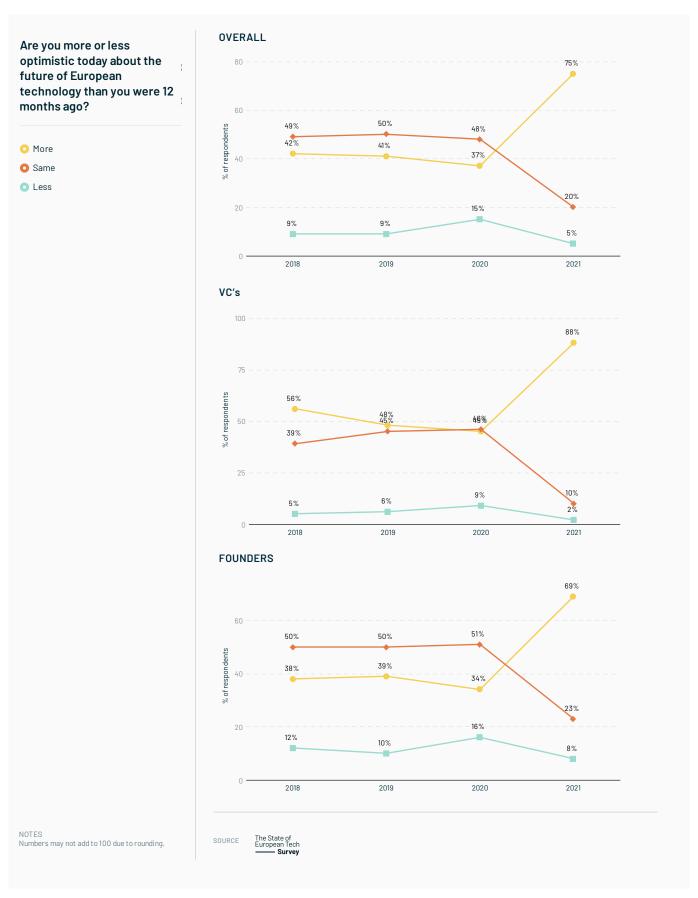






#### A shot of optimism

Following a stagnant 2019 and an understandable dip in 2020, confidence in European tech shot up in 2021. Three quarters of all respondents said they were more optimistic, a great indicator of this year's performance. VCs led the pack with 88%feeling more confident in European tech now compared to 12 months ago, speaking to the idea that success breeds success.



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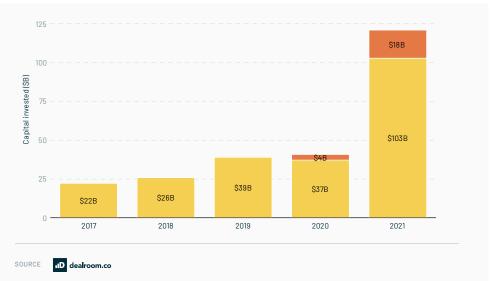




#### Crossing the \$100B mark

The European technology ecosystem will reach a major milestone in 2021: \$100B of capital invested in a single year. This is close to three times the level recorded in 2020. It is also 10 times the level that we celebrated as a significant achievement back when we first launched the State of European Tech report in 2015.





#### Europe is projected to break through the \$100B milestone

**CAPITAL INVESTED** 

invested in 2021 once annualised and adjusted for reporting lag



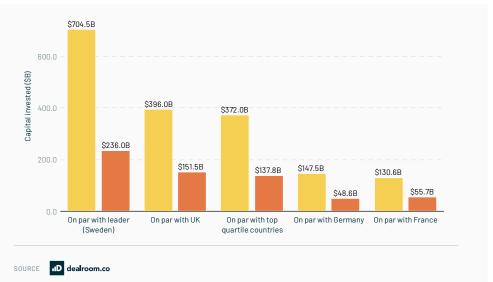




#### The next \$100B could come sooner than we think

It is especially interesting to contrast this milestone against the projections we made in our 2020 State of European Tech report. Last year, we projected that the European ecosystem could be worth \$100B in annual investments by extrapolating from the top quartile performing countries. The same metric has more than tripled this year, demonstrating how quickly the space is moving. Will we cross another milestone next year?









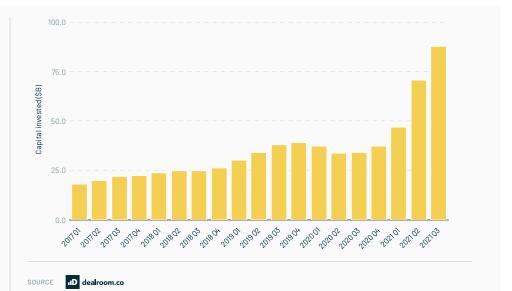




#### The pace of investment is picking up

The increased velocity of investment is particularly evident when looking at the 12 month trailing amount of funding going to European companies. After a slight dip in Q2 and Q3 of 2020, the levels of investment have accelerated since the start of 2021. European tech has made up for lost time, going from strength to strength. Most notably, we saw 50% growth in Q2 of 2021 alone. And this doesn't even include adjustments for reporting lag.

#### Trailing 12-month capital invested (\$B) per quarter, 2017 to 2021



All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021.



5 years ago, you could fit all of the continent's unicorns in a dining room and decry Europe's missing tech giants. Today, you'd need an auditorium with 321 seats and you'd hear a completely different story.

This report confirms what we've been seeing from our customers: the EU tech ecosystem is on fire. 5 years ago, you could fit all of the continent's unicorns in a dining room and decry Europe's missing tech giants. Today, you'd need an auditorium with 321 seats and you'd hear a completely different story. And one in five European unicorns are now a fintech. PSD2, financial services passporting, and open banking are all examples of the wave of entrepreneurship that directly benefits Europeans.

John Collison, Stripe | Co-founder & President







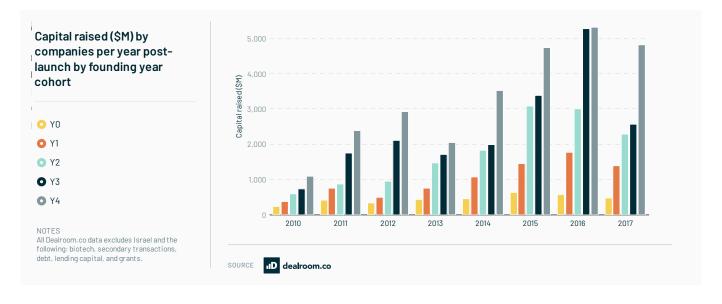


#### Newer cohorts of companies raise funding faster

For us, European tech reaching current investment levels was never a question of "if", but "when". The current pace of investment resonates with findings in previous State of European Tech report projections.

Tech is arguably going through the most meaningful paradigm shift in history globally, with perceptions of its role in the economy and society shifting. It's easy to underestimate the rate of progress this is driving.

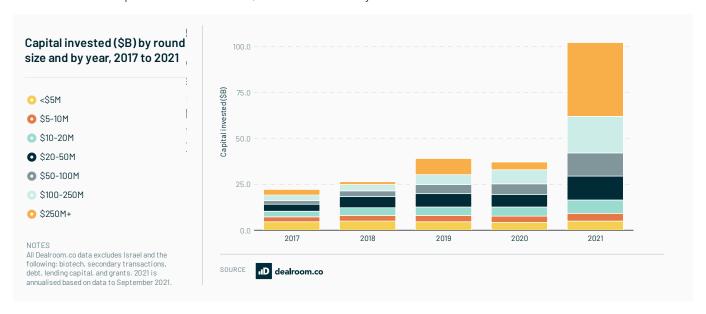
Our analysis points to this trend continuing, as the more recent cohorts of European tech companies scale faster than before.



#### Large rounds become the norm, driving record levels of investments

Investment growth in 2021 was largely driven by bigger rounds (\$250M+), which grew by a factor of ten in the last 12 months. They now represent 40% of the total capital invested in Europe. These large rounds tend to be a lagging indicator, however, given that they typically fuel growth for later stage companies.

Rounds below \$5M - a proxy for early stage funding rounds - made up a relatively similar amount to last year. However, as the total amount of funding soared, they came to represent just 5% of overall funding (down from 12% in 2020). This drives the perception that there is a "seed squeeze" but as we will see, that is not necessarily the case.







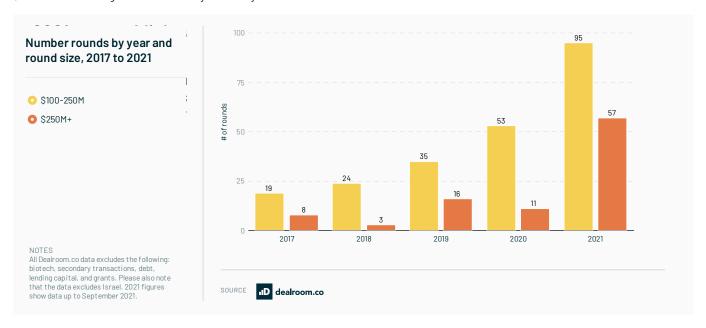




#### In 2021, no one blinks at \$100M+ funding rounds anymore

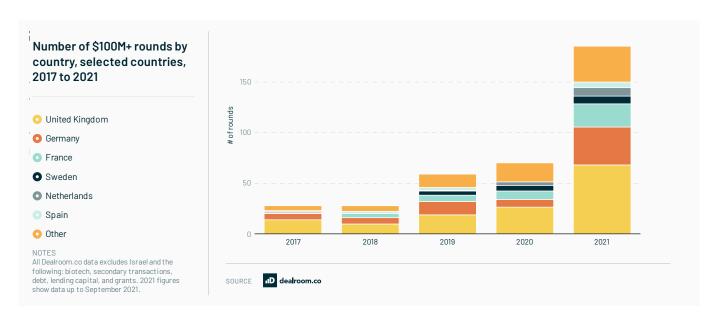
In a 2016 Slush panel discussion, we excitedly discussed the growth of \$10M+ funding rounds. In the first nine months of 2021 alone, we saw more than 150 funding rounds of \$100M and upwards.

There were 57 rounds of \$250M+, which is close to double the number achieved in the previous three years combined; a new record in European tech history. If \$100M+ has felt like a frequent occurrence, it is because the first nine months of 2021 have seen a \$100M+ round being announced every other day.



#### \$100M+ rounds here, there and everywhere

European tech megarounds have become a feature all across the region. During the first nine months of 2021 alone, there have been 68 rounds of \$100M+ in the UK, equating to 37% of all rounds of this magnitude in the region. But the growth of megarounds is far from a UK-only story. Germany, France, Sweden, the Netherlands and Spain have all set new records before the year even finished. Outside of the top six countries, there has also been an explosion of \$100M+ rounds; the number of these rounds outside the highlighted countries has hit 35 for the year to date, up 7x over the past five years.













In times of crisis and uncertainty, we often see a wave of innovation - and this seems to be what has happened in European tech over the past two years.

As wider economies have been challenged, the tech sector has welcomed a wave of new talent and new ideas. The pandemic has undoubtedly boosted the online economy and entrepreneurship, and in addition we are seeing larger fundraises become the norm, as some of Europe's more established tech giants reach truly global scale.

Maria Raga, Depop | CEO

#### Top of the Pops

The era of billion-dollar funding rounds has now arrived in Europe. So far this year, the top 10 funding rounds by size have accounted for more than 10% of all capital raised. Half of the largest rounds in 2021 were raised by fintech companies.

Top 10 largest deals raised by				
European tech companies in				
2021				

Company	Country	Round size (\$M)	Deal date
Northvolt	Sweden	\$2,750M	Jun 2021
Cinch	United Kingdom	\$1,276M	May 2021
Klarna	Sweden	\$1,000M	Mar 2021
Celonis	Germany	\$1,000M	Jun 2021
Gorillas	Germany	\$950M	Sep 2021
N26 Group	Germany	\$900M	Oct 2021
MessageBird	Netherlands	\$800M	Apr 2021
Mollie	Netherlands	\$800M	Jun 2021
Revolut	United Kingdom	\$800M	Jul 2021
Trade Republic	Germany	\$750M	May 2021
	Northvolt Cinch Klarna Celonis Gorillas N26 Group MessageBird Mollie Revolut	Northvolt  Sweden  Cinch  United Kingdom  Klarna  Sweden  Celonis  Germany  Gorillas  Germany  N26 Group  Germany  MessageBird  Netherlands  Mollie  Netherlands  Revolut  United Kingdom	Northvolt Sweden \$2,750M  Cinch United Kingdom \$1,276M  Klarna Sweden \$1,000M  Celonis Germany \$1,000M  Gorillas Germany \$950M  N26 Group Germany \$900M  MessageBird Netherlands \$800M  Mollie Netherlands \$800M  Revolut United Kingdom \$800M

NOTES

All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to October 2021.

dealroom.co









#### Europe saw it all: IPOs, Direct Listings, SPACs, M&A, PE buyouts

The top 20 largest exits of VC-backed European tech companies reached a combined value of more than \$114B, representing a record-breaking year. This list includes European tech companies from six different countries and every type of exit from IPOs, direct listings and SPACs to PE buyout and good old fashioned M&A. The path to liquidity for European tech companies has become more varied.





Based on data up to 10 November 2021.

■D dealroom.co







#### STATE OF TECH 21

#### Groundbreaking year for exits for Europe

Record exit value is now in excess of \$275B in 2021. It includes \$100B from M&A, \$110B+ via IPOs and direct listings and another \$62B via SPACs. \$140B (51%) can be attributed to VC-backed companies, with the largest share across IPOs and direct listings (60%).

#### **TOTAL EXIT VALUE**

of total enterprise value across M&As, IPOs, direct listings and SPACs

#### **VC-BACKED TOTAL EXIT VALUE**

of total enterprise value for VC-backed companies across M&As, IPOs, direct listings and SPACs



#### Total enterprise value (\$B) by route to liquidity and backing status in 2021

VC-backed

Non-VC backed

#### NOTES

All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. Dealroom 2021 data is based on data up to September 2021. S&P Capital IQ Platform, as of date 29 November 2021, for illustrative purposes

















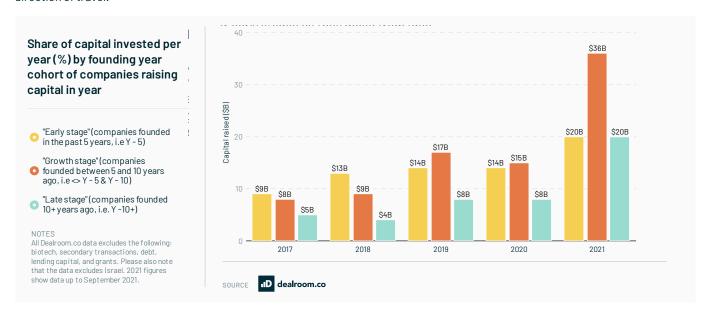


#### The "growth stage" funding gap is closing

Over the past five years, we've seen the biggest relative leap in funding levels being made at the growth stage - which is also where there was most catching up to do.

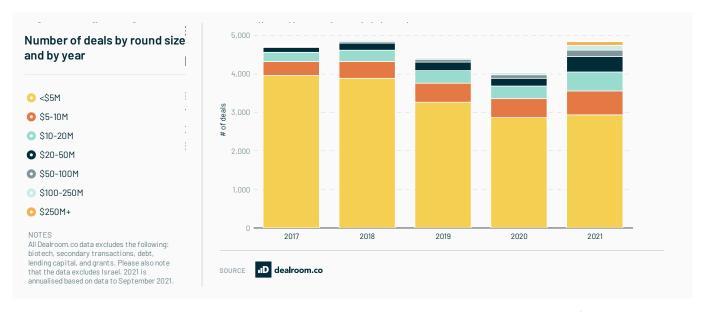
Growth stage funding has increased by 5X, while early stage funding has only increased by 2.3X in the same time.

This cohort analysis looks at the founding years of European companies and uses them as a proxy for company stage. Companies started in the past five years are likely to be in their early stages as they move from idea (Pre-seed) to product market fit (Series A/B). Next, those started between five and ten years ago are most likely to be in their growth stage, where capital fuels scaling. Finally, those started over 10 years ago are likely at a more mature stage of growth. While imperfect, this methodology allows us to see the direction of travel.



#### Is there a "seed squeeze" in Europe?

Zooming in on funding rounds of \$5M or less – a proxy for pre-seed and seed level companies - the number of funding deals has stayed similar to that of 2020 and 2019. While the number of funding deals at this level has not grown as rapidly as those of much later stages, this data doesn't point to a consistent underfunding or reduced activity level in the seed stage, or what some call the "seed squeeze". The following data on value allocated will shed further light on this. It is possible that the opposite might be true, due to the reporting lag effect: the most recent seed investment data is systematically understated.









#### STATE OF TECH 21

#### Europe has its strongest startup pipeline ever, now on par with the US

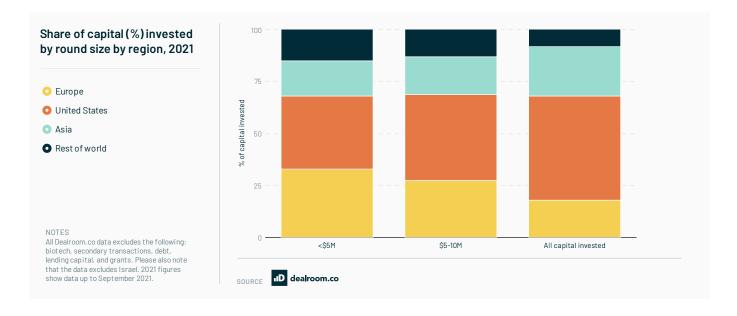
Early stage funding is a leading indicator of future growth. It is therefore worth noting that today, Europe's early-stage ecosystem is on equal footing with the United States.

European startups account for 33% of all capital invested globally in rounds of up to \$5M, compared to 35% for the United States.

#### **EUROPE ACCOUNTS FOR**

of all capital invested globally in rounds of up to \$5M

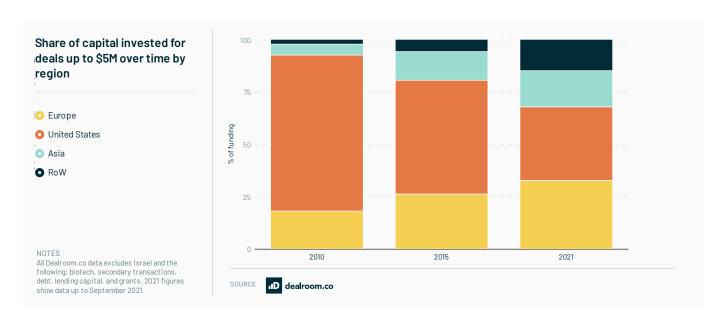




#### Europe's share of early-stage funding grows at expense of US

When we looked at each region's share of early-stage funding over time, it is clear that Europe's portion has grown at the expense of the US' - while China has seen a minor increase in share over the last five years. Europe increased its share of funding at this stage by 13%-points while the US decreased by nearly 20%-points.

This shows a clear jump in investor appetite for early-stage European technology companies and speaks to the improvement in the quality and quantity of companies that Europe has to offer.









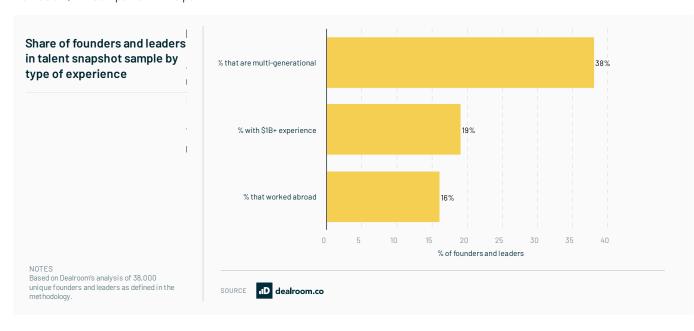


#### A thriving ecosystem breeds new generations of experienced entrepreneurs

The depth of the European talent pool is improving, as opportunities to work for wellfunded startups and scaleups attract more talent with different skill sets and work experiences.

Looking at founders and leaders working for companies that have raised funding in the past two years, 38% of them are multi-generational leaders that have worked for both established tech companies and younger startups. An additional 19% have worked for a \$1B+ companies in the past, and 16% have moved countries at some point in their

We explore this further in our Chapter: Founders & Leaders, where we analyse the profiles of 38,000 founders and leaders in European tech, and 6,000 founders who worked at \$1B+ companies in the past.





I am very optimistic about the future of the EU as the global powerhouse for startups and innovation. My optimism is based on the data from 2021 as well as prospects for the future.

The data of 2021 shows a remarkable increase in VC investments in startups, more than double in comparison to previous year Q3, as well as a tripling of the amount of exits in several sectors. Actually the largest IPO of 2021 is from the EU, UiPath. European startups no longer have to envy US startups. European unicorns have also become the new normal, with the number of unicorns almost doubling in 2021.

The future looks even brighter with institutional investors starting to invest in Deep Tech startups, like the example of Northvolt. And 2021 has signalled the booming of German speaking countries in terms of exits (overpassing any other European country) and number of unicorns, as well as the emergence of CEE countries as a place for startups to thrive.

Mariya Gabriel, European Union | EU Commissioner for Innovation, Research, Culture, Education and Youth







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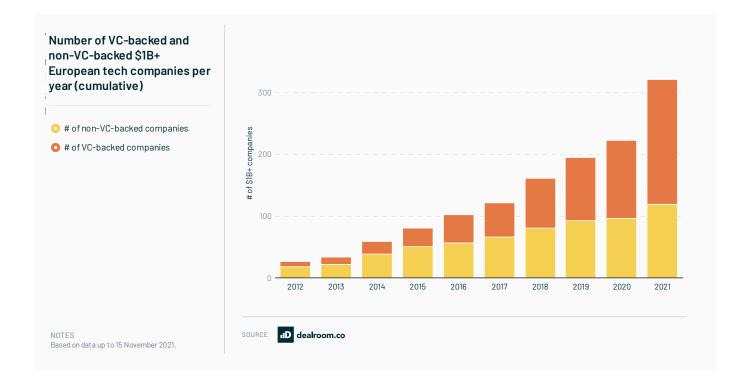


#### Europe has minted 98 new unicorns so far in 2021

Tech success stories spur on new entrepreneurs and better companies, leading to a virtuous cycle. This cycle has led to quantifiable outcomes, most notably in the total number of tech companies that have scaled to \$1B+ in Europe.

The total number of European unicorn companies has jumped from 223 at the end of 2020 to 321 at the time of publication. 98 new unicorns have been minted - 75 of which are VC backed.

Europe is producing unicorns at a faster pace than ever before.













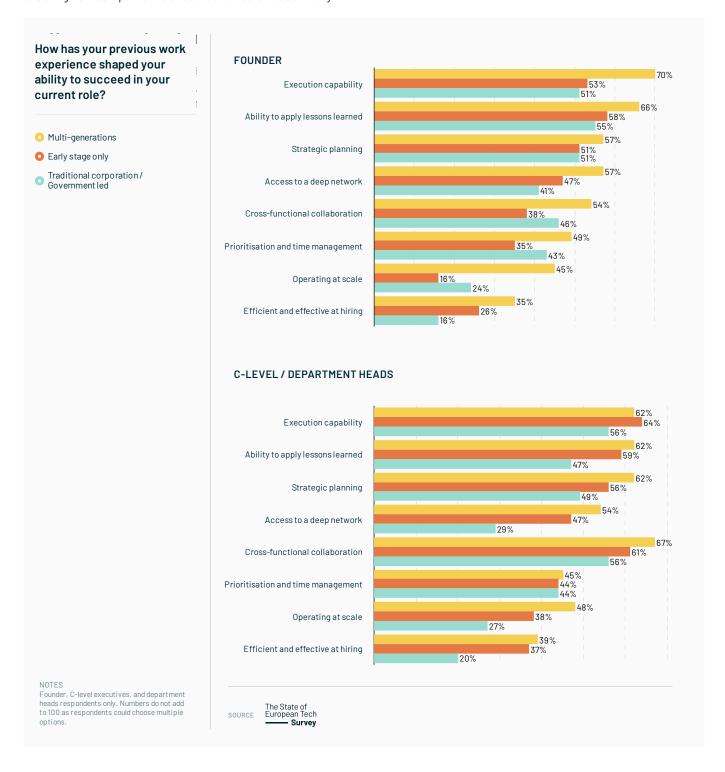


## As the unicorn herd grows, talent is compounding at lightning speed

European success stories have a compounding impact on the depth and sophistication of the region's talent pool. In our survey, founders and senior leaders at tech startups demonstrated how past experiences contribute to the success of their current company.

70% of founders who had experience at companies of several different sizes (from early-stage to established companies) said execution ability was the most valuable skill they'd picked up in previous roles, compared to 53% for respondents who had only worked in early-stage companies. Leaders with previous experience were also more likely to value their ability to access deep networks, operate at scale, and hire effectively.

Talent recycling and liquidity is crucial to the levelling up of operational talent, and enabling new companies to execute and scale successfully.











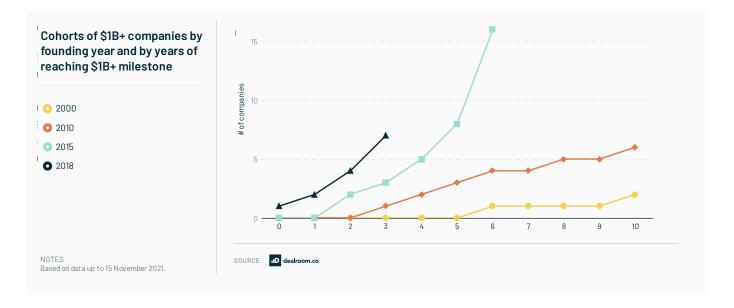


#### Not only are there more unicorns in Europe; they are scaling faster

The depth of experience in today's talent pool can be seen in unicorn creation. The most recent cohorts of European startups are producing more unicorns, at a faster pace than ever before.

In this graph, the x-axis plots the number of years since founding, while the y-axis counts the number of corresponding \$1B+ companies.

It took six years for the first European company - founded in 2000 - to reach unicorn status, and another four years for the next one to follow. For companies founded in 2018, however, it took only one year for the first two companies to reach this milestone, and less than one additional year to double that number.

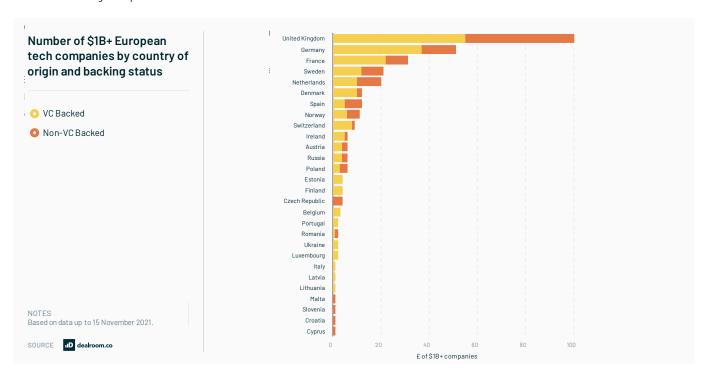


### Welcoming Latvia and Cyprus 👋

Europe has now seen unicorns emerge from 28 different countries across Europe.

Latvia and Cyprus are the most recent addition to this list, with Printful reaching unicorn status in May 2021 after raising a \$130 million growth round and Nexters Group passing the same benchmark earlier in the year with a \$1.9B SPAC deal.

The UK remains Europe's leading home for unicorns and reached a meaningful milestone having now produced 100 unicorns in total.



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Trends that we believed would take 10 years to fully materialise have happened in just two. Our continent is set up to make the most of that opportunity

The last 12 months have only increased our optimism about the future of European technology. In spite of the damage the pandemic has done to our communities - and it'll take some time for us to fully recover - we have witnessed a dramatic acceleration in the acceptance and take-up of digital services. Powerful changes in consumer behaviour have hastened the transformation of industries like healthcare and food. Trends that we believed would take 10 years to fully materialise have happened in just two.

Our continent is set up to make the most of that opportunity. We have creative founders with growing access to capital who are ready to meet that burgeoning demand. That perfect storm will inevitably lead to an even stronger pipeline of high-growth, techenabled companies.

Georgi Ganev, Kinnevik | CEO







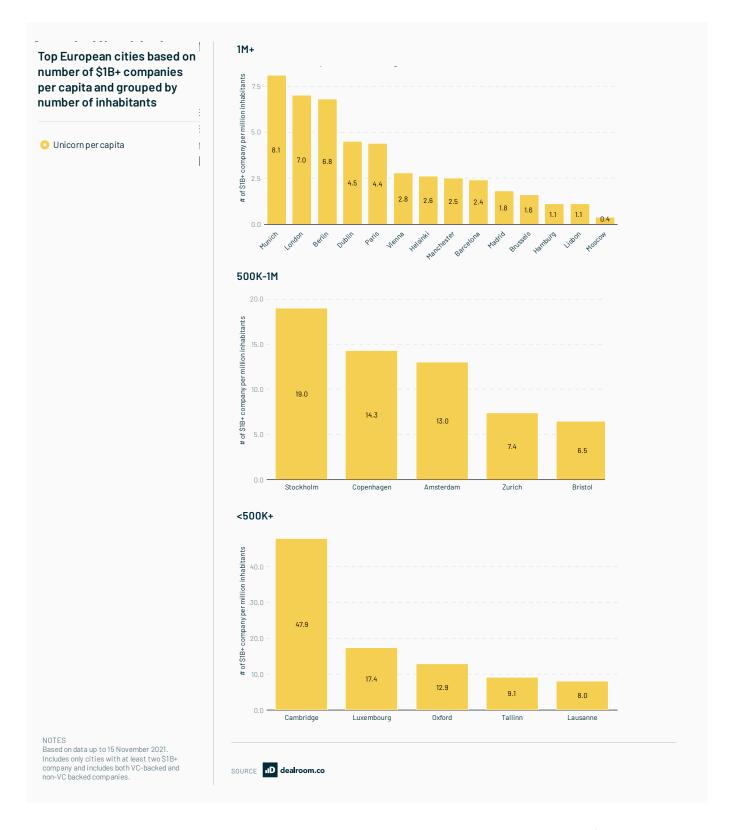


## Munich, Stockholm and Cambridge lead on "unicorn density"

The competition to be recognised as Europe's leading tech hub is a source of (mostly) friendly rivalry, with many tech hubs neck and neck when it comes to the number of unicorns produced per capita.

Among cities with a population greater than 1M inhabitants, Munich stands out as having the highest overall density of unicorns. Stockholm takes first place amongst mid-sized cities with 500,000 - 1M inhabitant, with 19 \$1B+ companies per million inhabitants.

Cambridge, however, stands apart from all others. Though small in size, it has produced a large number of unicorns, thanks to the very high concentration of talent.













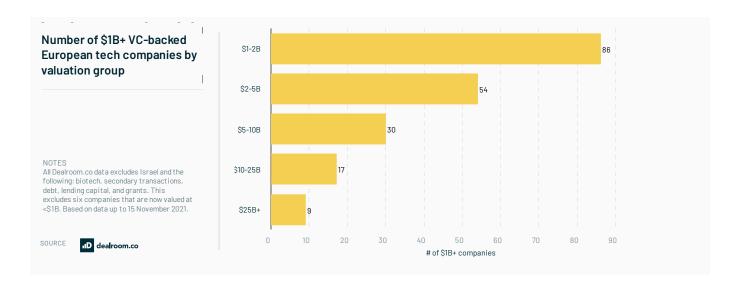


#### The decacorn herd doubles in size

Europe is not only producing new unicorn companies faster than before, the magnitude of its leading companies is also increasing in scale at a record pace. There are currently  $26\,European\,tech\,companies\,with\,so-called\,decacorn\,status,\,with\,a\,valuation\,of\,\$10B$ or more. This has more than doubled from the 12 recorded at the end of 2020.

The funnel of future decacorns is also promising, with 30 companies currently valued between \$5-10B, and another 54 valued in the \$2-5B range.

Meanwhile, Adyen looks set to become the first VC-backed European tech company to reach a \$100B valuation - also known as hectocorn status - having already reached \$99B in the second half of 2021.













#### The United States leads on market cap, but Europe is closing the gap

The accelerated growth of European tech companies is felt in both private and public markets.

The combined market cap of the ten biggest companies in the United States is still 10 times larger than Europe's, but the gap is getting smaller. In fact, ASML's value is now at the point where they would overtake Adobe to make into into the top 10 most valuable public tech companies in the US.

In 2021, Europe's 10 biggest companies added \$514B to their aggregate market cap, growing at 73% year over year. This compares to an increase of 55% in the US, and a decline of 17% in China.

#### Top 10 largest public tech companies by market cap (\$B) and region

#### **EUROPE**

	Company	Market cap (\$B)	Category	VC-backed
1	ASML	\$352B	Semiconductors	No
2	Prosus	\$272B	Online Commerce	No
3	SAP	\$168B	Application Software	No
4	Adyen	\$90B	Fintech	Yes
5	Dassault Systèmes	\$83B	Application Software	No
6	Infineon	\$63B	Semiconductors	No
7	NXP Semiconductors	\$57B	Semiconductors	No
8	Spotify	\$53B	Consumer Internet	Yes
9	STMicroelectronics	\$46B	Semiconductors	No
10	Delivery Hero	\$35B	Online Commerce	Yes

#### **UNITED STATES**

	Company	Market cap (\$B)	Category	VC-backed
1	Microsoft	\$2,523B	Systems Software	Yes
2	Apple	\$2,461B	Tech Hardware	Yes
3	Alphabet	\$1,977B	Consumer Internet	Yes
4	Amazon	\$1,798B	Online Commerce	Yes
5	Tesla	\$1,020B	Tech Hardware	Yes
6	Meta	\$967B	Consumer Internet	Yes
7	NVIDIA	\$749B	Semiconductors	Yes
8	Visa	\$449B	Fintech	No
9	Mastercard	\$355B	Fintech	No
10	Adobe	\$314B	Application Software	Yes

#### CHINA

	Company	Market cap (\$B)	Category	VC-backed
1	Tencent	\$601B	Consumer Internet	Yes
2	Alibaba	\$451B	Online Commerce	Yes
3	Meituan	\$228B	Online Commerce	Yes
4	JD.com	\$131B	Online Commerce	Yes
5	Pinduoduo	\$115B	Online Commerce	Yes
6	LONGi Green Energy	\$78B	Semiconductors	Yes
7	NetEase	\$72B	Games & Interactive Entertainment	Yes
8	Xiaomi	\$68B	Tech Hardware	Yes
9	Baidu	\$58B	Consumer Internet	Yes
10	Kuaishou	\$53B	Consumer Internet	Yes

S&P Capital IQ Platform, as of date 15 November 2021, for illustrative purposes

SOURCE

S&P Global







#### STATE OF TECH 21

#### Europe is now home to six private decacorns, up from two in 2020

In 2020, Europe had two privately owned decacorns: Klarna and UiPath, valued at \$10.7B and \$10.2B respectively. These have grown at unprecedented rates in the last year, reaching valuations of \$46B and \$35B.

Five decacorns join their ranks: Revolut (\$33B), Checkout.com (\$15B), Northvolt (\$12B), Celonis (\$11B), and Talkdesk (\$10B).

Four of the top ten companies from 2020 have now gone public: UiPath, Wise, Arrival and Auto1 Group.

#### MOST VALUABLE FINTECH

making Klarna the most valuable private European fintech company

#### Top 10 VC-backed \$1B+ private European tech companies

	Company Name	Valuation (\$B)	2021/2020 Valuation (x)
1	Klarna	45.6	4.3x
2	Revolut	33.0	6.0x
3	Checkout.com	15.0	2.7x
4	Northvolt	11.8	3.0x
5	Celonis	11.0	4.4x
6	Talkdesk	10.4	3.5x
7	Dfinity	9.5	2.7x
8	Outsystems	9.5	9.5x
9	N26	9.0	2.6x
10	Snyk	8.6	3.3x

NOTES

Based on data up to 15 November 2021.





### There's never been a better time to be an entrepreneur in Europe.

The continent is attracting more capital, more talent and there are more ambitious entrepreneurs than ever trying to follow in the footsteps of success stories.

Europe might seem like a more complicated market as it's fragmented with different languages and different cultures. However, there are now many success stories in consumer businesses coming from Europe: Ledger, Revolut, Sorare, Vinted etc. Culturally, European founders are more ambitious, they now think global from day one.

Nicolas Julia, Sorare I Co-founder





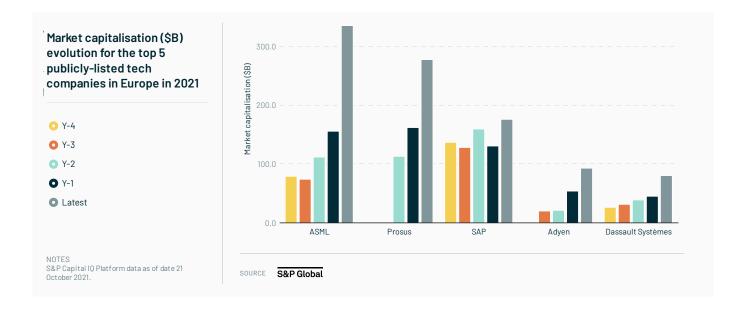




#### Entering the era of European big tech companies

Europe now has three publicly-listed tech companies valued at a market capitalisation of greater than \$100B, with others on course to follow suit.

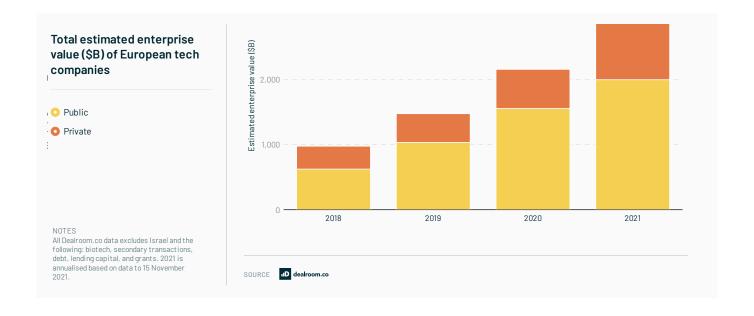
Europe's chance of producing its first tech company valued at greater than \$1 trillion over the course of the next decade no longer looks like an impossibility.



#### The total value of the ecosystem crosses \$3T

Given the trajectory of the sector, it's not surprising to see the recent acceleration of value creation across both public and private markets.

While it took the European tech ecosystem multiple decades to reach its first trillion dollars in value (December 2018), the next two trillion dollars have been reached at record pace, in less than three years.









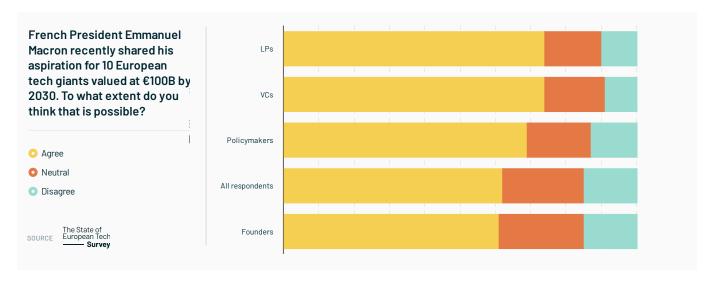


#### We can be bold in our ambitions for European tech

French President Emmanuel Macron recently shared his aspiration for 10 European tech giants valued at €100B by 2030. Yet, in the current direction of travel, this milestone seems an inevitability, and calls for us to raise ambition levels across the board.

Broadly speaking, there is a shared belief that we will see 10 European companies reach hectocorn status (\$100B valuation) by 2030, in line with the aspiration set out by French President Emmanuel Macron this year. 74% of investors share this vision, with LPs showing the greatest level of confidence.

Europe's current direction of travel would suggest the prospect is highly achievable, and may even become a cautious projection given the current rate of growth and compounding value. So what's next for Europe?



It's challenging to measure the state of European tech and to make assertions about where we are and where we're heading. One framework that we have found useful in our analysis is to ensure we understand the difference between leading and lagging indicators.

Unicorn counts, total capital invested and total ecosystem value are appealing as metrics as they give a real sense of progress, but they are also inherently backwards looking in nature.

They tell us more about the state of European tech over the past few years. If we want to understand what lies ahead, we need leading indicators that reveal more about the future, such as the depth and quality of entrepreneurial talent, flows of funding into the earliest stages, or more nuanced analysis that breaks things down into time-based cohorts. We hope this is a helpful framework for you as you also form your view on the state of European tech.

LOOKING AHEAD, NOT BACK source atomicoº











# 02.2 Europe's next act

## Europe's next act is taking shape - led by impactfocused companies and frontier tech

Europe has more investors than ever from all over the globe. Even though its share of the global venture pie is expanding, there is still massive room to grow. Planet Positive and Deep Tech companies represent the fastest growing segments, and investors are interested. Are they the future?

#### **INSIGHTS**

#### 11% of total funding in 2021 is Planet **Positive**

Planet Positive tech is on course to reach \$10B invested, capturing 11% of all funding this year at 6x the speed of 2017. Clean energy and climate are the biggest areas of growth.

#### Europe still has massive upside

Europe is still capturing only 7% of global tech market cap. But foreign investment is peaking (the number of US investors in European tech increased nearly 50% in 2021) and talent is accelerating: Europe is quickly making up for lost time.

#### VCs and founders have different views on macro risks

For founders, the top risks that could lead to a slowdown in VC activity in Europe over the next five years, are policy impacting their business and geopolitical factors. However, VCs and LPs most frequently cited the interest rate and inflationary environment, as well as overall public market sentiment and performance.









Most would agree that our key priority for the next decade is to achieve a better future for all, as outlined by the UN's 2030 Sustainable Development Goals (SDGs). Throughout the report, we use a number of terms to discuss this goal but we want to get aligned on their meaning. "Planet Positive" and "Purpose" both relate to tech companies' business model and industry, while "social and environmental impact" signifies companies' corporate responsibility initiatives. Since 2019, we have collaborated with Dealroom to quantify capital invested in purpose-driven companies. Dealroom manually tagged keywords to companies in its platform across all 17 SDGs, as well as if purpose is core or adjacent to the business model.

#### A BETTER FUTURE FOR ALL

#### How we define ESG, Purpose and Planet Positive in SoET

**ESG** — Reducing harm

PURPOSE-DRIVEN COMPANIES (IMPACT) ———— Building a sustainabe future for all by addressing one or more SDGs

PLANET POSITIVE -→ Sustainable use of the Planet's resources









SDG 12 Responsible Consumption & Production

























Life on Land



Building a responsible technology ecosystem that scales is critical to our future.

I know first hand at DeepMind both how challenging and rewarding this process can be - it's about digging in and building technologies that benefit everyone. It's about creating robust processes, building shared norms across the industry, and getting the right mix of people in the room. This is an evolving and complex process, and no one has all the answers. That's why it's so important that we come together as a community, continuously listening and learning from each other.

Lila Ibrahim, DeepMind | Chief Operating Officer









#### There's a large opportunity for Planet Positive companies

By mapping more than 6,900 publicly-listed European companies across 155 industry verticals to key thematic areas of entrepreneurship (the detailed methodology can be accessed in the appendix), we can start to get a picture of Europe's next act. This approach, while simplistic, is directionally useful to understand the scale of different opportunities even through the limited framing of European public equities.

For example, the 'Planet Positive' thematic segment, which encompasses tech and tech-enabled companies working towards a transition to sustainable environmental practices in fields such as energy, water and chemicals, can be compared against established or incumbent companies in industry sectors such as, oil & gas, coal and commodity chemicals.

The Planet Positive segment is the fastest growing of all, with over \$2T added to its public market cap.







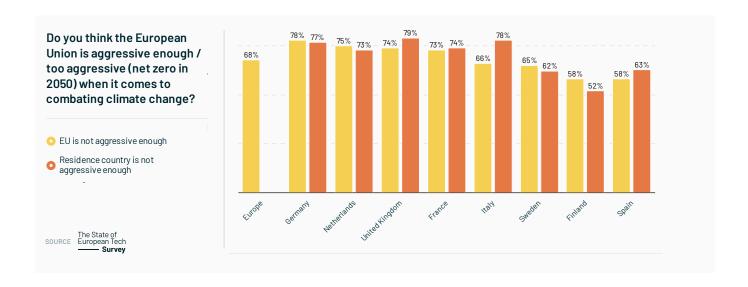




#### The European Union's climate plans are not seen as aggressive enough

A growing focus on climate change within the European tech ecosystem is accompanied by disappointment with the European Union's approach to mitigation, which is largely seen as not robust enough.

68% of survey respondents indicated they do not perceive the European Union as sufficiently aggressive in combating climate change. Looking at the country-level responses, some interesting differences emerge. For example, there is a 20 percentage point gap between respondents from Germany and Finland, with Finnish respondents least likely to call out their government for not being aggressive enough in their approach.





#### Social entrepreneurship's biggest challenge is its current incentive structure.

In a way, I am all for creating a viable path for social entrepreneurship but equally against totally de-risking that path because in essence, that is not entrepreneurship, that is the redirecting of public goods to create social value on a micro-level of individual action (that is often not rewarded well).

Meeting social challenges - from climate change to energy efficiency to ending income inequality - is a collective effort that requires finding innovative solutions at all levels. It does however start at the macro systemic level with policy makers. Private investors can and are currently playing an important role in funding innovation to solve social problems but the onerous in doing so at scale is with policy makers and their ability to integrate social value into incentives mechanism for innovation.

Nader AlSalim, Gaia | Founder & CEO

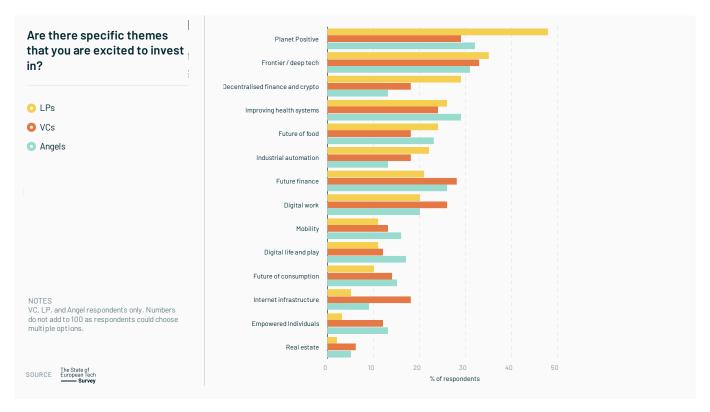






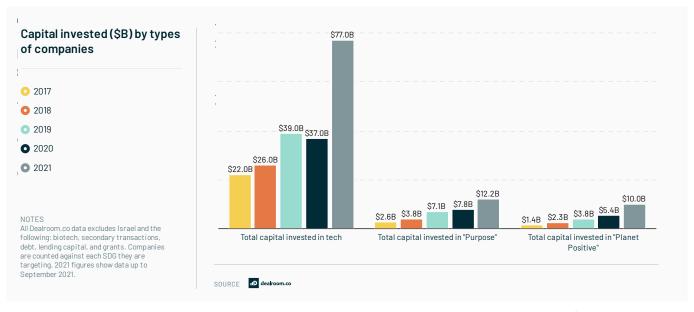
#### VCs and LPs mostly align on the big themes

The likelihood of Planet Positive initiatives emerging as a defining theme over the next decade is echoed in responses to the survey. When asked which themes they are excited to invest in, LPs and angel investors were most likely to select Planet Positive companies, and this theme also ranked second highest among VC respondents. As a forward-looking indicator, these responses suggest that European tech will continue to see significant deployment of capital towards the goal of combating climate change and promoting environmental sustainability.



#### Planet Positive captures 11% of total funding in 2021

The expectation of continued investment in Planet Positive companies is a continuation of a longstanding trend. In just the first nine months of 2021, \$10B was invested in European tech companies aligned to the Planet Positive theme. This level of investment has increased with significant scale and velocity, and is now at close to 6x the level seen in 2017. Looking at the allocation of capital to more broadly defined purpose-driven companies, investment has grown to more than \$12B; an increase of 3.8x compared to 2017.



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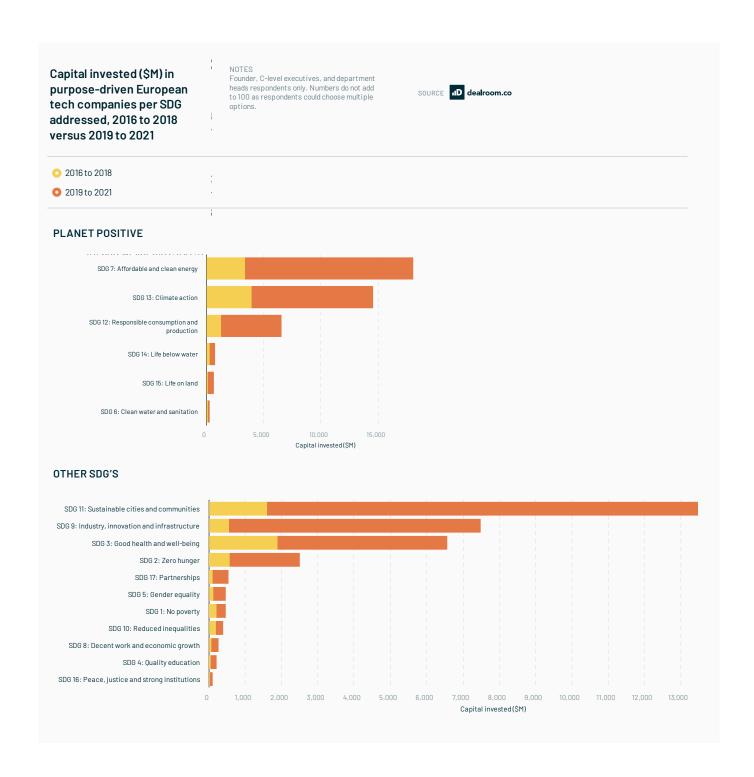


#### Funding into purpose-driven tech has accelerated in recent years

It's interesting to examine funding for purpose driven tech companies in a more granular fashion, looking at which causes are receiving most attention.

Taking the theme of Planet Positive, for example, the greatest share of investment has flowed to companies addressing the challenges of affordable and clean energy (SDG 7) and climate action (SDG 13). By comparison, the level of investment into companies addressing clean water and sanitation (SDG 6) has been very low.

Other SDGs that have attracted large-scale investment in recent years include sustainable cities and communities (SDG 11), industry, innovation and infrastructure (SDG 9), and good health and wellbeing (SDG 3).





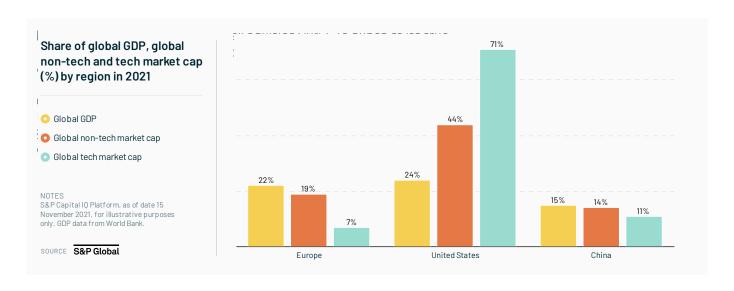




#### Europe still has massive upside

Europe continues to chart its own path, while increasingly asserting itself on the global tech stage. It represents an opportunity set with significant upside.

If you look at Europe's economic scale in high-level terms, Europe is broadly on par with the United States, capturing 22% of the global GDP and a similar share of global non-tech-related public equity value (market capitalisation). By comparison, and focusing solely on global tech public equity value, Europe does not yet punch close to its weight, as the region's technology companies represent just 7% of total global public tech market capitalisation. So how do we bridge the gap?

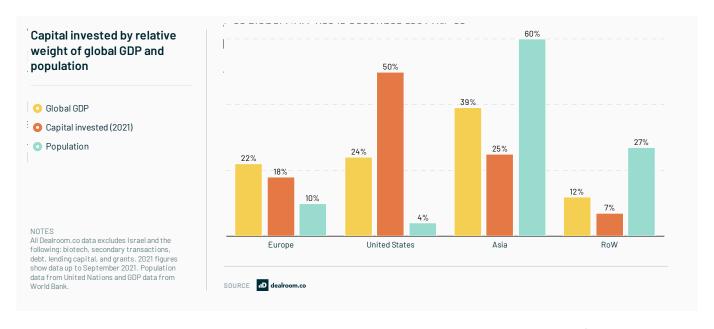


#### Europe's share of the global venture pie is expanding

Firstly, it's likely this gap will take time to close. While the European tech flywheel is spinning faster than ever, accelerating progress and strengthening its foundations,

there is no sign of the United States tech ecosystem slowing down.

The US accounts for just 4% of the world's population and 24% of global GDP, yet it accounts for 50% of all venture capital investment in 2021. Europe, meanwhile, represents around 10% of the global population and 22% of global GDP. While its share of global venture funding increased by five percentage points in the past 12 months, it still represents only 18% of the global market.











It feels like the rise of remote working culture has led to VCs and institutional investors casting a wider net and giving innovative and fast-growing companies headquartered outside of Silicon Valley a fresh look.

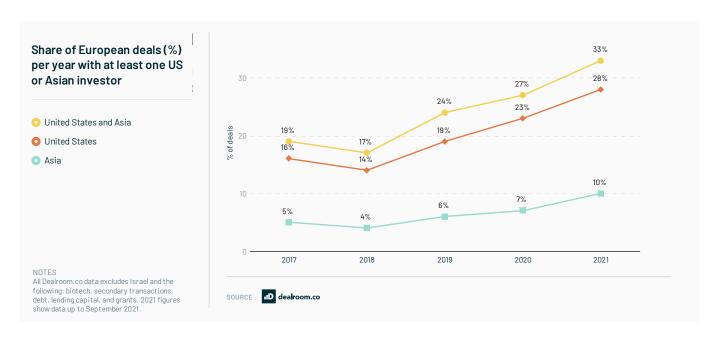
Infarm's experience with our latest fundraisings (completed over Zoom!) demonstrates how the pandemic has, in some ways, broadened the horizons for European startups, by opening up the European tech scene to impact-focused investors from around the world. The crucible of the pandemic has shown the resilience of the European tech ecosystem, with an incredible number of milestones reached and records broken in the past year in terms of raises and valuations. We've seen that European startups and scaleups, some whom we're happy to have partnered with, are able to deliver on ambitious expansion plans, despite the logistical challenges and continued uncertainty caused by macro-economic factors like Brexit, pandemic-related supply chain disruptions and lockdowns.

Osnat Michaeli, Infarm | Co-Founder and Chief Brand Officer

#### US investor participation in Europe hit a new peak

The continued interest and increased activity levels of foreign investors is important to elevating the overall strength of the European tech ecosystem.

US investors are now participants in over one quarter of all investment rounds in Europe, up from just 16% in 2017. Their presence in the market is helping to fuel the growth of European tech, build bridges across continents, and level up the strength of the investor base by bringing different experiences, networks and support.





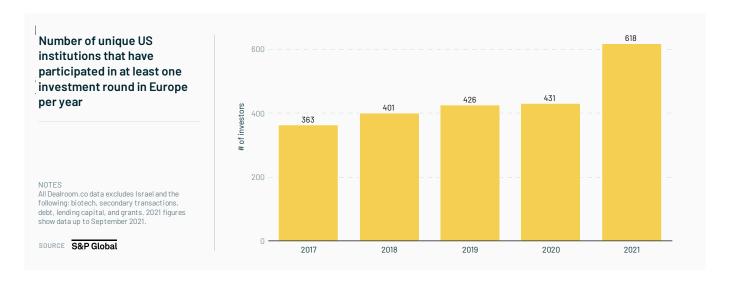




#### US investor interest picks up

An additional measure of US investor interest in European tech is the count of unique investors that have made at least one investment each calendar year. This serves as a helpful proxy to understand the trend in the volume of new investors active in the region.

2021 represented a step change in sentiment toward European tech among US investors, with the number of individual investors increasing by almost 50% – a significant leap compared to prior years.

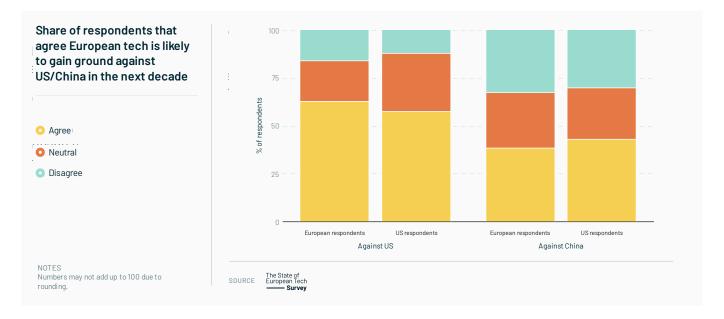


#### The US is losing out to China in relative tech sentiment

The United States remains the dominant force on the global tech stage, accounting for 70% of total technology market cap of public equities, and 50% of global venture

This places the US significantly ahead of China on both measures; China accounts for 11% of global tech value in the public markets and 25% of VC investment globally.

Interestingly, survey respondents were more bullish on Europe gaining ground on the US over the next decade compared to China, despite a turbulent year for tech in China in 2021. It is also of note that respondents based in the US shared the same overall sentiment as those based in Europe.











We need to find ways to compete with the US and China on making bigger investments in next generation technologies.

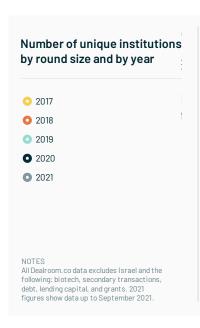
We are continuously improving our EU investment landscape, working alongside VCs and other investors, listening to the evolving needs of startups, and harvesting the incredible potential of Europe's research base for example by partnering with the European Research Council. But with the EIC's budget of 10 billion euro over seven years we cannot achieve everything. So we need to find ways to compete with the US and China on making bigger investments in next generation technologies.

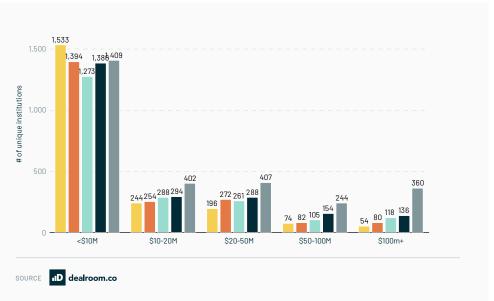
Jean-David Malo, European Innovation Council and Small and Medium-sized Enterprises Executive Agency (EISMEA) | Director

#### The pool of investors continues to expand

The overall investor base in Europe continues to expand across the different stages of investment.

In total, the number of unique institutions active in Europe in 2021 increased by more than 25% from 2020. The most significant changes were evident in the growth stages, where the number of unique institutions participating in rounds of \$100M and up more than doubled in the last year, and increased by more than 6x since 2017.







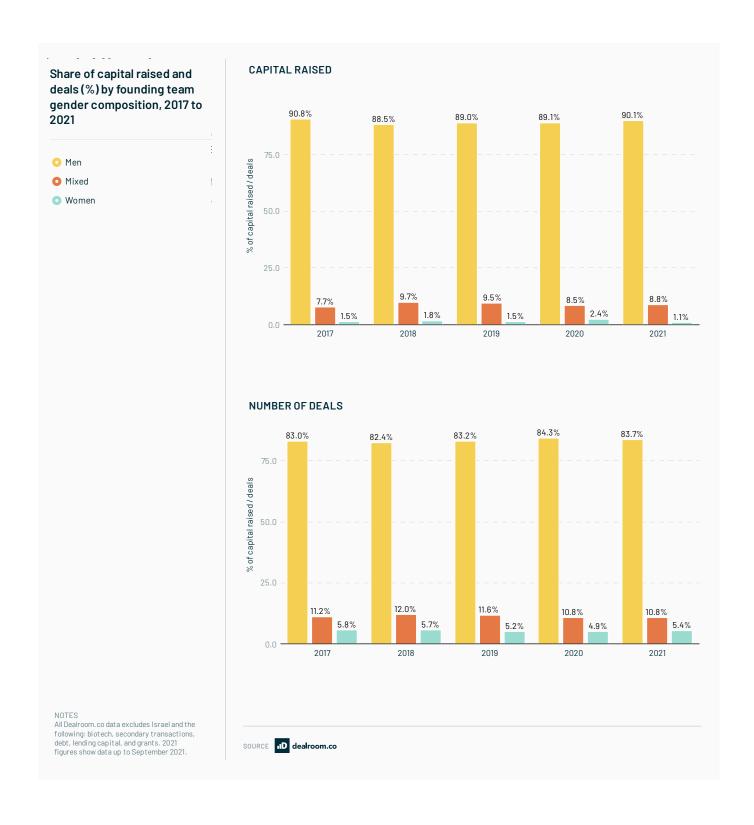




#### Closing the gender funding gap

There is still a massive opportunity to unlock by increasing the flow of capital investment to women.

The great gender funding divide remains a harsh reality for the European tech ecosystem. The distribution of capital to founding teams composed of women or teams of founders of mixed genders has stayed constant for the past five years, both in terms of share of total capital invested and overall deal count.



60







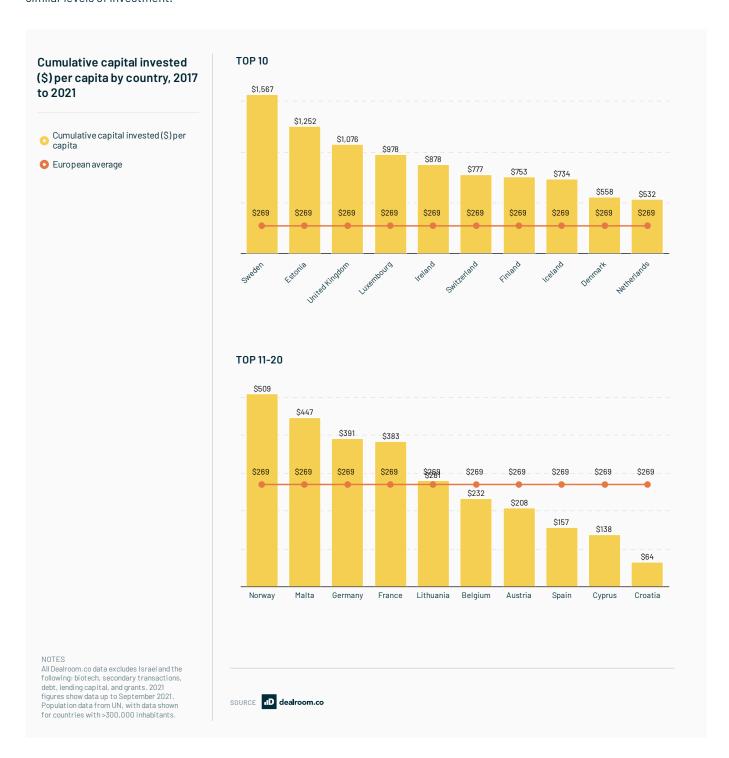
#### STATE OF TECH 21

#### And closing the geographic funding gap

At the European level, the implied level of capital invested per capita has increased significantly in 2021, growing from an estimated \$170 in 2020 to \$269 this year. There is, however, a wide discrepancy in terms of capital invested by country relative to their respective population size. Unsurprisingly, the highest levels of per capita investment can be found in countries that are typically regarded as amongst the most welldeveloped local ecosystems in European tech; Sweden continues to hold on to the top position, followed by Estonia and the United Kingdom. The opportunity for Europe is to develop more local ecosystems to hit similar levels of investment.

#### **CUMULATIVE CAPITAL INVESTED (2017 TO 2021)**

per capita in Italy versus \$269 on average in Europe

















#### Cumulative capital invested (\$) per capita by country, 2017 to 2021

Cumulative capital invested (\$) per capita

European average

### TOP 21-30 \$269 \$269 \$269 \$269 \$269 \$269 \$269 \$269 \$269 \$269 \$49 \$49 \$46 \$43 \$35 \$27 \$23 \$21 \$16 OTHERS \$269 \$269 \$269 \$269 \$269 \$269 \$269 \$269 \$11 \$7 \$4 SOURCE 1D dealroom.co

NOTES
All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021. Population data from UN, with data shown for countries with >300,000 inhabitants.









There is a high degree of certainty that as different opportunities such as Planet Positive or diverse investment play out over the next decade, European tech will add trillions worth of value. If we apply different growth scenarios, ranging from conservative to in line with current level of growth, we expect to see the value of the European tech ecosystem to double at the very least over the course of the next 10 years.

#### THE PATH TO \$10 TRILLION OF TOTAL EUROPEAN TECH ECOSYSTEM VALUE AND BEYOND









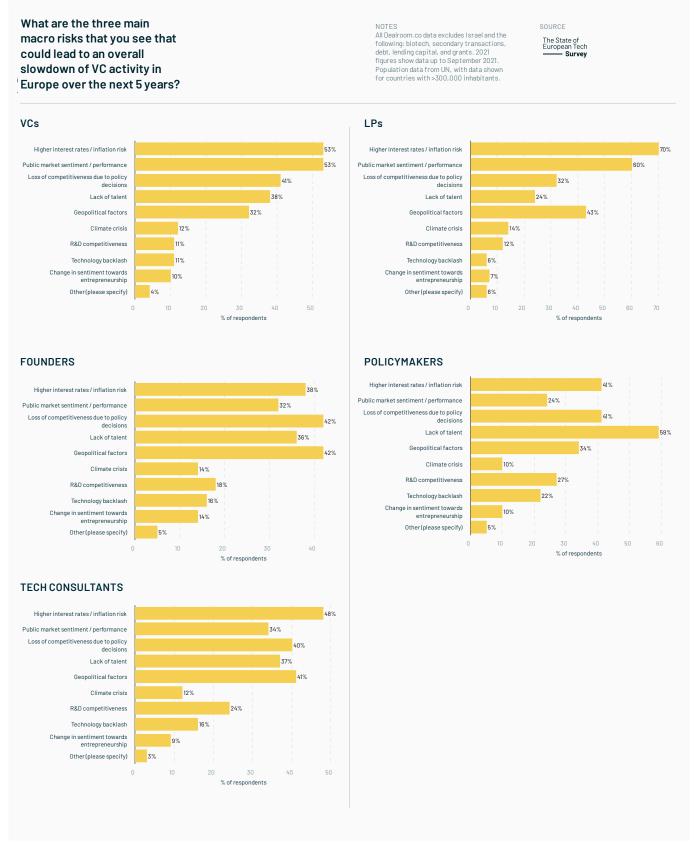






#### VCs and founders have different views on macro risks

The future trajectory of investment into Europe is, of course, subject to the broader macro context. When asked to highlight the top three risks that could lead to a slowdown in VC activity in Europe over the next five years, VCs most frequently cited the interest rate and inflationary environment, as well as overall public market sentiment and performance. This aligned with the sentiment shared by LP respondents. Founders, on the other hand, were most worried about policy impacting their business and geopolitical factors.













In general, I am an optimist because I think pessimists never get anything done. This being said, I think what we see is that the conversation on technology is changing.

Not only in Europe but also outside, in the US, India, Australia... More and more countries have come to recognise the risks that large tech platforms can bring to our lives, our mental health, and our democracy. We see more and more alignment on the idea that platforms have power beyond anyone else, and with that come responsibilities. That's why the EU-US Trade and Technology Council that we launched a few weeks ago is so important.

For the first time, minds have met on key issues like how to approach AI or how to address the shortage of semiconductors. It was a very successful meeting and promising for the future. Clearly the challenges are huge, but they're not too big for our democracies, especially if we come together.

Margrethe Vestager, European Union | Executive Vice President of the European Commission for A Europe Fit for the Digital Age; European Commissioner for Competition









# 02.3 45 shades of Europe





66

## European tech becomes more decentralised as some hubs grow, but there's still more to do

Munich, Stockholm and Cambridge are highest on unicorn density for large, medium and small cities respectively. Estonia retains its place as the most entrepreneurial country for the first time ever, and other regions in Central and Eastern Europe show resilience by finding alternative routes to funding. B2B, crypto & web3 and the creator economy are cementing as European strengths across the board.

#### **INSIGHTS**

#### The top 5 hubs still dominate investing activity

The five largest hubs by total capital invested (London, Berlin, Stockholm, Munich and Paris) are home to companies that between them captured 54% of total investment into the region in 2021, up from 49% in 2017.

#### Raising capital is still hard for most

Almost one-fifth of founders say it has become harder to raise capital in 2021, while a further 40% or so believe the environment remains unchanged from the past year, which itself was a year that saw a record number of founders responding that fundraising had become harder.

#### Could physical location lose its importance? Founders believe so

Startup founders and senior leaders see a decreasing importance across every consideration related to location - the most obvious shifts in sentiment related to the importance of having a physical office location, relocating employees and proximity to investors, which had all decreased in importance among more than 50% of respondents.



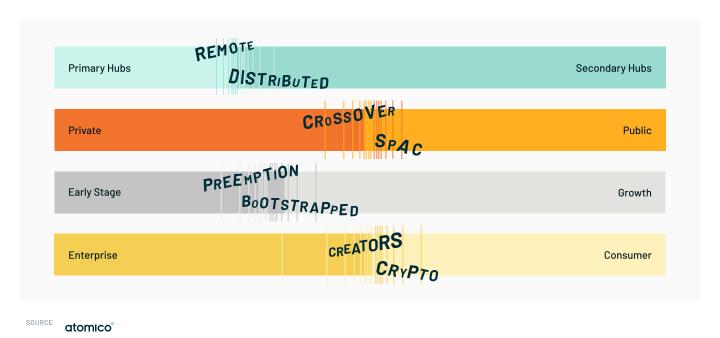




Just like any other region, Europe faces its own set of divides. Shedding light on some of these challenges provides a basis to reflect upon ways that all participants can make sure the flywheel that is spinning faster than ever before benefits a diverse set

The illustration below presents at a high level where some of these tensions exist as well as potential challengers to the status quo. This article explores location and the differences in consumer and enterprise, while subsequent chapters and articles also build upon this theme through the lens of company status and stage.

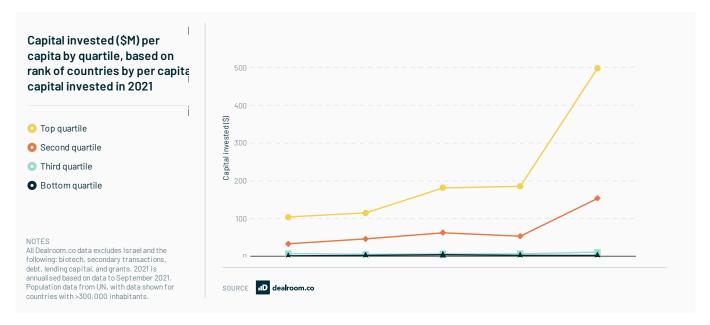
#### **CHALLENGING THE STATUS QUO**



#### The geographical funding divide widens in Europe

Increased levels of investment in more established, growth stage companies has widened the funding divide in favour of Europe's most developed tech ecosystems.

While the level of per capita investment in top and second quartile countries spiked materially in 2021 compared to prior years, this has not been mirrored by investment patterns into countries in the lower quartiles. The upper and second quartiles are mostly composed of countries from Northern and Western Europe, while the bottom two quartiles are heavily weighted towards countries from Southern and Eastern Europe.





















The general perception is shifting and building a company in Europe is now seen more as an advantage rather than a limitation.

Raising funds in Europe is still a different experience from raising funds in the US. European founders still fly out to the US for fundraising. Sometimes for expertise, sometimes for fair market offers.

Jakub Jurovych, Deepnote | Founder and CEO





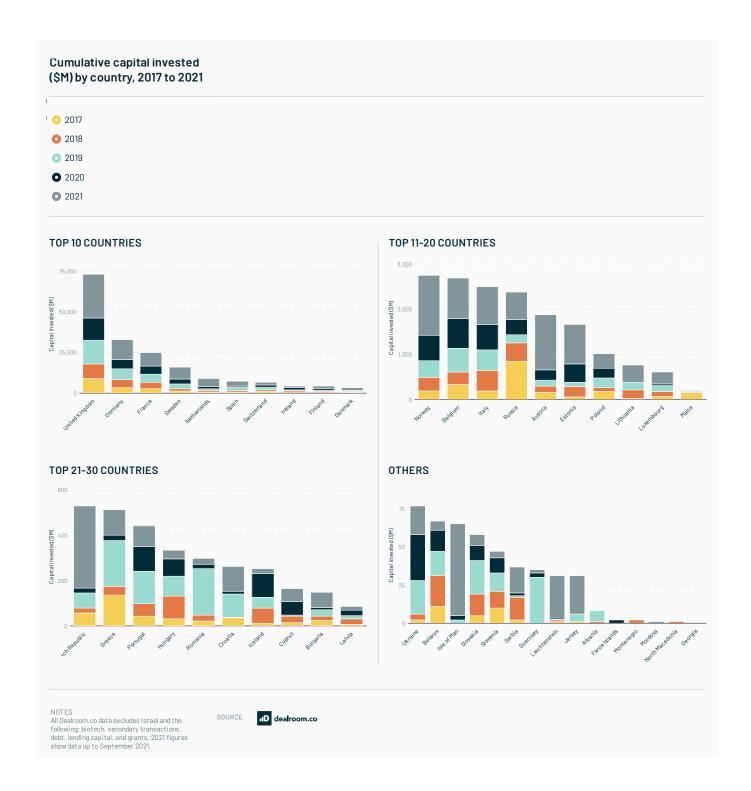




#### Twice as much invested in UK tech, compared to Germany and France

On a cumulative basis over the past five years, the total amount of capital invested in UK tech companies has nearly reached \$75B.

This is more than double the amount of capital invested in the second and third largest countries; Germany and France.



70







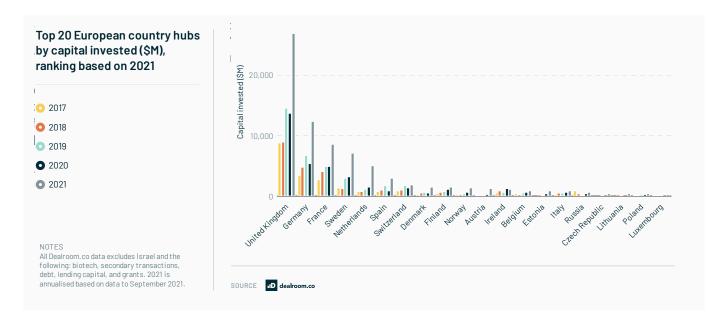


#### Beyond the top five countries, change is on the horizon

The top five countries by capital invested remain unchanged from 2020.

However, across the rest of the top 20, the significant inflow of VC capital in 2021 has served to shake up the ranking: Spain has overtaken Switzerland to land in sixth position, while Ireland has dropped out of the top ten after a 5% decline in capital invested. Despite being Europe's fourth largest economy by GDP, Italy has also fallen outside of the top 10 countries for capital invested.

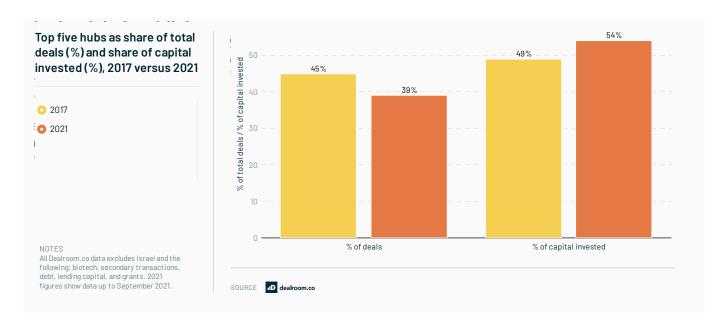
The impact of mega rounds is also discernible in the rankings. Vinted's \$200M was material for Lithuania, and the two \$100M+ rounds raised by Rohlik boosted the funding picture in the Czech Republic.



#### The top 5 hubs still dominate investing activity

The flywheel that underpins entrepreneurial activity and investment flows is spinning fastest in Europe's most well-developed tech hubs. As a consequence, these hubs are home to the greatest number of scaleups raising large growth rounds. This results in the five largest hubs by total capital invested (London, Berlin, Stockholm, Munich and Paris) accounting for an increased share of total capital invested in the Europe.

In fact, these five cities alone are home to companies that between them captured 54% of total investment into the region in 2021, up from 49% in 2017. Interestingly, their share of total deal count has fallen over the same period, indicating the potential for cities not currently in the top five to account for an increased share of funding amongst future cohorts of companies.













Right now we are hiring people all across different cities in Europe, like Amsterdam, Berlin, Stockholm, London, to join us without the necessity of relocating to Madrid with their families. This has allowed us to have access to a broader talent pool.

The "work from anywhere" revolution has affected us in a way that we are now accessing talent that we could not access given our former company policy and the willingness to relocate everyone to Madrid, where we are based. In terms of decentralisation, I believe that this is a big trend that will even create new Tier 2 Tech-Hubs in smaller cities, where people can work and have a higher quality of life.

Juan Urdiales, Jobandtalent | Co-founder & Co-CEO

#### London consolidates its position as the top European tech hub

London's position as the leading European tech hub - as measured by total capital invested - was further consolidated in 2021. The city raised \$18.4B in the first nine months of 2021: 2.6x the amount raised in Berlin in second place.

But all across Europe, tech hubs have seen levels of investment scale at an unprecedented pace. Berlin, for example, recaptured its position behind London, having seen investment levels increase by 150% year-on-year. A total of 11 cities have already raised in excess of \$1B during the first three quarters of 2021 and it's likely that number will exceed 20 by the end of the year. By comparison, just four European cities surpassed that milestone in 2020.

The impact of mega rounds is also visible in the ranking, propelling some cities into the top 20 on the basis of one outlier company.



#### Top 20 European hubs by capital invested (\$M), ranking based on 2021

London	\$6011M	\$5585M	\$11047M	\$9969M	\$18365M
Berlin	\$2061M	\$2483M	\$4259M	\$2873M	\$7106M
Paris	\$1528M	\$2509M	\$3044M	\$3098M	\$6533M
Stockholm	\$808M	\$715M	\$2515M	\$2592M	\$6522M
Amsterdam	\$454M	\$508M	\$724M	\$893M	\$3591M
Munich	\$272M	\$554M	\$1480M	\$867M	\$2952M
Barcelona	\$360M	\$433M	\$830M	\$365M	\$1503M
Farnham				\$0M	\$1276M
Oxford		\$389M	\$71M	\$436M	\$1184M
Madrid	\$299M	\$382M	\$612M	\$245M	\$1159M
Vienna		\$88M	\$106M	\$195M	\$1117M
Copenhagen		\$324M	\$393M	\$297M	\$998M
Helsinki		\$303M	\$562M	\$571M	\$918M
Spencers Wood			\$70M	\$350M	\$905M
Dublin		\$429M	\$453M	\$461M	\$883M
Tallinn		\$229M		\$398M	\$852M
Cambridge	\$243M	\$398M	\$537M	\$187M	\$777M
Oslo			\$204M	\$269M	\$671M
Milan		\$285M	\$274M	\$388M	\$565M
Utrecht	\$40M	\$57M	\$20M	\$32M	\$548M
	2017	2018	2019	2020	2021

All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 is annualised based on data to September 2021. Population data from UN, with data shown for countries with >300,000 inhabitants.

SOURCE ID dealroom.co





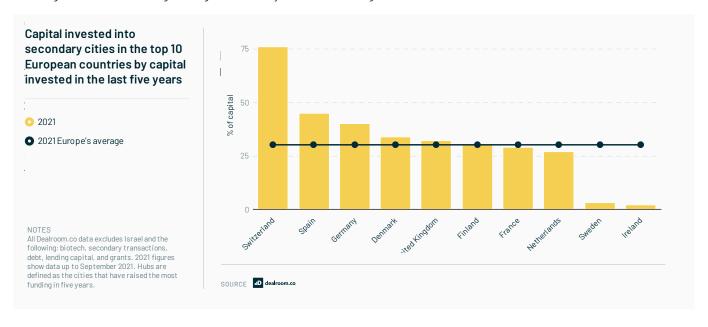




## Venture capital in Sweden and Ireland is highly concentrated in primary hubs

In order to better understand the distribution of capital invested across different hubs within a single country, we categorised cities as primary or secondary hubs based on the total amount of capital invested during the last five years. The level of concentration varies significantly across the top ten countries by capital invested.

Investment into Sweden and Ireland, for example, is overwhelmingly concentrated in the primary cities (Stockholm and Dublin, respectively), while it is more widely distributed in countries including Spain and Germany. Switzerland is also an outlier, with large amounts of funding flowing to secondary cities such as Zuq and St Gallen.



## Deal count in Europe's leading hubs remain constant

2021 was a record year for capital invested in most European primary hubs, yet the number of rounds raised by companies in the top 20 hubs stayed flat on average. This figure remains unadjusted for the reporting lag that results in an underrepresentation of total deal volume until more time has elapsed.

London, unsurprisingly, remains the top European hub by total deal count, with a number that is 2.5x higher than the second largest hub.









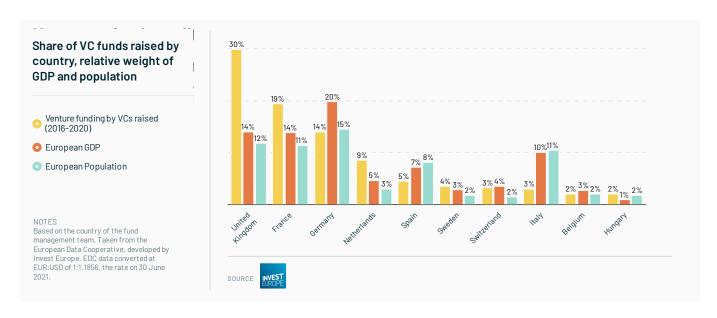


## UK companies benefit from disproportionate access to VC investors

There is evidence that links the destination of venture capital to the source location of the investing VC fund manager. This is intuitive, but also supported by empirical studies, such as recent research published jointly by the EIF and Invest Europe ("The VC Factor - Pandemic Edition").

This translates into more "local" funding available for companies located within the  $geographic\ proximity\ of\ investors.\ In\ this\ context,\ it\ is\ interesting\ to\ see\ the\ unequal$ geographic distribution of VC funds raised by country relative to the respective share of European GDP or population.

This type of analysis shows how the UK and France account for a disproportionate share of VC funds raised in Europe, while Germany and Italy stand out due to a lack of depth of local funds raised, relative to the size of their economies and populations. It is, of course, important to note that there is a significant volume of cross-border investment activity.





Despite all of the fast-paced changes that are keeping the consumer space fresh in Europe, what remains constant are the underlying ingredients of success in the consumer space - the importance of building an authentic brand and putting end customer experience first.

Despite market uncertainties, the exciting European consumer landscape continues to be accelerated by underlying consumer trends including: impact of digital transformation; rise of ecoconsciousness; increased importance of creator economy; developments in blockchain technology and its potential to transform our digital experiences; morphing relationship to ownership, among many others! With every year we also continue to be more and more excited by the increasing global ambitions of European consumer founders and their relentless focus to innovate and transform the sectors in which they operate.

Sasha Astafyeva, Atomico | Partner





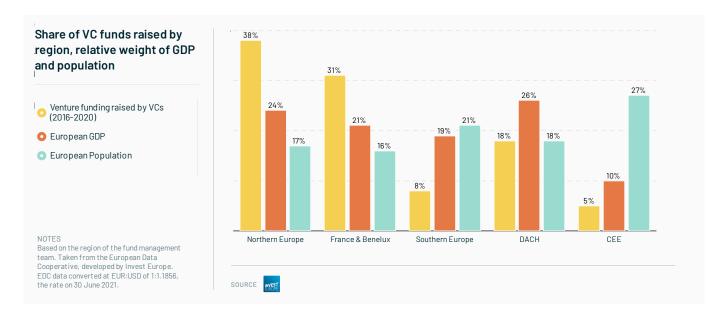




## Local VC firepower lags in Central and Eastern Europe

Analysing levels of VC investment at the sub-regional level reveals even more striking differences than those at the regional level.

What stands out most is the low level of VC firepower raised by funds based in Central and Eastern Europe. This sub-region accounts for just 5% of all funds in Europe, despite its 10% share of European GDP and 27% share of the European population.

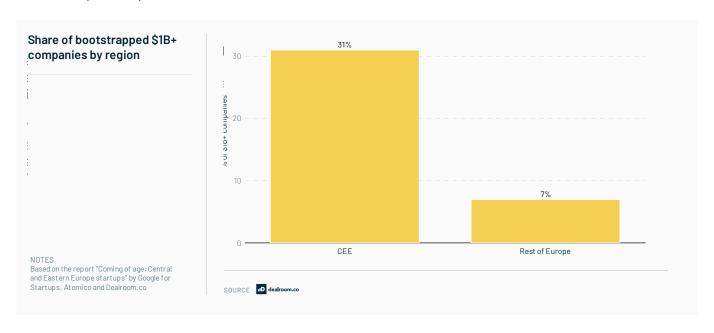


## 31% of unicorns from Central and Eastern Europe are bootstrapped

Lack of local VC funding has not prevented the emergence of many breakout success stories from Central and Eastern Europe. These regions are now home to 28 unicorns, including decacorns such as UiPath and Yandex.

While there is clearly no shortage of incredible entrepreneurial talent, the region's leading companies have had to find alternative paths to fund their growth. In fact, the number of non-VC-backed unicorns as a share of total unicorns from the region is almost five times higher than for the rest of Europe. While 31% of unicorns from the CEE did not raise venture capital, the total for the rest of Europe is just 7%.

It's clear that resilient talent in CEE has been able to thrive in spite of lacking access to more mature private capital markets.













I strongly believe that CEE has a massive potential to become a cradle of Europe's most valuable companies.

Ever since our early days with Skype, at Atomico we've been watching technology transform every industry and region in Europe and Central and Eastern Europe is no exception. Specifically, as someone who was born in Moldova, I strongly believe that Central and Eastern Europe has a massive potential to become a cradle of Europe's most valuable companies. Most of the ingredients are already there - determined founders, skilled talent and clockwork execution - and the flywheel is already spinning, This will help the flywheel to spin faster and faster - this year, 9 Central and Eastern European unicorns joined the herd, increasing the total by 50% from the 2020 number. We have historically seen it through many of our investments, such Skype, Supercell and Aiven among others, and one can also clearly see that in this report - companies like Romanian-founded UiPath are blazing a trail, with Prague-based Rohlik - which raised not one but two \$100M+ rounds this year. Personally, I am thrilled to continue supporting companies close to my home, and help breed the next generation of global game changers.

Sasha Vidiborskiy, Atomico | Principal

## VC funding and startup count generally rise hand-in-hand

One way to better understand the factors that shape distribution of capital across Europe, is to explore the relative level of entrepreneurial activity in different countries.

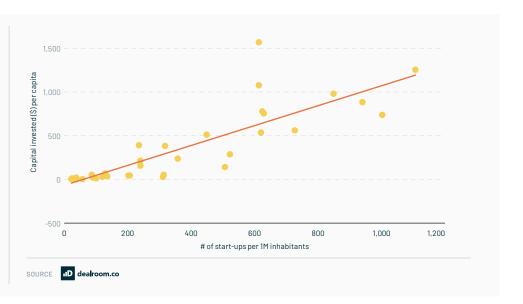
This chart measures the ratio of startups per capita in different countries, set against the level of investment per capita. The data follows an intuitive trendline, with the volume of investment growing in line with increased startup density.

There are, however, some interesting outliers. Estonia, for example, has the highest startup density of any European country, while Sweden is the best capitalised in terms of investment per capita. It should be noted that the comprehensiveness of startup activity tracking varies between countries, so the data is imperfect.



## Number of start-ups per 1M population versus capital invested (\$) per capita

NOTES All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021. Population data from UN, with data shown for countries with >300,000 inhabitants.







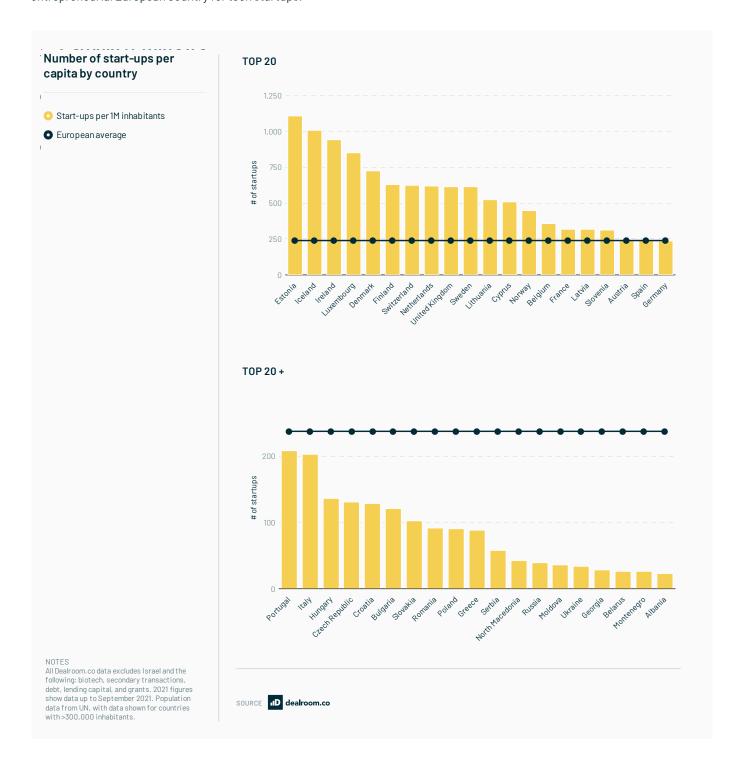


## i...Estonia retains its place as the most entrepreneurial country in Europe

The scale of startup activity in Europe continues to rise, with the total count of verified tech companies from the continent currently at over 175,000, according to Dealroom.

On a per capita basis, Estonia retains its leadership position as the region's most entrepreneurial country for tech startups, followed by Iceland and Ireland.

This methodology provides an interesting ranking of countries in terms of overall entrepreneurial activity, and highlights Estonia's continued leadership as the most entrepreneurial European country for tech startups.











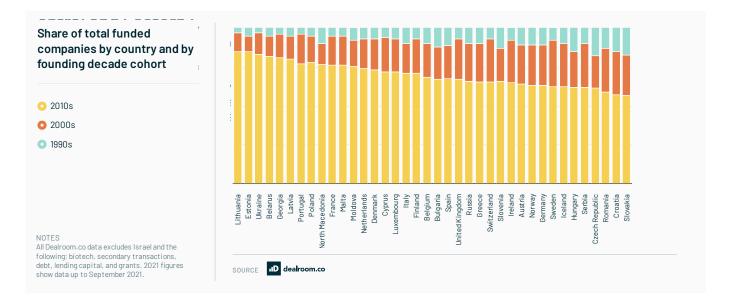


## Central and Eastern Europe prepare for take-off

Another interesting way of better understanding geographical differences in the funding landscape is looking at the distribution of funded companies by founding decade and by country.

The picture is not always intuitive, but it highlights the weighting of the overall startup landscape in certain regions, such in the Baltics, towards more recent generations of startup cohorts.

As expected, countries that are more 'mature' and have been through many cycles of startup generations spanning a longer time horizon have a greater overall weighting towards companies from earlier founding decades. Countries such as Romania or Slovakia rank towards the bottom of the list, which is consistent with the fact that they have yet to see the same level of recent growth in entrepreneurial activity and company formation.

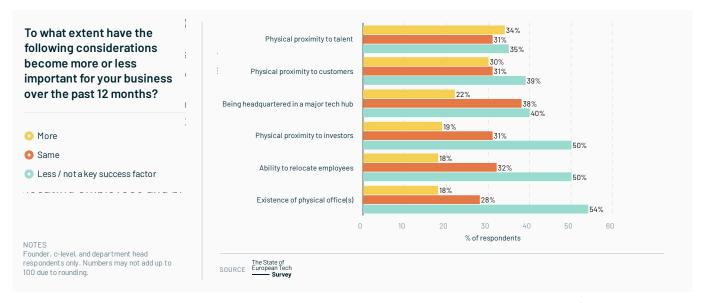


## Could physical location lose its importance? Founders believe so

Attitudes toward the importance of physical location are shifting. This may point to an increased dispersion of startup activity and investment flow later down the line.

When asked whether considerations related to location had become more or less important for their business over the past 12 months, startup founders and senior leaders were more likely to state a decreasing importance across every considerations.

The most obvious shifts in sentiment related to the importance of having a physical office location, relocating employees and proximity to investors, which had all decreased in importance among more than 50% of respondents.





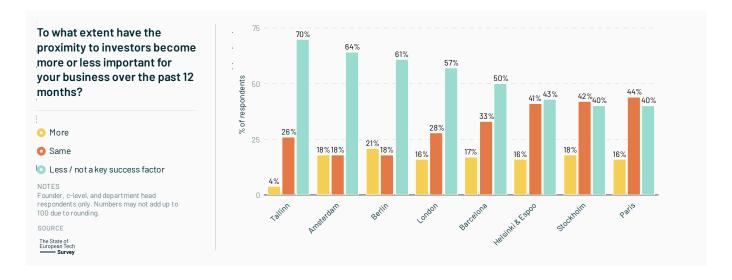




## Proximity to investors is less important to founders

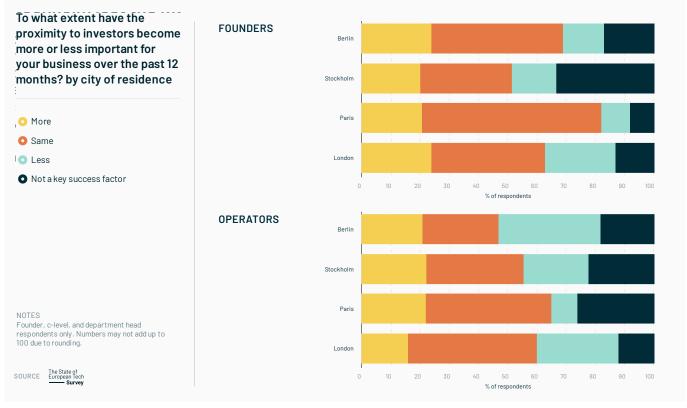
The pandemic has forced investors to adapt and make major adjustments to their investment processes. One benefit has been increased funding accessibility for founders based in hubs that may have once been considered secondary within their country.

It remains to be seen how these changes will evolve going forward, but it is interesting to note that there is a strong indication of meaningful change in sentiment. Many founders and senior leaders from a wide range of cities have found physical proximity to investors to matter less in the last 12 months.



## Stockholm lost the most in importance to builders

For respondents based in one of the four primary tech hubs, we asked how they had seen the importance of being headquartered there evolve over the past 12 months. Across both founders and operators (C-level executives, department heads and employees) the trend speaks to an overall decrease in importance. It is most pronounced for Stockholm where 44% of operators rate it as either less important or not a success factor. Paris stands out as counter narrative amongst the pack with over 80% of founders finding it had either stayed the same or gained in importance. It is also interesting to compare and contrast the views of founders and operators - the latter tend to be more radical, even in Paris where 26% don't think it is a key success factor versus just 8% for founders.





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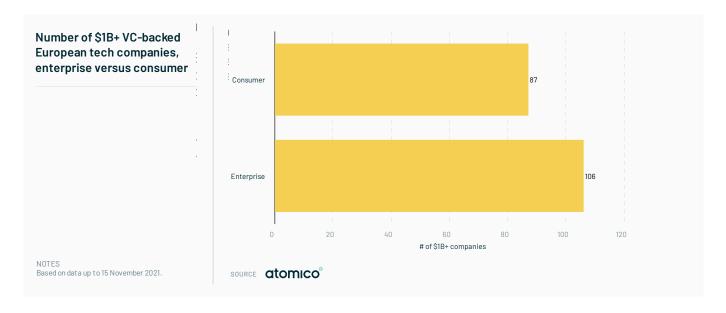




## B2B unicorns overtake B2C by a large margin

The changing shades of the European tech landscape are also reflected in the growing importance of companies with a business-to-business (B2B) focus. European tech originally built its reputation in consumeroriented (B2C) tech products and services, but the more recent rise of B2B software has transformed the region's influence and relevance in the global enterprise software market.

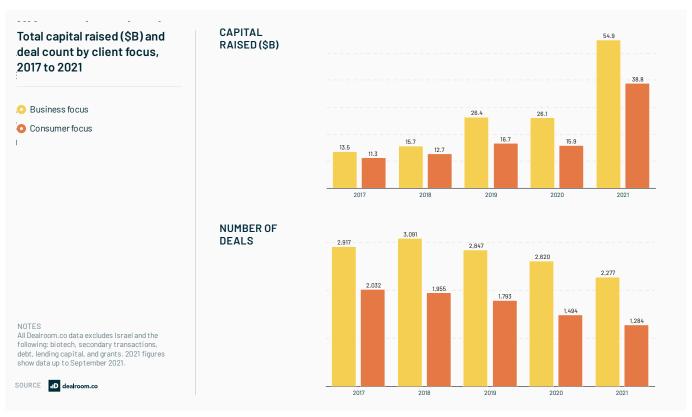
In last year's report, we highlighted the fact the number of VC-backed enterprise unicorns had surpassed the number of consumer unicorns for the first time, ending the year at a ratio of 54:53 (Enterprise: Consumer). At the time of publication, this gap has grown to 106:87 (Enterprise: Consumer).



## B2B investment activity outpaces consumer

The change in focus towards B2B opportunities is reflected in the distribution of capital raised and deal volume between B2B and B2C companies.

During the first nine months of 2021, B2B companies raised \$55B, versus \$39B raised by B2C companies. On a deal count basis, B2B companies have accounted for more than 75% of total funding rounds in 2021 to date.







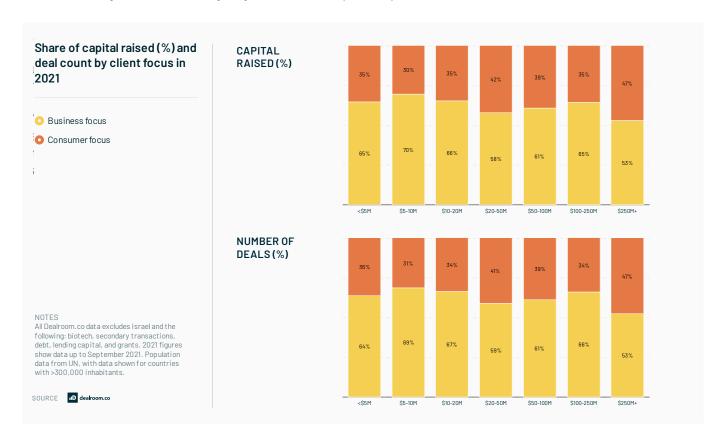




## B2B dominates at the early stages

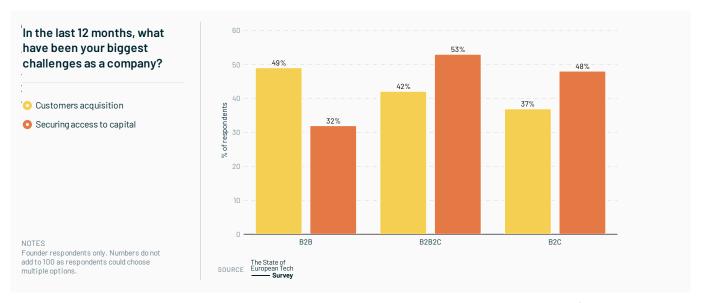
Europe's increasing orientation toward B2B software is especially pronounced when looking at the share of funding rounds of different sizes.

 $It's \ fair \ to \ say \ that \ larger \ growth \ rounds \ are \ typically \ raised \ by \ companies \ from \ older \ vintage \ founding \ years.$ The fact that funding in these rounds is distributed more evenly between B2B and B2C reflects the greater prevalence of consumer companies in those vintage years. Looking at smaller rounds sizes - a proxy for earlier round stages - the heavier weighting towards B2B companies is pronounced.



## Are investors favouring B2B over B2C companies?

The shifting preference of investors towards B2B companies is also echoed in responses to our survey. When asked to cite the biggest challenges founders have faced as a company, securing access to capital was notably more likely to be cited by founders of consumer-oriented companies than by those with a B2B focus.



81









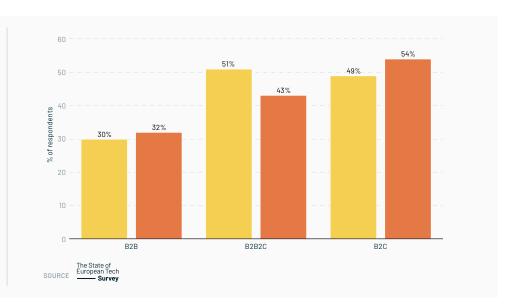
## And this is particularly true for repeat, experienced, B2C founders

Moreover, this holds true from first-time founders through to experienced repeat founders.

Share of respondents indicating securing access to capital as a challenge for their company in the past 12 months - By company type and founder experience

- First-time founder
- Experienced repeat founder

Founder respondents only. Numbers do not add to 100 as respondents could choose multiple options.





Europe is in a strong position to shape the next wave of disruption in B2B, as Europe is home to many industrial market leaders built on legacy technology ready to be disrupted.

Reinventing the B2B IT stack is the here-and-now opportunity: Whether it's storage, compute, software architectures - they're all going to shift! There is no economic reason for any part of the value chain not to be digitized in the long run if there is potential to streamline and automate processes. From developer tools to vertical-specific applications, we expect software to power all areas of business.

Europe is also home to some of the global leading tech universities as sourcing ground to bring up new founders! Having a first wave of successful B2B founders such as the founders of Celonis, UiPath, Personio, arculus, etc. that go back to universities and share their story with tech students to inspire the next generation of potential founders to start a company helps!

Robert Lacher, Visionaries Club & La Famiglia | Founding Partner







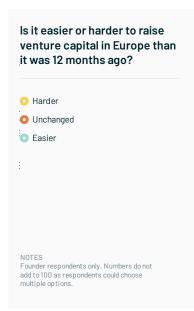


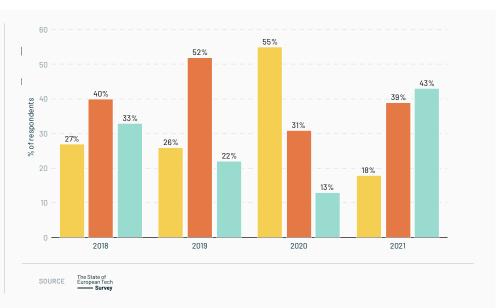
## Raising capital is still hard for most

In spite of the unprecedented increase in capital invested in the European tech ecosystem, the challenges of raising capital should not be underestimated.

In fact, almost one-fifth of founders say it has become harder to raise capital in 2021, while a further 40% or so believe the environment remains unchanged from the past year, which itself was a year that saw a record number of founders responding that fundraising had become harder.

Raising capital is never easy, no matter what is shared in the media or on social platforms.





In your opinion is it harder to raise venture capital in Europe than it was 12 months ago?

**ALL FOUNDERS** 

of all founders found it harder to raise venture capital in Europe than 12 months ago

SOURCE



## WOMEN AND NON-WHITE FOUNDERS

of women and non-white founders found it harder to raise than 12 months ago





**CHAPTER** 



# Founders & operators

As the tech industry grows, so does the talent pipeline

## Talent is betting on tech

The European tech talent pool is deeper and more experienced than ever, as talent is recycled across the continent. Yet there is still a way to go; talent acquisition tops the list of challenges for founders, alongside fundraising. Many founders - particularly those from underrepresented backgrounds - are finding it as hard as ever to access capital.

## **ARTICLES**

## 03.1 Talent depth

Funding and talent remain the biggest challenges facing European tech - but the talent pool is strengthened by highly skilled veterans and young people willing to bet on tech.

## 03.2 Talent recycling

Europe has its strongest ever talent pipeline, with early-stage funding on par with the US. Talent recycling is more distributed than one might imagine, and the results can be seen in the wide distribution of the European 98 cities which are home to unicorns.

## 03.3 Empowering a new generation

Belief in European tech talent is growing, and founders are reinvesting in the leaders of tomorrow. But to truly empower the next generation, more work is needed to create a diverse and inclusive ecosystem.









# 03.1 **Talent depth**





## European tech talent is multi-faceted

Belief in European tech talent is growing, and founders are reinvesting in the leaders of tomorrow. But to truly empower the next generation, more work is needed to create a diverse and inclusive ecosystem.

## **INSIGHTS**

## Talent is a complex issue

43% of repeat founders believe the depth of the talent has improved over the past year, yet 25% of people still see talent as the greatest challenge facing the ecosystem.

## Multi-generational Europe

38% of founders and leaders have previous experience at more than two tech companies, and 19% have experience from unicorn companies.

## The ratio of women leaders to founders is incredibly low

25% of the leaders in the sample are women, whereas 15% of the founders are women, and for every founder in the sample that is a woman, there are nine leaders that are women. By contrast, for every male founder there are only 4.6 leaders that are men. Put differently, the implied relative conversion from leader to founder is twice as high for men.





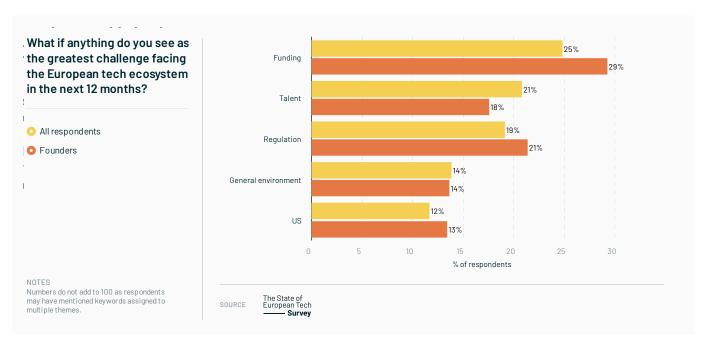




## Funding and talent are perceived to be the biggest challenges facing the European tech ecosystembiggest challenges facing the European tech ecosystem

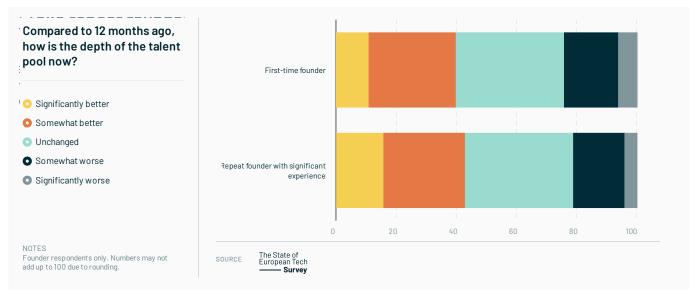
Respondents to our survey provided free-text answers to the question: "What, if anything, do you see as the greatest challenge facing the European tech ecosystem in the next 12 months?". We analysed the keywords in their responses to categorise their opinions into core themes.

The two most frequently-cited themes related to funding and talent, which were raised by 25% and 21% of respondents respectively. Responses from founders skewed higher for mentions of funding-related keywords, but lower for keywords related to talent. These two dimensions are inextricably linked as one begets the other from the perspective of founders. In other words, funding is a key enabler to allow founders to attract and reward the best talent competitively in a market currently experiencing a so-called 'war for talent'.



## Take repeat founders at their word

As Europe's tech ecosystem has developed, it has built an increasingly deep pool of talent. This is being recognised by founders. 43% of repeat founders with significant experience perceive that the depth of the talent has improved over the past year. Experienced founders are slightly more likely to feel this way compared to first-time founders (40%).













As the world becomes connected, I'm very confident that certain types of software are much easier to build in Europe than the US.

Europe has the advantage of sitting 'on the middle of the world' and can cooperate with Asia and the US fairly efficiently in regards to the timezone. On top of that, the salary of developers in Europe is still 2x lower than in the US while the average quality remains the same. With that, engineering heavy products can be built much more efficiently in Europe while still having a big enough market to serve and get feedback from.

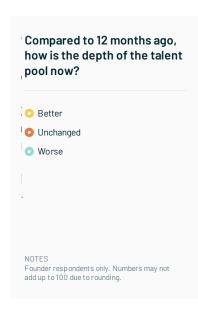
Hung Dang, y42 | Founder & CEO

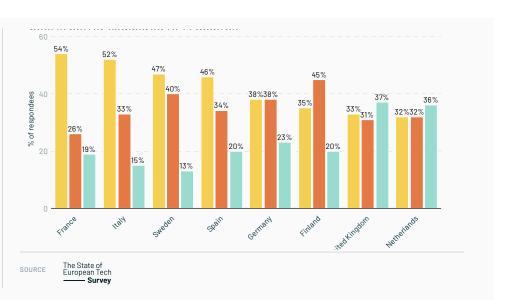
## #® Brexit and the pandemic takes its toll on talent

Our survey reveals some significant differences in how founders perceive the talent pool depending on where they are based.

33% of UK-based founders believe that the depth of the talent pool is better compared to 12 months ago, but an even greater share (37%) say it has worsened. By comparison, the equivalent numbers for France-based founders is 54% (better) and 19% (worse).

The Netherlands is the only other country where the share of founders thinking the depth of the talent pool has worsened (36%) is greater than those thinking it has improved (32%). It is likely that factors such as the pandemic, heightened competition for talent and Brexit, drive the differences.













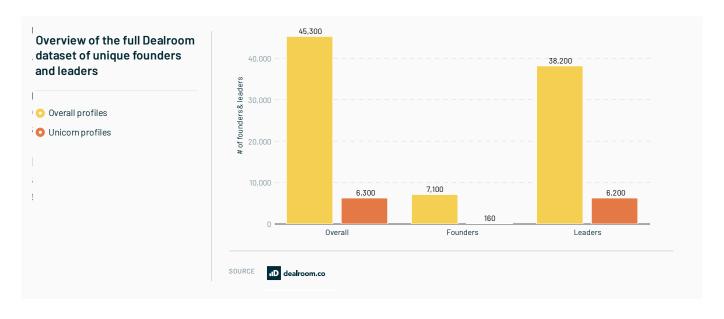


## A window into the talent pipeline

In order to better understand the talent pool in the European tech ecosystem, we partnered with Dealroom on a data-driven analysis of thousands of companies and tens of thousands of their founders and senior leaders. The resulting sample includes close to 5,000 private tech companies headquartered in Europe that have raised at least \$2M of capital from venture investors since 1 January 2020.

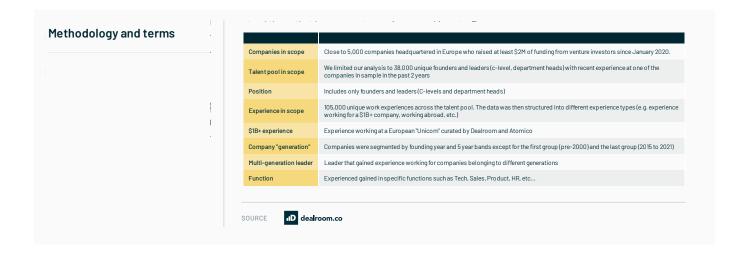
These startups and scale-ups are distributed across a range of countries, industries and stages. The dataset also gathers publicly-available data on close to 45,000 unique profiles of founders and senior leaders, who either currently work or once worked at one of these companies.

To further refine the dataset, and to focus on a current snapshot of the talent pool, we limited the analysis to 38,000 unique founders and leaders (C-level executives, department heads) with recent experience at one of the companies in the sample. In other words, the profiles we analysed all worked at one of these companies at some point in the past two years, though they may have moved on since.



Dealroom also analysed the individual journeys taken by people working in tech, mapping over 105,00 unique 'work experiences' within the sample. To provide further insights into the dataset, we also segmented the profiles to understand those that have recent experience working at a European unicorn.

Where country-level data is presented in the analysis that follows, it includes only countries where the sample size is statistically significant. Our hope is that this dataset provides a unique and fresh perspective on the depth of the talent pool in European tech today. So what did we learn?







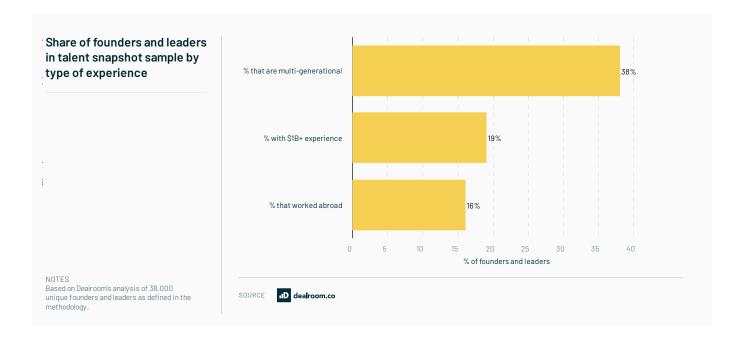




## Our experiment reveals the depth of experience of the current talent pool

At a high level, 38% of the founders and leaders in Dealroom's sample have 'multigenerational' experience, meaning they have gained experience at two or more tech companies from different 'generations'. Generation is defined here by the founding year cohort to which the companies belong.

Additionally, we learned that 19% of the profiles in the sample have gained experience working at a \$1B+ European tech company, either in their current role or through historical experiences. The talent pool in this dataset is also geographically mobile: 16% of them have moved countries at some point in their career to gain international experience.





Now that I'm based in Europe again I see the playing field as more level and the market for talent as truly global.

Over the past 18 months we've all reevaluated what it means to collaborate and be productive as a technical team. Developers can do amazing work when remote. Designers don't need to be face-to-face to be successful. And engineers can sprint whether in the office or not. So even though a hybrid approach may be most effective—and it's the one that I personally prefer—Covid has smashed the stigma about remote work.

Ott Kaukver, Checkout.com | Chief Technical Officer









## Europe has a highly-educated, highly-mobile talent pool

In addition to professional career 'mobility', we mapped the degree of international mobility of profiles with regards to their academic credentials. We found that 42% of the founders and leaders in our sample are currently based and working in a different country different to where they completed their academic studies.

Further, we also identified that 20% of profiles in the sample attended an 'elite' university, which is defined as a university ranked in the top 50 universities globally based on the QS World University Ranking 2022. This is particularly striking given there are an estimated 25,000 universities worldwide.

## Share of founders and leaders in sample by type of studies Based on Dealroom's analysis of 19,000 unique % that are foreign educated % that are 'elite' educated founders and leaders as defined in the methodology. Elite education is define as studies from one of the top 50 universities as per the QS World University Ranking 2022. ₁D dealroom.co



Many EU-based companies are much more comfortable with hiring talent from other EU countries rather than just from their home country.

Talent concentration was always an issue. For certain roles, you pretty much had to go to the Bay Area for talent with relevant experience. The sudden shift to remote-first approach helped distribute that talent and skill set across multiple places. It'll take a few more years to fully benefit from this trend though — it takes time to build new ecosystems.

Time zones remain a big issue. US talent is still very much locked in US time zones and European talent in European timezones. One thing has changed significantly — many EU-based companies are much more comfortable with hiring talent from other EU countries rather than just from their home country.

Jakub Jurových, Deepnote | Founder & CEO







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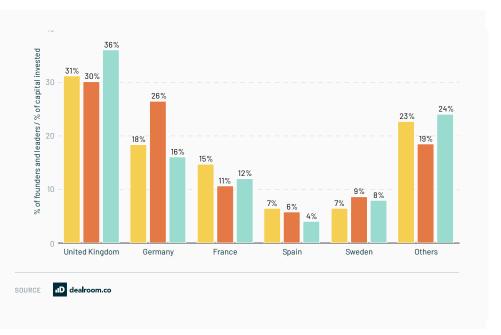


## The UK, Germany and France capture the lion's share of the tech talent market

The largest share of founders and leaders in the sample are based in the UK, Germany and France. Together, these three countries alone account for 64% of the talent pool mapped in the dataset.

This isn't that surprising given both the absolute size of those markets, and the underlying maturity of their tech ecosystems. In fact, the same three countries also captured 64% of the capital invested in European tech over the past five years.







## What is the share of founders and leaders located in a primary tech hub?



## PRIMARY TECH HUB

of the talent pool in sample is located in a primary hub, defined as the largest city by capital invested in the last five years.









## Talent is not measured by years of experience

Talent, of course, is not measured by years of experience. There are, however, notable differences across countries.

The median experience in Europe is 7.5 years for founders and 5.7 years for leaders. UK and Swedish founders stand out for their greater overall years of experience (median of 8.8 years). Ireland also stands out for having particularly experienced founders and leaders. The large number of European headquarters of mature US tech companies in Ireland is one possible contributing factor.

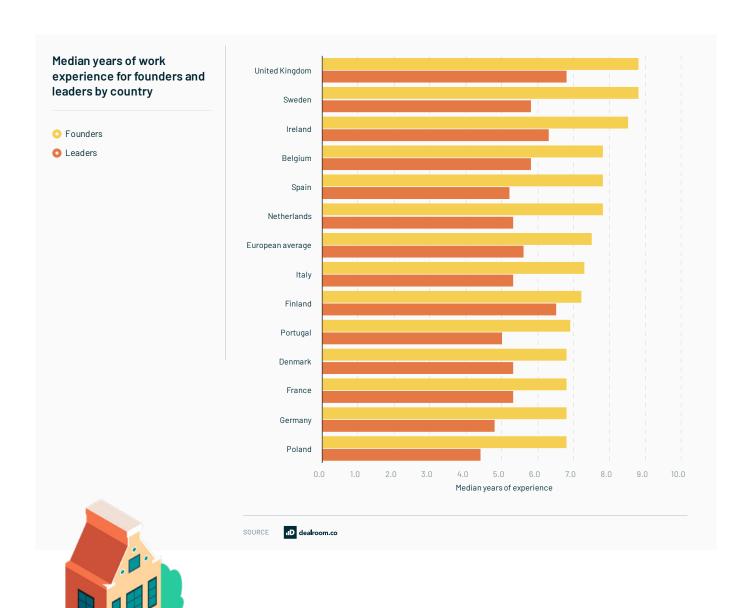
On the other end, countries like France and Germany have a relatively 'younger' talent pool of founders and leaders.

### **FOUNDERS EXPERIENCE**

median years of experience for founders in Europe

### LEADERS EXPERIENCE

median years of experience for leaders in Europe















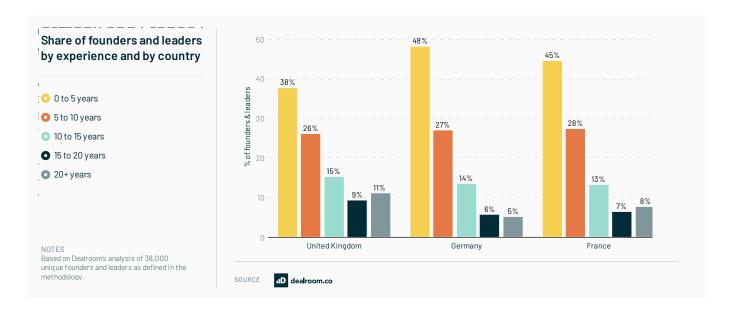




## Germany and France have a larger share of founders and leaders with limited experience

We analysed the distribution of founders and leaders in the dataset across different cohorts of experience. In other words, we asked what share of the sample have 0-5 years of experience, 6-10 years of experience, and so on. Looking at this on a countrylevel basis provides an interesting view of the relative share of the talent pool in each country that has more recently entered the tech industry.

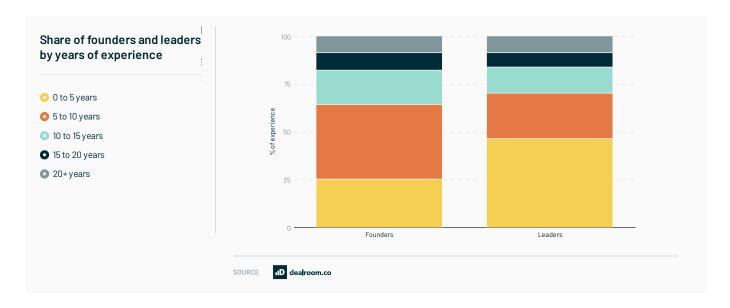
In the sample dataset for France and Germany, there was a greater share of founders and leaders in the most inexperienced bracket of 0-5 years. The UK stands out for having a share of highly experienced (20+ years of experience) founders and leaders that is around twice as high as its two main 'rival' countries.



## Betting on people, betting on tech

Tech makes a bet on people and people are making a bet on tech. Close to 50% of the leaders in our sample have less than 5 years experience. By contrast, founders are more experienced on average and are more likely to hire talent with less experience

It's clear that tech is happy to make a bet on people. But it's also true that people are making a bet on tech, by choosing to join startups and scale-ups within five years of them entering the job market.









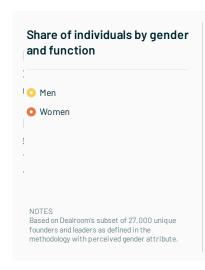


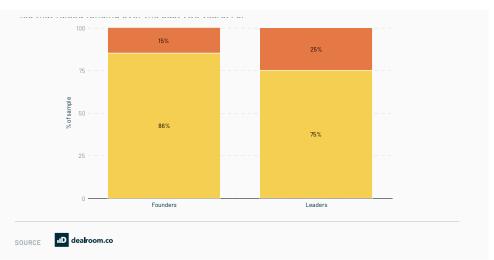
## The ratio of women leaders to founders is incredibly low

The gender distribution of the profiles in the sample dataset is dominated by men, as would be expected given it is based on a snapshot of companies that raised funding over the past two years. For context, 86% of deals in 2021 across Europe were raised by all-men founding teams.

There are important differences in gender distribution between founders and leaders. 25% of the leaders in the sample are women, whereas 15% of the founders are women. If we see a proportion of these leaders converting to become founders at in the future, it may cause the founder balance to shift in a positive direction towards parity.

It is also interesting to note that the ratio of women leaders to founders is high. For every founder in the sample that is a woman, there are nine leaders that are women. By contrast, for every male founder there are only 4.6 leaders that are men. Put differently, the relative conversion from leader to founder is twice as high for men.





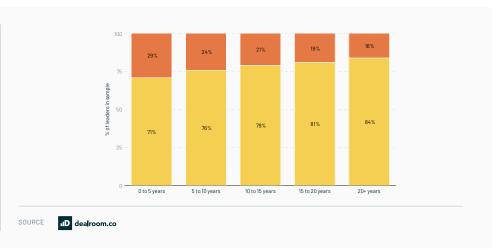
## Young, talented women leaders are represented, but can European tech retain them?

This snapshot looks at the distribution of leaders in the sample by gender, across each of the experience cohorts. It is revealing.

Women make up almost 30% of the least experienced or 'youngest' cohort of leaders with 0-5 years of experience. By contrast, women account for only 16% of the most experienced cohort (20+ years of experience).

On one hand, it's positive - given metrics on gender diversity explored elsewhere in this report- to see that women make up nearly a third of the next generation of leaders operating in the European tech ecosystem. However, it's also a wake-up call to the industry to find the most effective ways to retain that talent. The data brings into focus the importance of diversity and inclusion initiatives to ensure that tech companies become more supportive for women, in order to increase retention in years to come. A topic further explored in the chapter: Empowering a new generation.











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## What do founders do before starting their companies?

### LEADERSHIP EXPERIENCE

of the founders in our sample were in a leadership role prior to starting their company

aD dealroom.co

### **UNICORN EXPERIENCE**

of the founders in sample with prior leadership experience also worked at a unicorn before starting their company

SOURCE





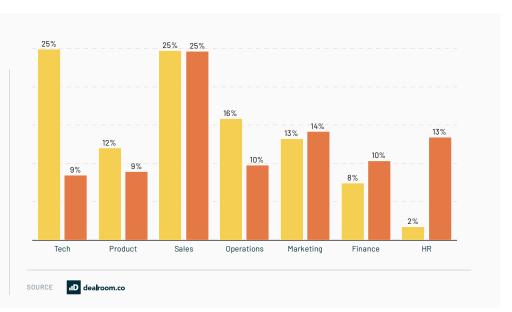
## Gendered roles in tech may account for lack of diversity among founders

We analysed our sample of founders to identify all that had prior leadership experience before starting their current company. This equated to 43% of the total founder profiles in the dataset. In that context, it is notable that for the other 57%, we were unable to identify any prior leadership experience matching the definition used in the methodology. Although it is an imperfect approach, it partly explains why founders see value in investors providing them with leadership coaching support (see Chapter 'VC: Disrupt or be disrupted').

Looking at those founders that do have prior leadership experience, they most often come from functional roles in Tech (e.g. CTO, Head of Engineering) or Sales (e.g. Chief Revenue Officer, VP Sales). When we then apply the lens of gender, and return to the distribution of women leaders by functional area, it reveals key differences in the distribution of functional leadership experience for women, and the most common paths to become a founder.

Again, this serves to highlight the need for the industry to focus on creating pathways for diverse talent to enter all functional areas, as well for investors to be open-minded about founders that have different areas of functional expertise.

Distribution of previous leadership experience for founders in sample 0 % of founders % of women leaders Based on Dealroom's subset of 1,100 unique founders with function attribute as well as



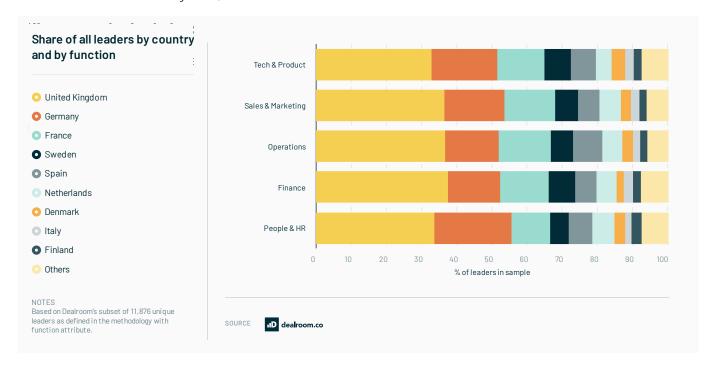




## Where are today's tech and product leaders?

Looking beyond founders, we mapped the roles and functional experiences of around 12,000 leaders. The geographic distribution of leadership talent by country and function is essentially aligned to the distribution of companies and the flow of capital across Europe.

There are a few interesting things that stand out. Germany, for example, over-indexes on leadership talent in Tech and Product, as well as in People and HR. France overindexes on Sales and Marketing talent, as does the UK.





Combining profit and purpose is not only key to attracting talent but to retaining it. People who join us today are optimising for complexity and purpose. Solving previously unsolved problems combined with purpose is what motivates people.

The current generation of talent expects authentic social responsibility and impact from the companies they purchase products and services from, let alone where they invest the next decade of their lives and careers. Our mission has been a critical component in our ability to attract high caliber talent early on in the journey. There is a clear dichotomy between the US and European talent when it comes to their appetite for risk in joining early stage startups. In our case, we managed to mitigate that due to our transformative mission that is changing the way people think about families while offering hope to the many that can't afford one.

Nader AlSalim, Gaia | Founder & CEO









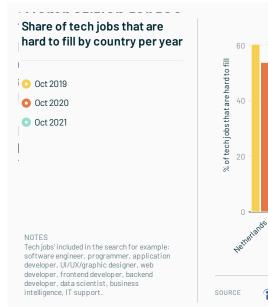


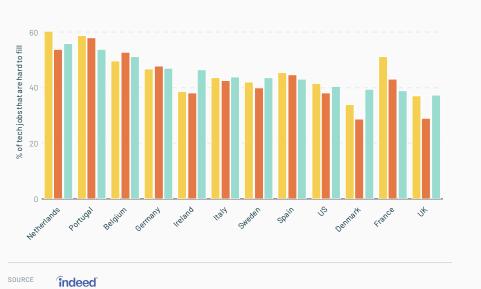
## Competition for tech talent is fierce

The war for talent in European tech is real. We partnered with Indeed to gain insight into how competition is playing out across the region. Indeed's 'hard to fill' metric is an interesting proxy for this, calculating the share of tech jobs that are hard to fill, meaning they have been left unfilled on their platform for more than 60 days.

Their data shows that filling tech jobs is particularly challenging in the Netherlands, where the greatest share (56%) of tech jobs are deemed to be hard to fill. By contrast, the equivalent share in the UK is just 37%.

Year-on-year changes within countries are also interesting to observe. On the basis of this metric, competition for talent has increased in many countries (the Netherlands, Ireland, Italy, Sweden, US, Denmark and the UK) in 2021 compared to 2020, while decreasing in many others (Portugal, Belgium, Germany, Spain and France).





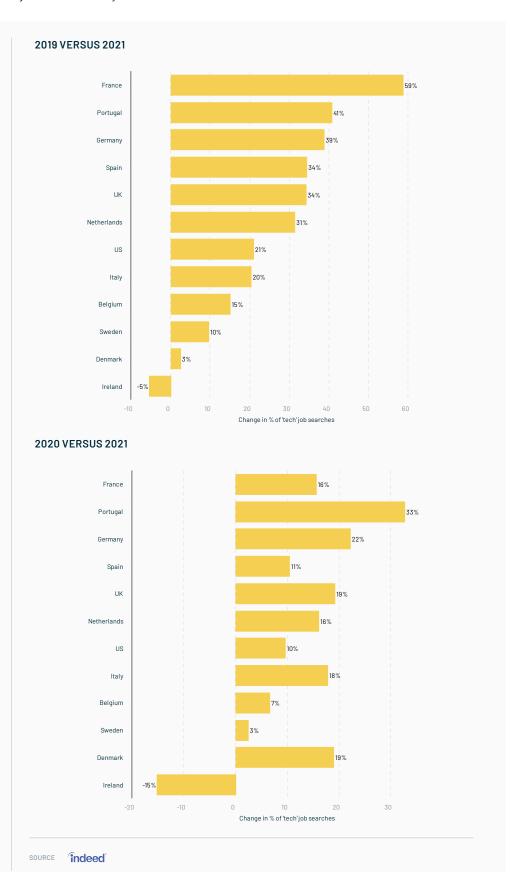




## French talent is drawn to tech

Growth in overall demand for tech jobs can be gauged by the change in relative search volume for tech jobs across different countries. Jobseekers in France in particular have become much more interested in tech since before the pandemic, and maintained a high level of interest throughout the last year as well. This could explain in part why the number of hard-to-fill jobs in the country has decreased over time.





NULES
Tech jobs' included in the search for example: software engineer, programmer, application developer, UI/UX/graphic designer, web developer, frontend developer, backend developer, data scientist, business intelligence, IT support.

atomico in partnership with 51.115H











The pandemic has obviously had an effect on how we all find and hire talent. While it has led to decentralisation, at Infobip, it certainly has not impacted the talent pipeline. In fact, we're seeing candidates thinking more broadly, surfacing new possibilities for collaboration and exchange.

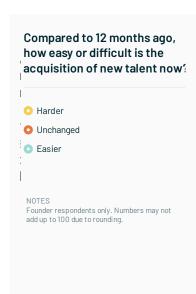
It is also obvious that being able to communicate and interact directly, with all participants in the same room, in front of the same whiteboard, simply does not have a viable alternative currently. There are differences per sector, but the flow of ideas, energy, creativity that can happen in person is much better than doing the same over the video link - and highly skilled workers are very aware of this! Decentralisation is happening, but workers will not just live anywhere - people do need to see each other from time to time.

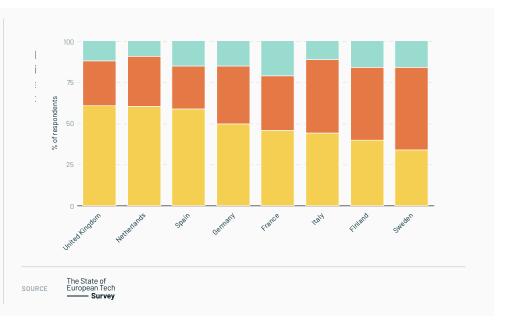
Izabel Jelenic, Infobip | Chief Technical Officer

## Founders say it's getting harder to acquire new talent

We also surveyed founders directly to understand their experience with the acquisition of new talent, and how they have changed over the past 12 months. The overall sentiment is clearly in support of the argument that the war for talent is heating up.

In several countries, more than 50% of founders perceive that is has gotten harder to acquire new talent in the past year. In others, where the share is lower, it still significantly outweighs the share of founders that respond with a more positive sentiment toward the change in the market. Indeed's data also shows that the overall year-on-year jump in the share of hard-to-fill jobs was highest in the UK.











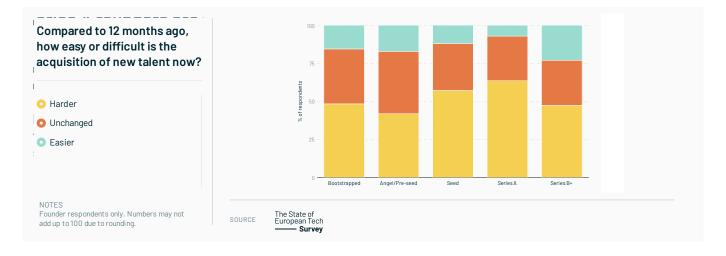
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## Series A founders are finding it hardest to acquire new talent

Across all stages, founders shared that they are finding it harder to hire talent compared to 12 months ago. however, the challenge was most frequently highlighted by founders of Seed and Series A stage companies.

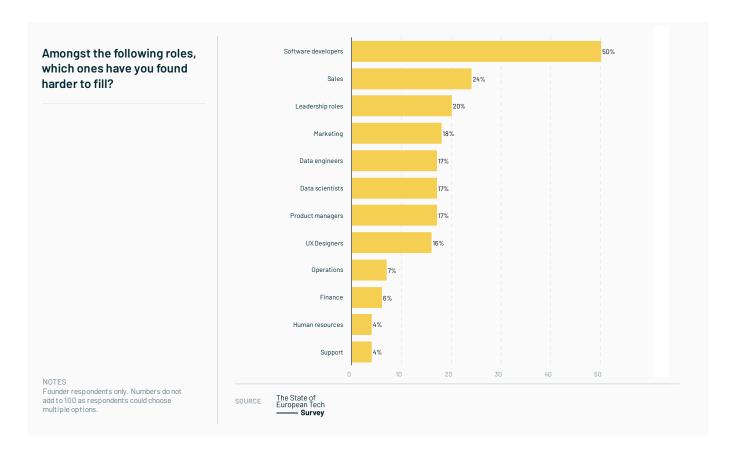
There has been a significant increase in companies entering the scale-up stage this year, and as they try to keep up with growth and hiring, it is putting further pressure on companies downstream, especially as they may be able to compete more aggressively on compensation packages.



## Lack of software engineering talent continues to be a bottleneck

Founders are finding it hardest to hire software developer talent. 50% of founder respondents highlight this as a problematic position to fill.

Hiring commercial talent also presents a challenge for many, with 24% of founders indicating difficulty in bringing people into sales roles. Interestingly, these trends are mirrored in the responses of founders across all geographies, company types and stages.











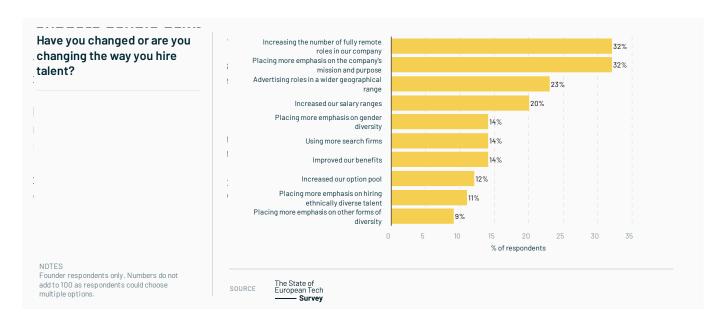
## Founders double down on purpose and remote roles to attract talent

In the context of an increasingly competitive talent market, we thought it would be interesting to ask founders what they've been doing differently in order to attract talent.

The most frequently-cited response is to increase the number of fully remote roles in their country, presumably to tap into new talent pools in other geographies. This is followed by placing more emphasis on the company's mission and purpose. Purpose and mission is also echoed by employees as a key component of their decision to take a role, so there is a real alignment in the actions of both founders and talent on this issue. A topic further explored in the chapter: Empowering a new generation.

A focus on diversity does not feature high on the list of priorities cited by founders, especially not in terms of placing more emphasis on hiring ethnically diverse talent.

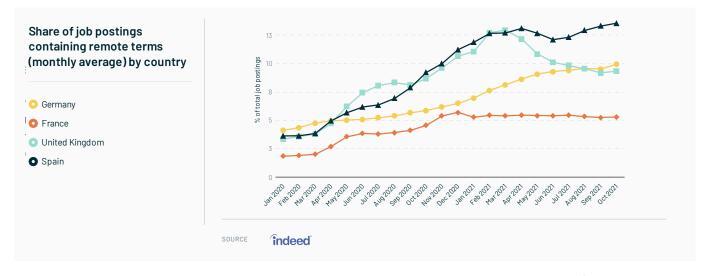
An additional insight gained by slicing the data by founder types is that experienced repeat founders are more likely to 'throw money at the problem': They show an increased likelihood to have turned to increasing salary ranges and hiring search firms in order to attract talent, compared to less experienced repeat or first-time founders.



## The future is remote

It's clear that remote work is crucial to the future of work, and becoming an increasingly prevalent feature of the labour market.

Indeed's data can be used to track the share of job listings including terms related to remote work, such as 'work from home'. Their analysis shows that the share of jobs that reference such terms has increased significantly across many countries. In this chart, the increase in Spain is particularly noteworthy, where the number of remote jobs is up nearly 4x since January 2020.













We can operate very efficiently with 30% of the workforce being completely remote and the other 70% distributed in the different hubs.

We see that remote work "works". We cannot deny that it has become impossible to attract the best talents if we don't accept remote work. However, we are still big believers of having physical hubs to foster culture. As a result, we can operate very efficiently with 30% of the workforce being completely remote and the other 70% distributed in the different hubs. There is a certain type of magic happening when people interact with each other on a regular basis in person. This way, team members who work completely remote can still feel a strong culture deviating from these hubs.

Hung Dang, y42 | Founder & CEO



People no longer need to emigrate to work in the best teams and companies in the world. These experiences will help foster native entrepreneurship and ecosystems, increase opportunity, bring social mobility and distribute prosperity from tech to a much broader set of humanity.

Engineers from all over the world have been collaborating globally on open projects for decades; the creator of Linux is Finnish, Mysql is Swedish, the original Apache group had Indian/Italian/ German/British engineers, video-player VLC is French and popular 3D-software Blender is Dutch. Traditional companies and startups have been reluctant to build global teams due to cultural inertia, access to talent and collaboration constraints. With remote work being normalised, these previously perceived immutable constraints are starting to wear away. This enables dissemination of talent, learnings and approaches across tech-ecosystems instead of concentrating them.

Tariq Rauf, Qatalog | Founder & CEO



# 03.2 Talent recycling





## Success breeds success

European tech is on track to reach \$100B invested in a single year, and optimism is picking up. 2021 is a year of record growth for both unicorn generation and megarounds, and new companies are raising funding faster than ever.

## **INSIGHTS**

## Unicorns from everywhere

28 countries and 98 cities have given rise to unicorns from increasingly diverse sets of hubs, enabling recycling of tech talent across the continent. 64% have been founded and built from primary hubs across the region

## Talent recycling is more distributed than one might imagine

There are more than 2,000 alumni founders that have emerged from the top 15 European unicorns ranked on this measure. On average, each of those unicorns has 'given birth' to more than 135 founders.

## The full potential of today's unicorn offspring has yet to be realised

18% of current unicorns were founded in the 90s, and have produced 21% of all unicorn alumni founders. 44% of current unicorns were founded after 2010, yet only account for 25% of unicorn alumni founders. The ecosystem will level up once again as this generation of talent is recycled.











The European technology ecosystem has hit a special tipping point: for the first time we have 25-30 cities where we can see the recycling of both talent and capital.

The result is an explosion of high quality entrepreneurs across a range of sectors and geographies. Accel is entering its third decade in Europe and yet we have seen more change in the last 18 months than we did in the preceding decade. It's questionable as to how long the frenetic pace can last but the fundamentals have never been stronger and the innovation and ambition continues.

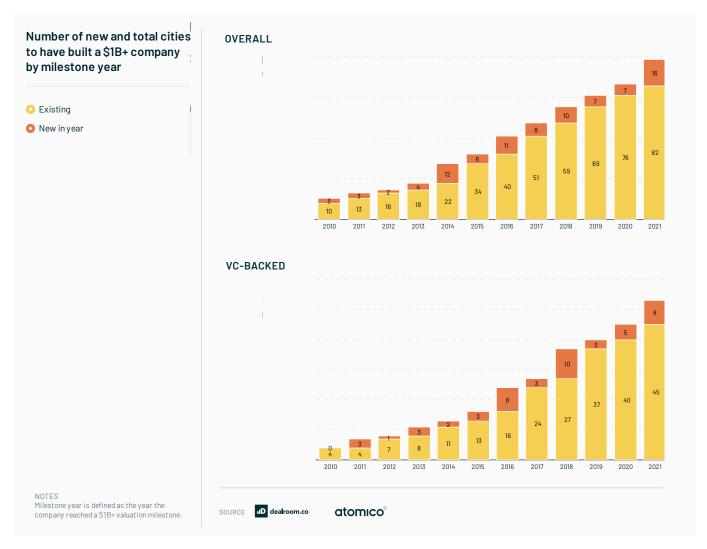
Sonali De Rycker, Accel | Partner

## Unicorns from here, unicorns from there, unicorns from everywhere

The geographic diversification of \$1B+ companies and the development of local hubs continues to accelerate with an additional 16 cities added overall in 2021.

In total, 98 different cities from across Europe have built a unicorn. From Aarhus to Karlsruhe and Riga, it is exciting to see founders all over Europe building \$1B+ companies and planting the seeds for startup communities to flourish.

It's also interesting to see how companies that did not raise venture capital have played a role in the diversification of cities that have given birth to unicorns. VC-backed \$1B+ companies have been built from 53 different locations, whereas non-VC-backed \$1B+ companies add another incremental 35 locations to the mix.









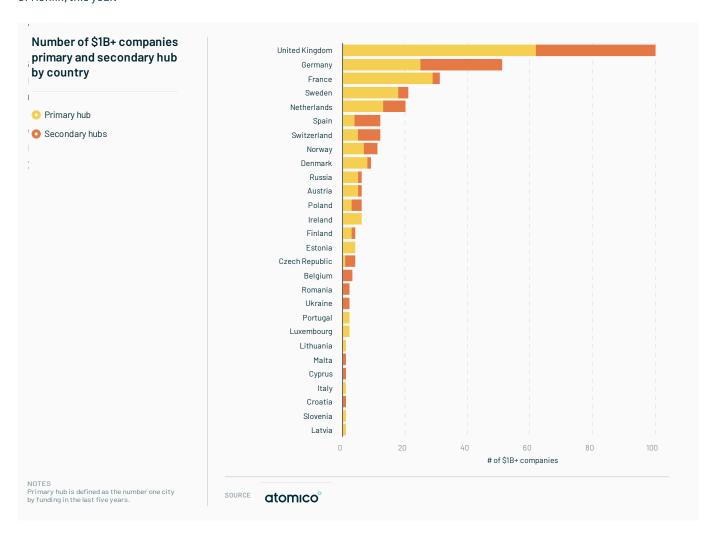
## The geographic diversity of unicorns continues to increase

Taking the entire herd of European unicorns in aggregate, 64% have been founded and built from primary hubs across the region. The remainder emerge from other cities across the 28 different countries that have given rise to unicorns.

Looking at the top 10 countries by count of unicorns, France is the most concentrated with 94% of its unicorns founded in Paris. Spain and Switzerland have the lowest share from primary hubs. For example Spain has built 12 unicorns from four different cities.

We define a primary hub as the top city within each country according to the total capital invested over the last five years and as such these are not necessarily the capital city.

It is worth noting that primary hubs can change over time. For example, Prague was the primary hub in the Czech Republic in 2020, but has been replaced by Olomouc (home city of Rohlik) this year.





When you have that level of business creation, investment, and expanding talent base in one place, it tends to create a virtuous cycle.

There is already a vibrant community of technology companies in Bristol, and it is growing every year. Over time that community will create more entrepreneurs who want to develop their ideas and build their businesses in the city. We would like to see Bristol emerge as one of the top tech hubs in Europe.

Nigel Toon, Graphcore | Co-founder & CEO







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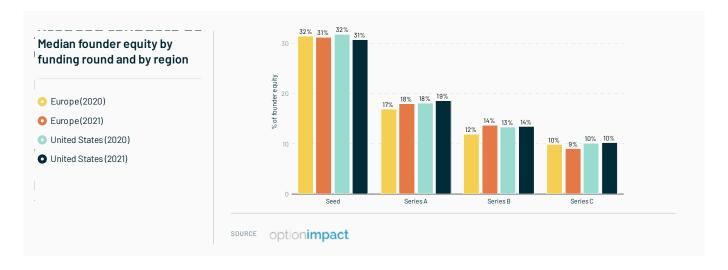


#### European founders have become more aggressive in defending their ownership

The average level of founder equity by funding round is closely aligned between the United States and Europe at the early stages of funding.

It is interesting to note that compared to the previous year, European founders have been slightly more aggressive in defending their ownership at Series A and Series B.

This is an important consideration with regards to recycling, as it ensures founders get to keep a larger share of the proceeds, which in turn has positive implications on their ability to reinvest in the ecosystem in the future, if they realise liquidity. There are countless examples of repeat founders who have been able to work on bolder ideas after benefiting from liquidity from their first venture.

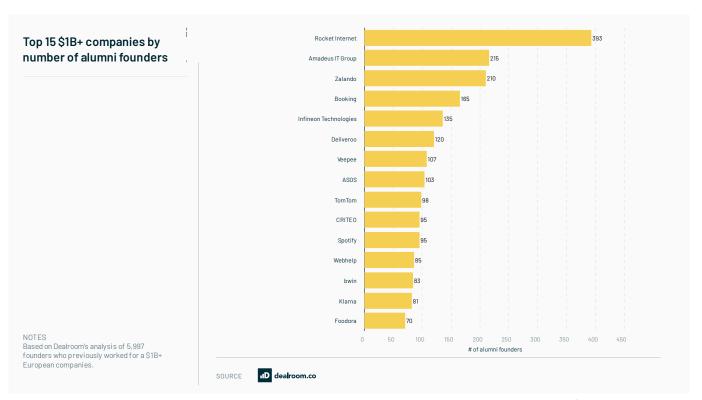


# European tech mafias

Together with Dealroom we have created an extensive analysis of \$1B+ alumni who went on to become alumni founders. We mapped nearly 6,000 founders who had previously worked at \$1B+ companies headquartered in Europe and managed to map mafias for over 80% of the more than 300 \$1B+ companies.

The mature \$1B+ companies are parents to many new founders. The findings validate some of our 'MVP' analysis last year that showed Rocket Internet leading the way based on the number of alumni that have emerged to become founders in their own right.

And it is notable how talent recycling is leading to multi-generational mafias too with Zalando, the Rocket Internet offspring, coming in third place in the ranking.









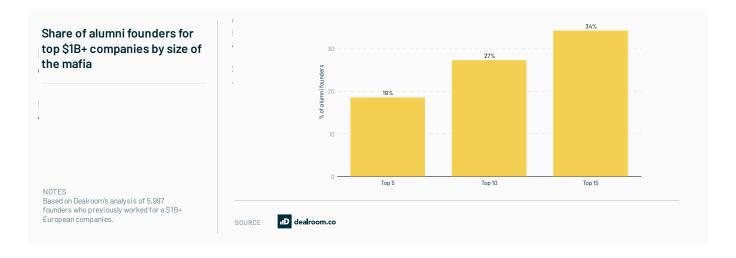


#### Talent recycling is more distributed than one might imagine

The top five \$1B+ company mafias alone represent close to 20% of the overall alumni founders that were mapped.

Their impact alone is huge. But a company's influence on an ecosystem is not measured in counts of alumni founders alone. Spotify for example may 'only' have contributed 95 alumni founders in Europe, but its impact on the startup ecosystem has been profound. Additionally, there are many companies that never reach unicorn status that have also had an outsized impact in their local ecosystem.

In some ways, it's not just about quantity, but also the quality of the talent that these companies grow and nurture that matters. The entrepreneurial mindset, execution capabilities and networks these alumni are able to develop are key.

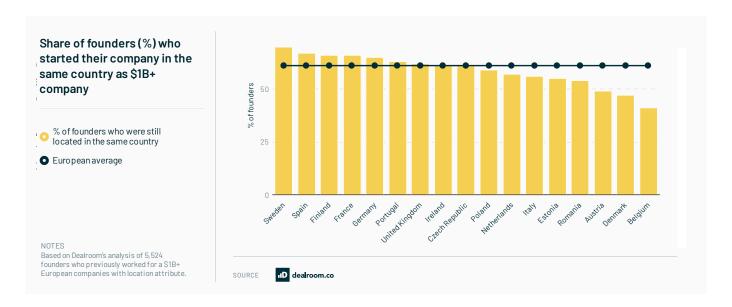


#### Talent recycling gets the flywheel spinning faster

Looking at our dataset of European founders, we were able to validate another early finding from last year which is that liquidity events are especially transformative for the countries they are headquartered in.

We compared where founders had gained their experience working in a \$1B+ company against where they went on to found their own company. Across Europe, 61% of founders stayed in the same country to establish their own company as where they gained their unicorn experience.

Sweden stands out as a particularly noteworthy example of this trend, while the alumni from Belgian and Danish unicorns are relatively more likely to have established their new companies elsewhere.













We've easily saved many years of scaling pains. Our team network enables quick access to support across all areas of the business. The effects of this foundational team are profound and will be felt for a long time to come.

I'm very fortunate and grateful for the people I get to work with everyday. These include veterans and early employees from Wise, Amazon, Stripe, InVision, Mozilla, Atlassian, Vimeo and others. A meaningful consequence of this is avoiding a lot of pitfalls that come with building a high-scale company.

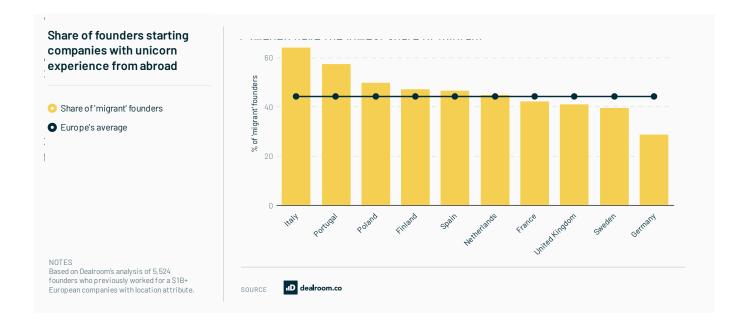
One of the challenges of European cities where the tech sector is new is the lack of similar know-how and experience in company, funding, team, product, culture-building and the nuances in approaches at various stages of the business. Mistakes in these areas can sometimes be costly, have multi-year effects and in some cases even be fatal for the business. I highly recommend founders who do not have prior expertise to build mentor and advisory relationships with people who do.

Tariq Rauf, Qatalog | Founder & CEO

### Founders in Italy have gained their experience abroad

We also look at 'migrant' founders or founders who decided to start their company in a different country to the one where they worked at the time of gaining experience at a unicorn.

Italy has the highest share of these 'migrant' founders with 64% of founders mapped having worked for a \$1B+ company outside of Italy. On the flipside, Germany and Sweden have the lowest share of 'migrant' founders, implying they are relying more heavily on homegrown founders. Some countries take extra steps to incentivise these flows. For example, the Italian Tax Authority offers incentives for workers moving to Italy.



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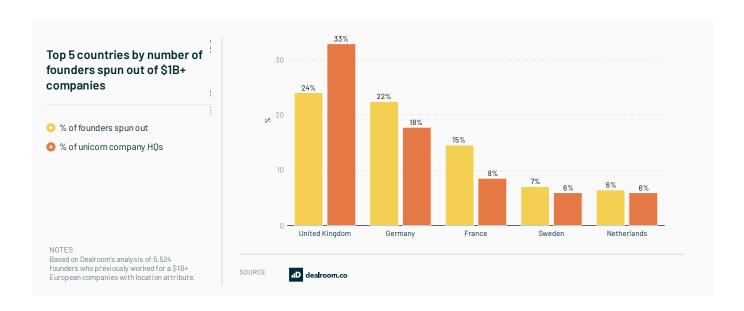






#### UK appears underweight on unicorn alumni founders

We compared the count of founders that emerged from \$1B+ companies and the location of the unicorn company. The highest share of alumni founders were based in the UK (24%). However, this appears underweight relative to the share of \$1B+UK companies (33%) considered in the dataset.





I've observed many operators and founders becoming full-time investors (VC or angel) with deep experience in starting a company, building world-class products, and scaling their business.

Being an operator and an early employee (2011) in one of Europe's fastest-growing consumer tech companies, I've seen a dramatic shift and maturity in the tech ecosystem in the past decade. Apart from the substantial capital inflow into Europe, access to human capital is growing significantly. I've observed many operators and founders becoming full-time investors (VC or angel) with deep experience in starting a company, building world-class products, and scaling their business.

This is a critical inflection point, particularly for startups that will now benefit from more "smart money" and operational experience from investors, which is essential to further developing the ecosystem. I'm also very excited about stronger interconnected networks of angel syndicates, and VCs sharing deal flows across geographies. This means that you can now access capital in a much broader and more efficient way.

Kim Fai Kok, Framtid | Co-founder









### The 2000s was a vintage decade for spinning out European tech founders

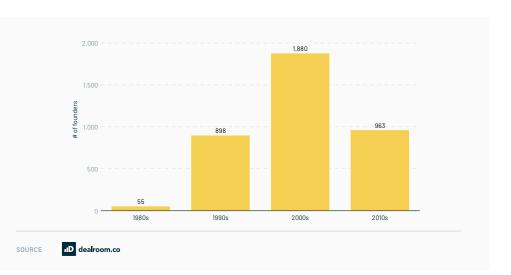
We looked at the distribution of founders who worked in \$1B+ companies by the founding decade cohort of these companies. The founders in our dataset are more likely to have emerged from a \$1B+ company founded since 2000.

In fact, nearly half of the founders have gained their unicorn experience from companies founded in the 2000s and 25% from companies started after 2010, For example, the top 5 most prolific parent companies of founders include Rocket Internet, Booking.com and Infineon Technologies, all founded in the 2000s.

There are many interesting conclusions that could be drawn from this. Firstly, we are seeing an increasingly liquid market where, over time, more of the talent pool grown in the most successful European tech companies are feeling empowered and motivated to embark on the entrepreneurial journey themselves.

Secondly, given more elapsed time, we should expect a significant increase in the number of alumni founders that will ultimately emerge from today's unicorn companies.























The European flywheel is spinning into action. Our unicorns are now producing a healthy flow of incredible founder talent that have learnt from the best and investors are willing to invest earlier than ever before.

That said, we still struggle with the status quo in Europe, where traditional career paths take many of our most talented individuals. As an ecosystem we need to make a concerted effort to attract talent at the beginning of their careers to startups so that they can become the founders of the future.

Alice Bentinck, Entrepreneur First & Code First: Girls | Co-founder







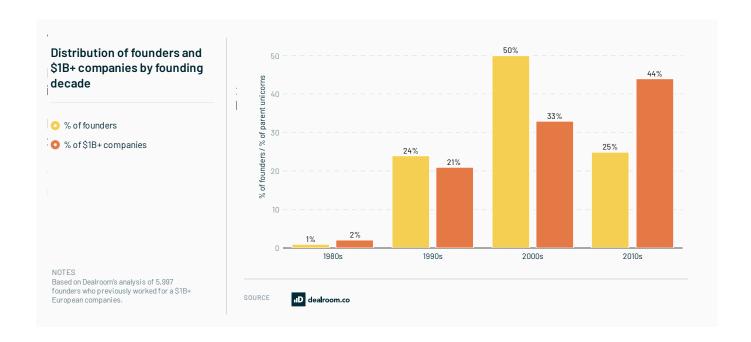


### The full potential of today's unicorn offspring has yet to be realised

This time lag is clearly visible in this chart that shows that the alumni of unicorn companies founded since 2010 have yet to show up in the numbers.

These companies account for 44% of the total unicorn count in our full \$1B+ dataset but only account for 25% of the alumni founders we mapped to date.

By contrast, the more mature cohort of unicorns founded in the 1990s, which account for 21% of total unicorns, have produced 24% of the total unicorn alumni founders. This represents a huge leading indicator for the future prospects of the European talent flywheel.













# 03.3 Empowering a new generation







#### **ARTICLE 03.3**

Europe's tech leaders - especially the young - are positive about Europe's prospects. But there are still barriers that could deter founders from underrepresented backgrounds from taking the plunge into entrepreneurship.

#### **INSIGHTS**

Talent makes bet on tech as beliefs
in the future of tech rises especially
among the young

56% of employees, 57% of department heads and 62% of under-25s feel more confident in Europe's ability to build global leaders in tech compared to 12 months ago.

#### But is tech making bets on talent?

European founders are consistently taking lower salaries compared to those in the United States, both in terms of base salary and incentive pay.

#### Impact matters to European tech talent

83% of under-25s, 80% of employees and 75% of department heads within tech companies think social impact is important when choosing a job. Women employees (84%) care more than men (75%)

#### We must do better on inclusion

68% of women and 61% of men believe the ecosystem has failed to improve opportunities for underrepresented demographics in the last year. 86% of non-binary people, 63% of women and 50% of people of colour feel it is failing to provide equal opportunity for their groups.











Now, more than ever, there are multitudes of options for young people wanting to get into tech and for more experienced people wanting a change in career.

Recent innovations in technology ranging from blockchain to Al to better e-commerce functionality to the Metaverse are pretty exciting. The developmental leaps combined with the investment in free educational offerings from the tech giants makes me hopeful. Now, more than ever, there are multitudes of options for young people wanting to get into tech and for more experienced people wanting a change in career. This bodes well for big tech corps and startups alike, there's more talent than ever available and this means more can be achieved.

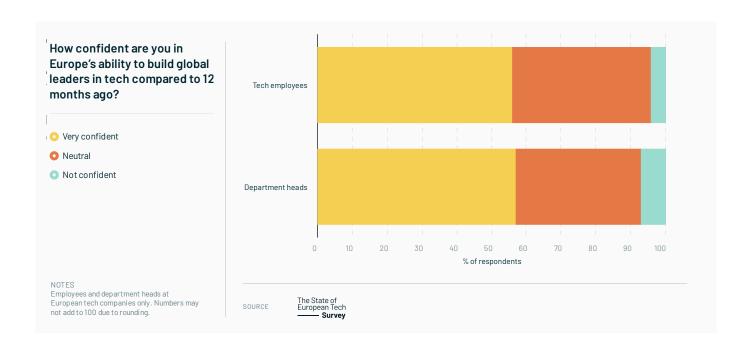
In the last year we've been able to launch a chat bot (which I learnt to build for free during lockdown) and build an app on a tiny startup budget thanks to the new functionality that Flutter & Firebase allow. The future of tech is bright.

Rachael Corson, Afrocenchix | Co-Founding Managing Director

#### Confidence in Europe's tech talent pool is high

When asked about Europe's ability to build global leaders in tech now compared to 12 months ago, 56% of employees and 57% of department heads report feeling very confident in the prospect.

Many feel the same as before, but only a very small proportion - 4% of employees and 7% of department heads - now lack confidence in Europe's prospects on this front.











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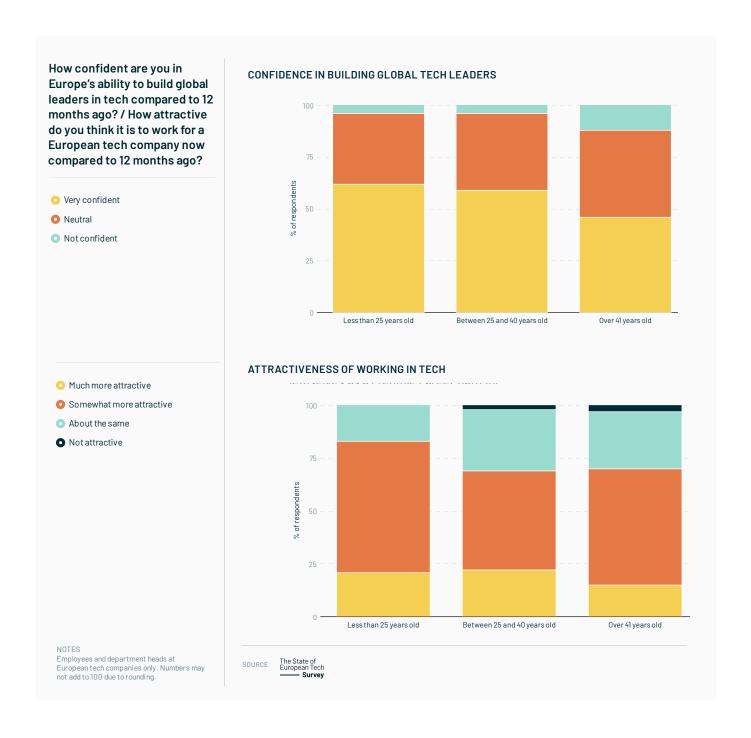
# Younger people are more confident in and attracted to working in European tech

Young people believe in Europe's ability to build global tech leaders, and are even more positive about working for a European tech company than a year ago.

70% of all respondents indicate working for a European tech company is more attractive now than 12 months ago, but this percentage rises to 83% for those under 25 years old.

Similarly, 62% of under-25s are confident in Europe's ability to build global tech leaders. This is an encouraging indication that tech startups have established themselves as a credible career path for young talent.

So how do we empower a new generation of leaders and founders?







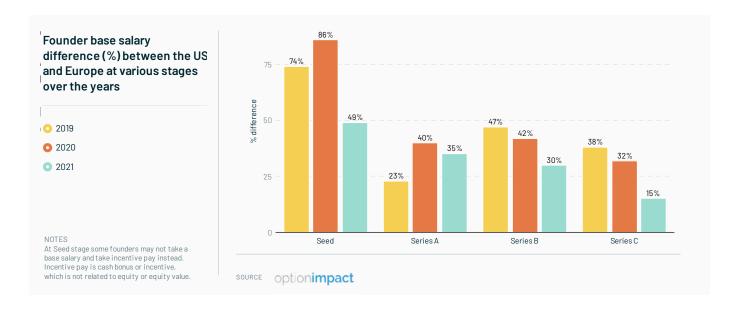




#### Closing the regional gap in founder base salary

We've seen convergence of market dynamics between Europe and US across round sizes, valuations and investor base, to name a few.

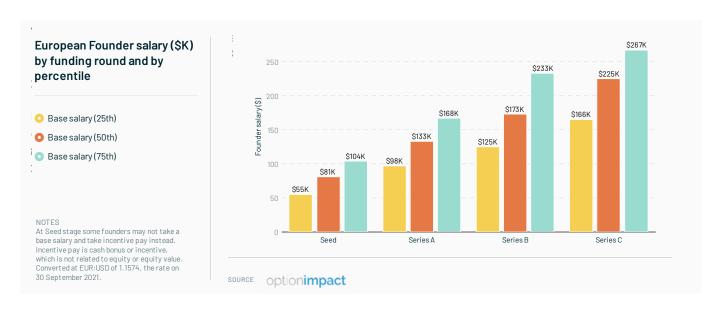
This is another example of the gaps that once existed between the two regions starting to close, albeit not at the same speed for every funding stage.



#### There's a wide range of financial realities among founders

It's a common trope in tech that entrepreneurs don't get into it their job for the salary. But for many founders, a decent base salary is the difference between being able to take care of themselves, or not.

There is wide discrepancy in founder salaries, with the top quartile being paid nearly double that of the bottom quartile. The widest discrepancy is seen among Seed stage founders, where 25% of reported salaries are below the \$55K mark - close to half of the top quartile. This likely reflects the fact that founders have different preferences for the mix of cash and equity in their compensation.











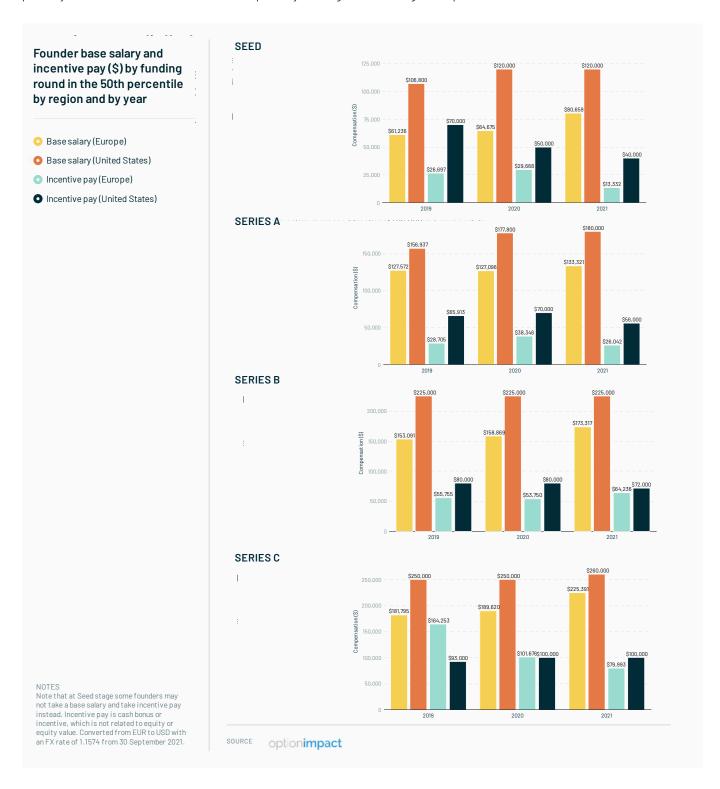
#### Incentives are dialled up in the US

Financial prospects do matter to founders, and can be a deterrent for many - especially those from less financially privileged backgrounds.

It's therefore worth noting that European founders are consistently taking lower salaries compared to those in United States, both in terms of base salary and incentive pay. This is likely related in part to preferences and/or differences in tax treatment of stock options.

Interestingly, the base salary gap between Europe and the US narrowed in the last year - most evidently at Seed stage, where average base salary increased by almost \$16,000 in Europe while staying level in the US. However, progress on this dimension was accompanied by a decrease in incentive pay, indicating a shift in the average mix of compensation, rather than an overall increase.

The salary gap between regions does get narrower at later stages of the company journey, possibly due to increased international transparency and alignment for larger companies.













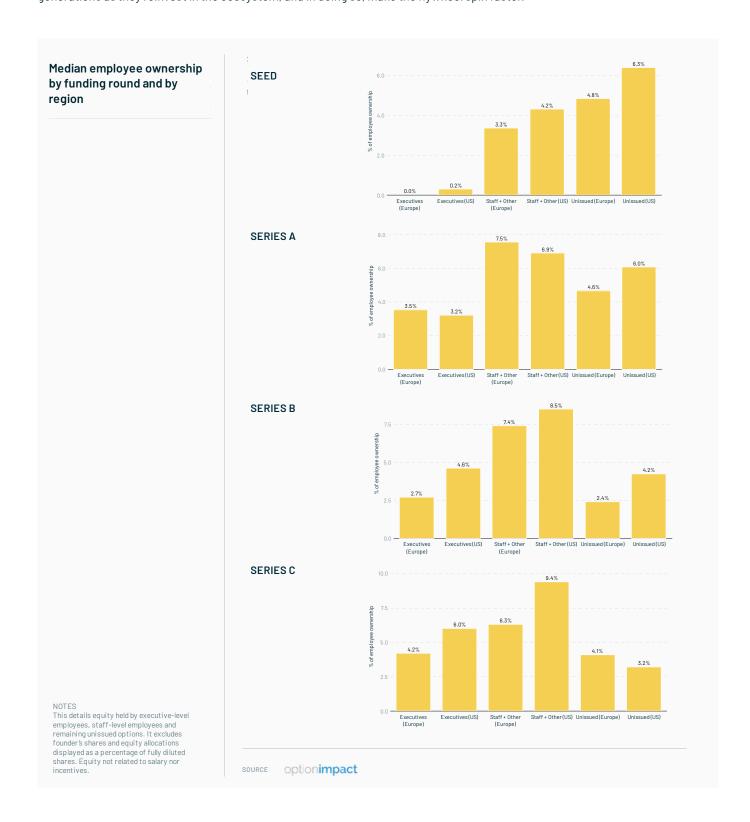


#### Seeding the next generation

Well-rewarded senior operators and staff contribute to a virtuous circle, as they go on to seed the next generation of companies with raised ambitions and bolder ideas.

Europe's Employee Share Ownership Plans ('ESOP') are critical in order to fuel the flywheel: Firstly, ESOP acts as an effective tool to attract and retain talent, which is one of the top concerns expressed by founders. Secondly, it aligns incentives across all participants. Yet ESOP stock option pools in Europe are still playing catch up with other regions like the US. It's encouraging to see this as a top priority for the newly set up European Startup Nations Alliance.

We have seen time and again how early employees can have a meaningful impact on future generations as they reinvest in the ecosystem, and in doing so, make the flywheel spin faster.

















We're seeing an increasing number of exceptional founding teams with global ambition.

The ecosystem continues to grow and mature, and we're seeing an increasing number of exceptional founding teams with global ambition. This is partly due to the success of European founders like Daniel Dines from UiPath. To see Daniel start a company in Romania and go on to define a category, is hugely inspirational for the next generation.

Luciana Lixandru, Sequoia Capital | Partner

# Angel investor voices in the State of **European Tech report**

#### **OPERATOR EXPERIENCE**

of angel investor respondents have previously worked at a startup or scale-up

#### **FOUNDER EXPERIENCE**

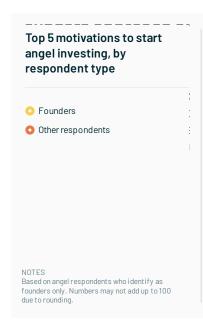
of angel investors respondents have either founded or co-founded a business

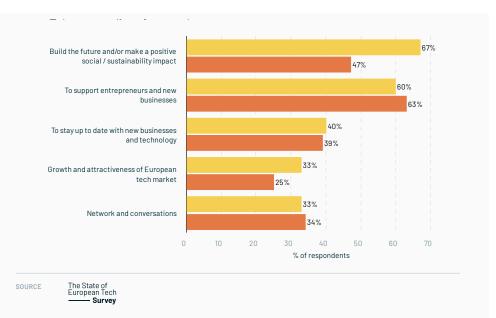
# Founders approach angel investing with the same mindset: building the future

The liquidity of the European tech marketplace - meaning the ease with which capital and talent flows from one company to the next - matters for multiple reasons: Talent recycling, for one, leverages experience and knowledge to build new and better companies, and to do it faster. Capital recycling is also important. One of the ways in which this is activated is when founders re-inject their capital gains back into the ecosystem as angel investors.

More and more successful European founders and operators are becoming shareholders of and champions for a new generation of startups. It's interesting to understand their motivations for this. The most important one, especially for former founders, is to help build the future and have a positive impact, while supporting a new generation of entrepreneurs and early-stage companies.













We need to stop trying to copy Silicon Valley and be more self-confident to find our own DNA and strengths to accelerate our European cluster.

It is great to have a diverse set of visionary entrepreneurs such as Daniel from Spotify, Guillaume from Checkout, Taavet from Wise or the Strüngmann brothers (BioNTech / Hexal) that do not only strongly believe in the strength of our European tech ecosystem but play a very active role in amplifying it with capital as well as in-depth knowledge and conviction in contrarian ideas they thrive for that really make a dent for Europe. Strüngmann's EUR 150m seed investment in BioNTech in 2008 during the financial crisis is a great example of such a contrarian investment - the rest is history. The challenge with European VCs is that we are sometimes too numbers and return focused too early on, don't have large enough fund sizes to back the bold technologies and think too short term in terms of our returns.

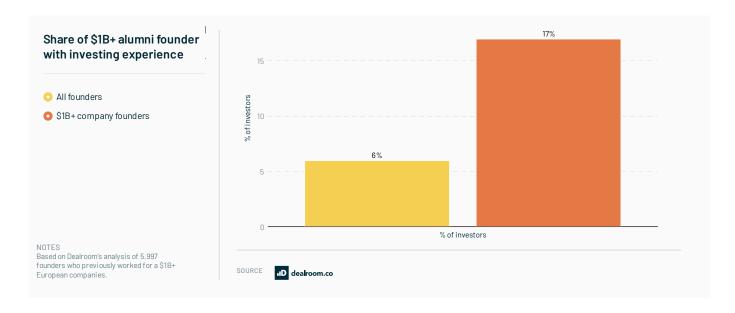
Robert Lacher, Visionaries Club & La Famiglia | Founding Partner

#### Founders become investors

In partnership with Dealroom, we analysed the profiles of around 7,500 European tech founders. One aim was to gain quantifiable insights into the proportion of founders who self-identify as investors by listing their investment activity on their LinkedIn profile.

We found that 6% of the founders whose profiles we analysed self-identified as investors on LinkedIn. This likely a significant underestimate of the true level of founder-turnedangel activity, as many will not have listed their activity on LinkedIn. Nevertheless, it does indicate that capital and knowledge recycling is starting to happen systematically and at scale across Europe.

Interestingly, when we explored the subset of unicorn founders, the share that had listed investor activity increased to 17%.





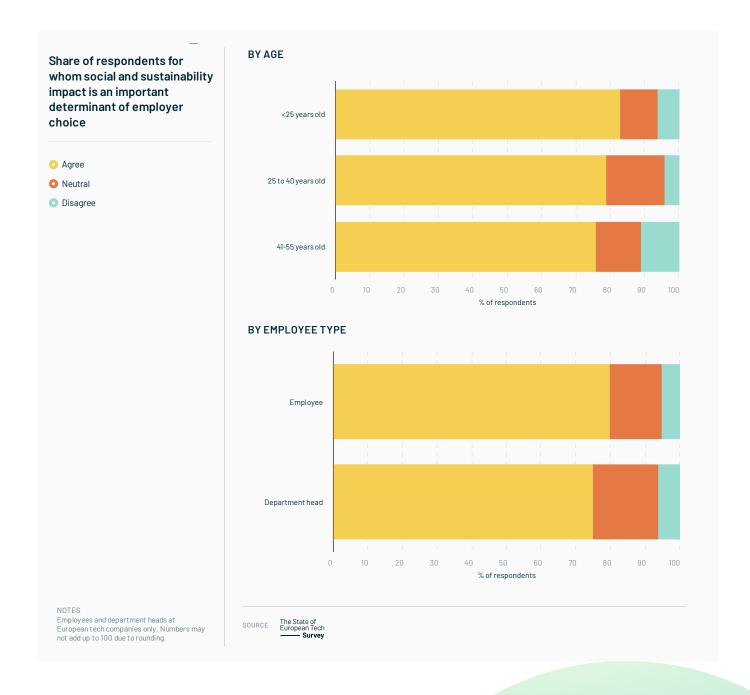




#### Impact matters to European tech talent

Beyond financial incentives, there is a growing desire among talent to work for companies that are aligned with their values.

Social and environmental impact is an increasingly important determinant of employer choice in the European tech ecosystem. Around 80% of respondents in our survey stated that impact is an important consideration for them when choosing where to work. This is felt most strongly among younger cohorts of talent, though it is not reserved to the general employee base; 75% of department heads within tech companies also agreed that impact is important to them.















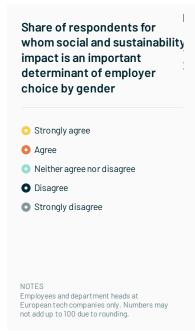
Years ago, the most talented people wanted to be like Gordon Gekko or the Wolf of Wall Street. Nowadays, most talented young people want to be like Gandhi. They really want to make an impact and belong to an organisation that has a real, sustainable purpose.

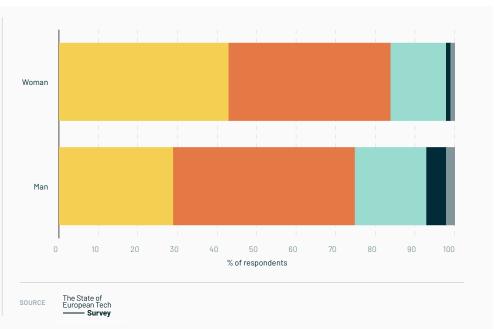
Juan Urdiales, Jobsandtalent | Co-Founder and Co-CEO

#### Women job seekers are more motivated by impact

The growing importance of social and environmental impact is also underlined by the share of respondents that agree or strongly agree that it is an important determinant for them in making employment decisions.

This trend is seen more strongly among women than men: 84% of women employees or department heads agree or strongly that it is important to them, compared to 75% of men.







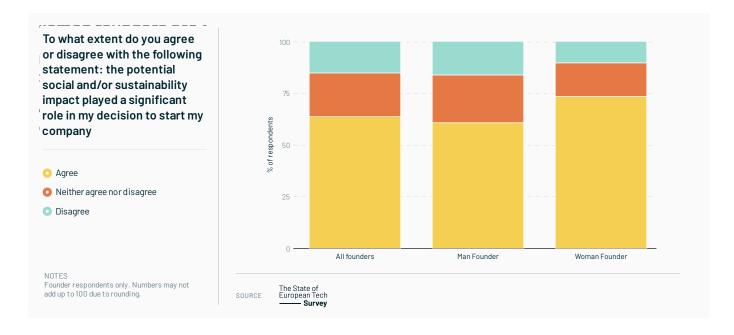




#### Women founders are also more motivated by impact

The sentiment we see among women employees and department heads is mirrored by women founders, in their reasons for starting their companies.

64% of all founders agree that social and/or sustainability impact played a significant role in their decision to start a company, but that number rises to 73% for women, compared to 61% for men.



#### **Building with purpose**

A number of changemakers in the European tech community are working to enable companies to integrate best practices environmental and social governance (ESG) best practices early on in their journey. Many also work on the investor end, helping them support their portfolio companies in implementing best practices. Overall, these initiatives enable more entrepreneurs to build and scale their businesses with purpose.





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We are very excited to watch sustainability establish itself as more than a trend. It has become a true priority on all fronts.

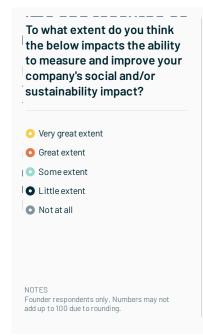
Stronger pressure from regulators and consumers who are increasingly more aware and engaged makes room for startups to establish themselves as category leaders. We've seen some interesting trends through some of our portfolio companies, like Sylvera on the infrastructure end, or Treecard, on the consumer front. Both startups have been able to attract world-class talent from day 1, as today's employable generation is looking to join companies with stronger missions rather than financial returns. Furthermore, they have been able to assemble diverse teams from the get-go, which we deem to be crucial in building products and solutions for wider adoption.

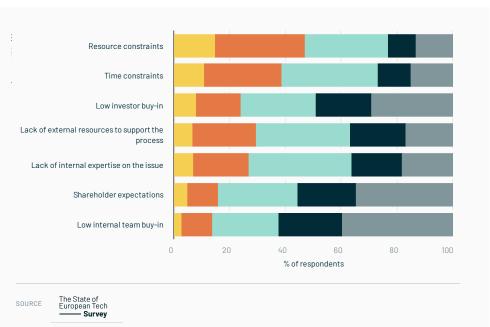
Sia Houchangnia, Seedcamp | Partner

# Time and resource constraints are barriers for companies looking to better understand their impact

The majority of founders share that environmental and social governance (ESG) has grown in importance in their day-to-day operations. However, they also report a significant amount of friction in the process of understanding and improving the impact of their companies.

Resource and time constraints are highlighted as the biggest constraints, followed by a lack of investor buy-in and external resources to support the process. Promisingly, initiatives have emerged over the last year to address these challenges, such as VentureESG and ESG\_VC. For instance, ESG\_VC has created a free and easy-to-implement framework to help companies quantify and set ESG-related objectives (link below the chart).













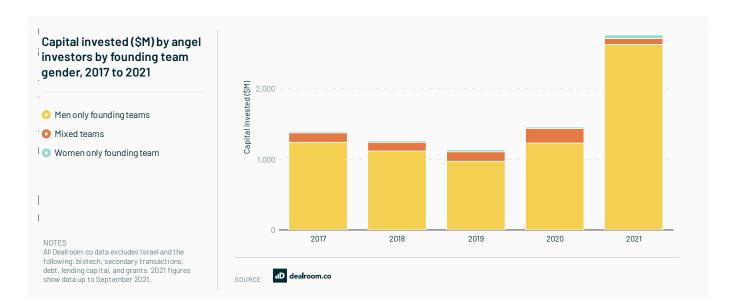
# Angel firepower is now significant with influence over the diversity of the talent pool

In order for better ideas to fuel the next wave of companies, it is crucial to expand the pool of talent that gets access to funding.

In the next chapter we will see how lack of diversity compounds over time. As such, it is key to make sure diversity is tracked at the top of the talent funnel, as well as across each stage of funding.

Angel investment is important here, as it is typically the 'first money in'. It remains one of the most challenging datasets to report on, because a large share of that funding is not made publicly available and/or is suffering from significant reporting lags. Nonetheless, Dealroom's dataset is a helpful signal on the market's direction of travel. It shows that the gap in investment going to male and female founders remains stark.

In 2021, founding teams comprised solely of men captured 87% of all angel funding.





To grow my business in the 1960s, I had to become 'Steve Shirley' and disguise the true nature of my all-female workforce! Leaps have been made since then, but much remains to be done.

I arrived in the UK as part of the Kindertransport in July 1939 when Europe was on the brink of collapse. It is almost unbelievable to see Europe as it stands today, a thriving hub of entrepreneurship.

I know now that our community can grow despite great hardship, proved again by the pandemic. Founders across the region stepped up and set the stage for this extraordinary year of investment. We now have much-deserved world-class recognition of our talent and skills. To continue this trajectory, we need to even the playing field for people from all walks of life.

My advice to founders today? Make the most of the world's new interest in European technology and stick with those who inspire you. Relay your successes back to those who helped you, and pay your debt forward to those who still face extraordinary barriers.

Dame Stephanie Shirley CH







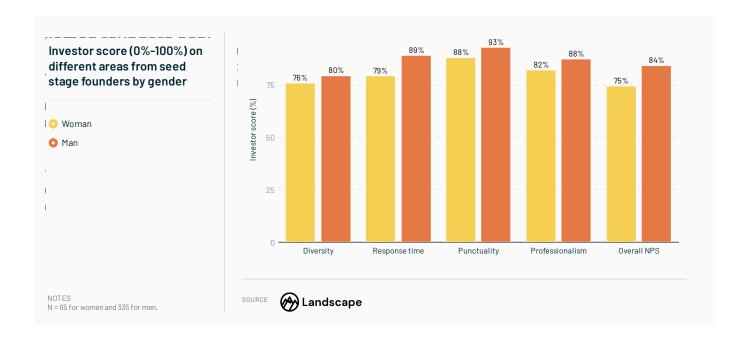


#### Women founders consistently report poorer experiences with investors

Landscape - a platform for anonymous VC and investor reviews - gathers insights from founders across a range of attributes to unpack the strengths and weaknesses of investors. For the purpose of this analysis, all reviews have been aggregated and anonymised. Scores range from 1(lowest) to 5 (highest) and have been translated to percentages.

Reviews were segmented by stage and gender to provide further insights into gendered experiences in the talent pipeline. We found that women founders at seed level consistently give investors worse scores on diversity, response time, punctuality and professionalism, compared to their male counterparts.

The scores given to investors on diversity particularly stand out, as these materially weigh down overall net promoter scores. VCs still have work to do to ensure they deliver a consistent experience for all founders.





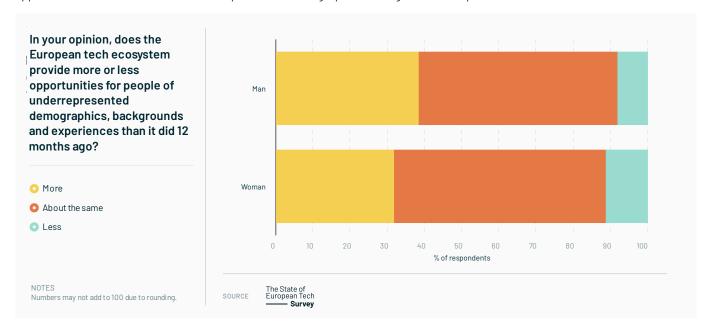
I do think as a woman founder I have to hit every benchmark. No one is saying "Peanut is excellent in XYZ, they will figure ABC out", we have to deliver the whole damn alphabet. "They will figure it out" is a phrase I hear often used about male founders, and I've never heard about a women led team.

We know that companies with a women only founding team have raised late stage capital that are half the round size of mixed gender founding teams and male only teams. To change that, we need more women writing the cheques, more women sitting at the table, leading decisions. That doesn't just mean having the title of Partner, that means having an active voice on ICs. If LPs were able to challenge funds on these points too, that would make a real difference too, although it is the responsibility of funds to challenge themselves on their pipeline. If your pipeline is not diverse, scrap it, and start again, diversity of founders are there if you search for it.



### More must be done to increase opportunities for underrepresented groups

68% of women and 61% of men that responding to this year's survey do not believe the European tech ecosystem has made progress over the last 12 months when it comes to providing opportunities to individuals from underrepresented demographics, backgrounds or experiences.

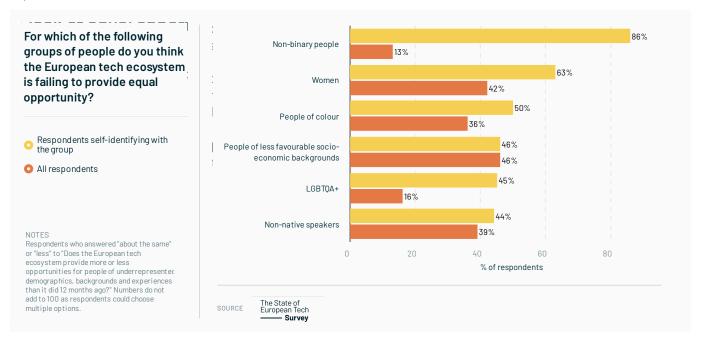


#### A lack of equal opportunity

When asked which groups of society are currently lacking access to equal opportunities, nonbinary respondents, women and people of colour feel most left out. But across the board, one in two respondents from underrepresented groups feel like that tech ecosystem is failing to provide equal opportunity to them.

The range of answers given here speaks to the importance of building a broader awareness and better understanding of the many forms of discrimination that exist within the European tech ecosystem. There seems to be a clear mismatch in perception between people from the marginalised groups and those without. For example, for people from poorer socio-economic background and non-native speakers, their perception of their own lack of opportunity matches that of people from outside their group. Yet for women, people of colour and non binary people (especially) there's clearly a disconnect.

It is of course important to note that these survey results speak to people's perception, rather than an objective measure of reality. Nonetheless, they provide an important indication of people's lived experiences.









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I don't think solving long lasting equality in entrepreneurship is simple, but diversity is no good if the environment is such that talented people from a minority background cannot be retained.

Hiring associates is important, but what about challenging the accepted criteria for hiring partners? Assembling a truly diverse senior team gives more access to deals and it's widely proven that diverse teams are stronger and more robust in the long term. For me, it can look like investors asking my male CTO about revenue and unit economics through kind words from well meaning investors telling me that I've "done well", even though I know my male peers are not spoken to like this. It affects confidence. They might be small comments that we laugh off, but the truth is that these everyday examples chip away at that sense of self belief that is critical to being a successful founder. I'm looking forward to a day when I'm not asked this question anymore or when I mention these examples - and my kids look at me in amazement because it's such a relic of the past!

Romanie Thomas, Juggle Jobs | Founder

















**CHAPTER** 



# Better ideas, better companies

Europe's unicorn herd is growing at record pace - with great ideas leading to high impact businesses

# European tech is on a new, mission-driven path

From frontier tech to crypto and enterprise SaaS, European founders can build successful companies from Europe. A new generation of entrepreneurs is putting social and climate impact at the core of their mission. Of the total amount of funding raised by companies in our sample, only 1.3% went to teams with solely ethnic minority founders - the ecosystem is aware of the need to improve diversity and inclusion, but has much left to do to make that happen.

#### **ARTICLES**

#### 04.1 Fuelling better, more diverse ideas

Unlocking access for more diverse founders is still a key challenge for European tech as discrimination remains a key consideration across Europe. While the amount of funding received by female and mixed teams has increased, it has decreased as a proportion of total funding.

#### 04.2 From ideas to gamechangers

The era of the European moonshot has arrived with deep tech companies maturing and attracting record levels of funding. From frontier tech, fintech, to open source and crypto, European tech is making great strides across the board. But there is still more to do to ensure science in university labs has a path to commercialisation - with academics citing a lack of aligned incentives.

#### 04.3 Collective mission

European entrepreneurs want to move the needle on social and environmental challenges. But, while more is being invested in purpose-driven companies - in fact, Europe has the largest share of total capital invested in early-stage purpose-driven tech companies on a global basis- the share of total funding they receive has decreased relative to other areas. And despite a fantastic year for climate, some SDGs have not had the same level of entrepreneurial activity and company formation yet.







# 04.1 Fuelling better, more diverse ideas





# Slow progress on diversity and inclusion is capping the addressable market for ideas and talent

Fostering diversity can help to align profit and purpose. But discrimination remains across Europe. While the amount of funding received by female and mixed teams has increased, it has decreased as a proportion of total funding.

#### **INSIGHTS**

# Ethnic minority teams face heightened barriers to funding

Of the total amount of funding raised by companies in our sample, only 1.3% went to ethnic minority founding teams.

# Progress in diversity and inclusion is lacking

38% of women and 56% of ethinic minority respondents have experienced discrimination in the past 12 months while working in European tech.

Capital flows to all-women founding teams are not improving on a relative basis

In 2021, 1.1% of capital raised overall went to all-women founding teams, and 8.8% to mixed-gender founding teams. Looking at the total number of deals, the share captured by allmen founding teams also remains largely unchanged over the past five years.







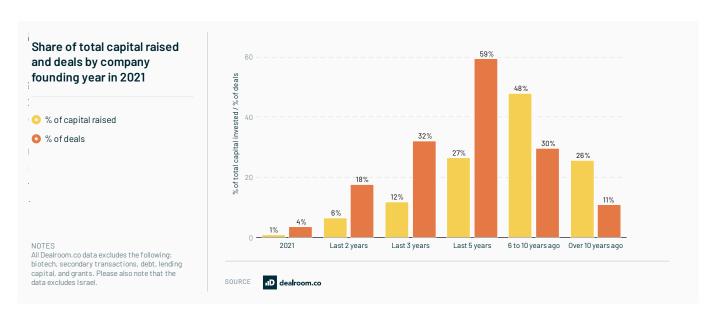


#### Newly-founded companies get less than 1% of capital invested

It's easy to be drawn into the narrative that it's easy to start a company and raise millions of dollars (seemingly overnight) on just an idea and little more. Although this can happen, it is very much the exception rather than the rule. The reality is that raising capital requires patience, resilience, determination and, arguably, a lot of luck.

2021 has been a record year for venture capital investment in Europe, yet securing funding remains one of the greatest challenges for founders. That's particularly true for those at the earliest stages of their journey, or those further along, but still searching for product-market fit or for an investor that believes in them.

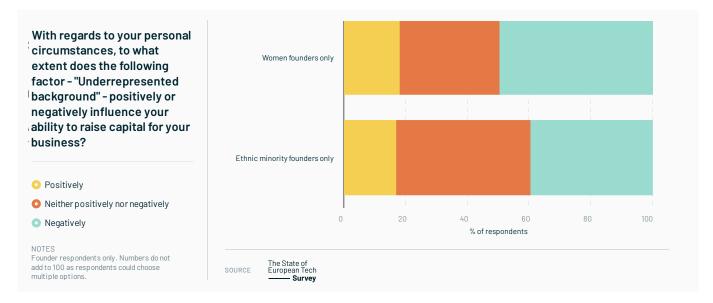
To put things in some context, companies founded in 2021 only captured 0.9% of total capital invested in the first nine months of the year. More than three-quarters of all capital invested was raised by companies that are at least 6 years old. The reporting lag may push that 0.9% higher, but it has typically ranged between 1-3% in recent years.



#### Founders from underrepresented groups see greater barriers to raising capital

Not only is it not easy to raise capital; the challenge is not equal for all. For example, women founders, and founders from ethnic minority backgrounds face higher barriers to securing access to capital.

When asked whether their background has had an impact on their ability to raise capital, they are much more likely to feel prejudiced against.





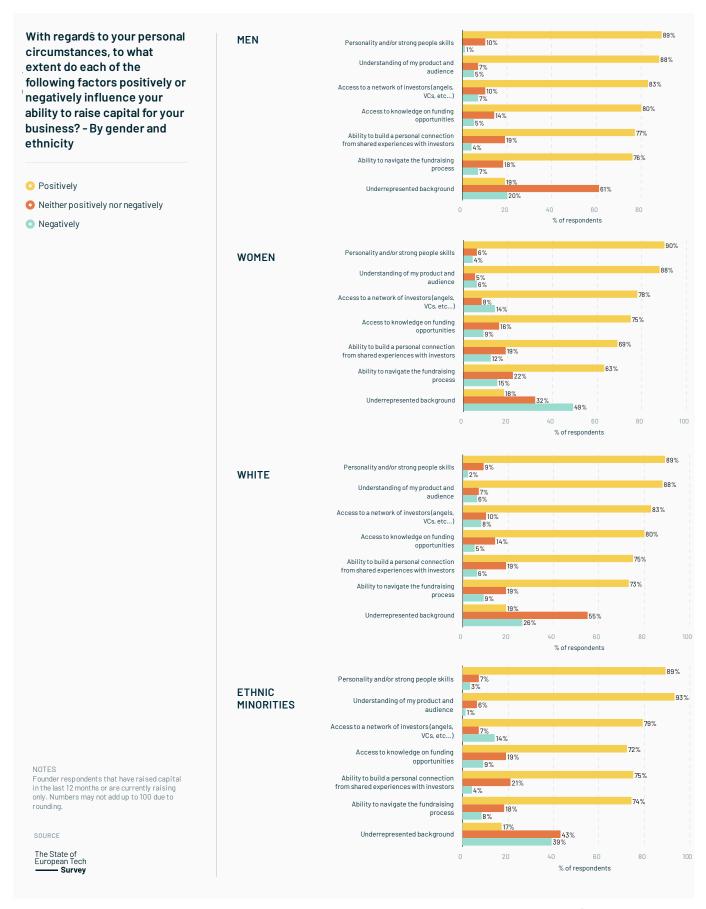






#### Unlocking access

Across respondents from diverse groups, the main strengths are somewhat fairly distributed across the board but there are some notable differences. Lesser access to a network of investors places women and ethnic minority founders at a slight disadvantage compared to men and white founders. The former also feel more penalised by their background.









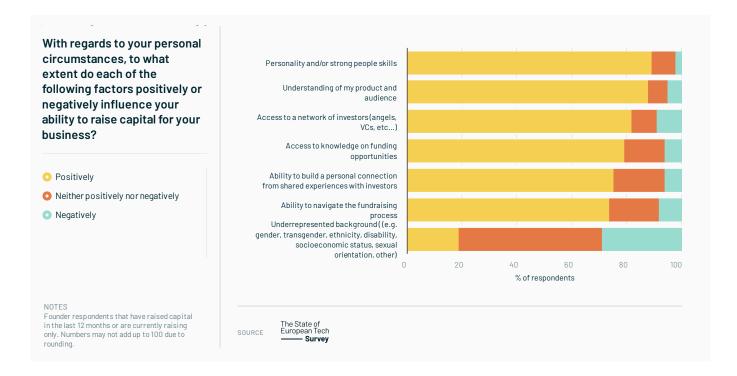


#### Network, access and 'relatability' still govern in fundraising

We asked founders who raised (or are still raising) external capital over the past 12 months about the personal factors that they perceive may have had a positive or negative influence on their ability to raise capital.

The factors respondents feel most positively impact their chances of success are personality and/or strong people skills, understanding of their product and audience, and access to a network and knowledge on the fundraising process. The factors that are most likely to be perceived as having negative influence are coming from an underrepresented background and, for women and ethnic minority respondents, lack of access to a network of investors.

When broken down by gender, women are more than 3x as likely as men to cite the inability to build a personal connection from shared experiences with investors as a negative influence on their fundraising experience. Women are also around twice as likely to have faced issues in accessing the right knowledge about funding opportunities, and navigating the fundraising process as a whole.





When assessing commitment, I never listen to the rhetoric, rather I measure based on the actions and in VC, action translates to pounds and pence invested.

Over the last year, three more Black female founders have raised at least £1M of VC funding (R Grid, Beautonomy, Afrocenchix). They join that exclusive club with The Stack founder Sharmadean Reid. We see Passion Capital, Ada Ventures, Local Globe and very few others committed to this table. There has been a proliferation of training schemes established to incubate companies with Black and brown founders, but very little capital has flowed to the investors and funds best positioned to find and support these special entrepreneurs.

We need more Black and other underrepresented GPs with the power and purses to make investment decisions. People of colour and other underrepresented folks unable to allocate funds within generalist funds is not the answer. Generalist funds with no particular connections in underrepresented networks or experience of successfully supporting underrepresented entrepreneurs is not the answer.

Eric Collins, Impact X | CEO & General Partner





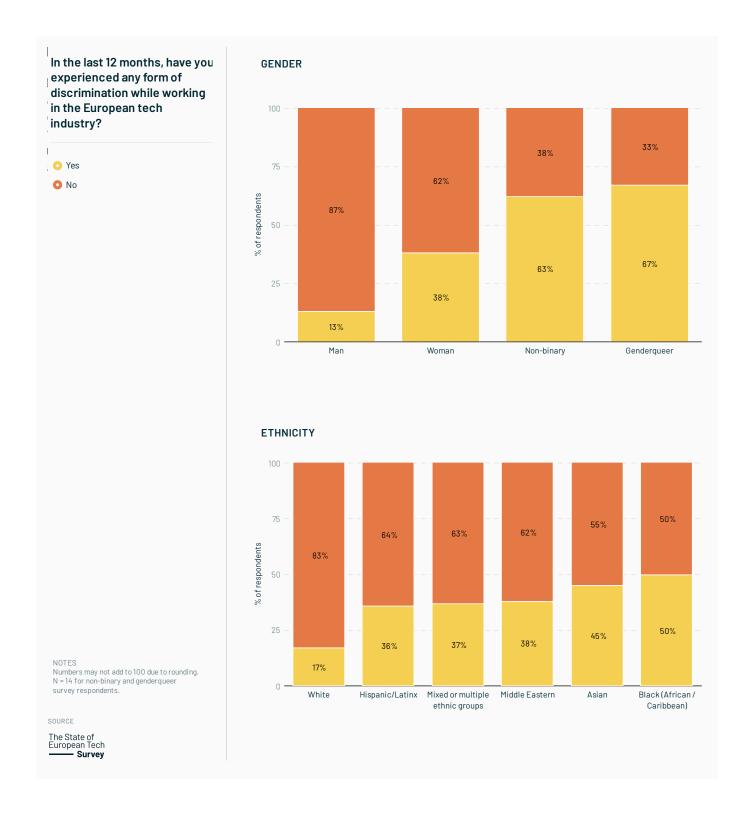




#### Discrimination is still too commonplace in the European tech ecosystem

38% of women working in European tech report having experienced some form of discrimination in the past 12 months, compared to just 13% of men.

The sample size for respondents that self-identify as non-binary or genderqueer is small, but it is important to share the perspective of those who spent the time taking the survey and provide feedback on the state of diversity in tech. 63% and 67% of those survey respondents respectively reported that they have experienced a form of discrimination in the past 12 months.









# STATE OF TECH 21

# Capital flows to all-women founding teams are not improving on a relative basis

As cohorts of established companies - which are dominated by all-white and all-male founding teams - continue to raise more capital, the gender imbalance in the flow of capital is compounding. As a consequence, there is no measurable progress in the overall share of capital invested and deal count accounted for by women or mixed-gender founding teams. In 2021, 1.1% of capital raised overall went to all-women founding teams, and 8.8% to mixed-gender founding teams. Looking at the total number of deals, the share captured by all-men founding teams also remains largely unchanged over the past five years.

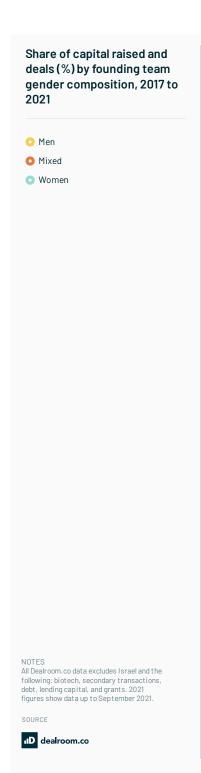
#### **CAPITAL RAISED**

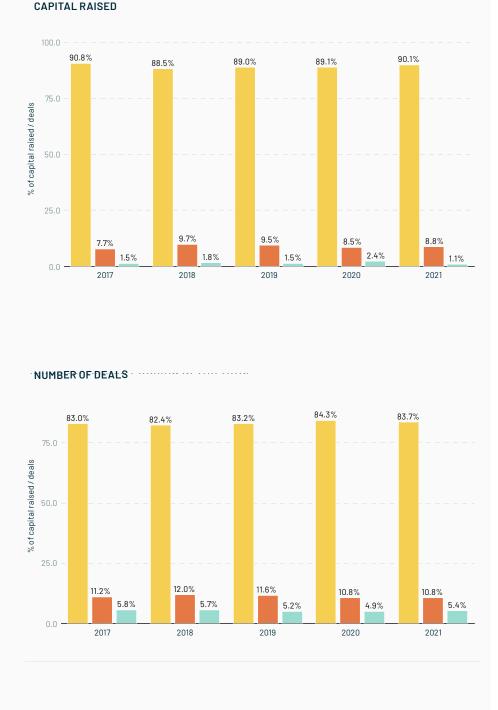
9.9%

of total capital raised by mixed and all-women founding teams

SOURCE

ı1D dealroom.co









141









atomico in partnership with 51.115H

More men called John have raised investment than Black women in the UK. That isn't good enough.

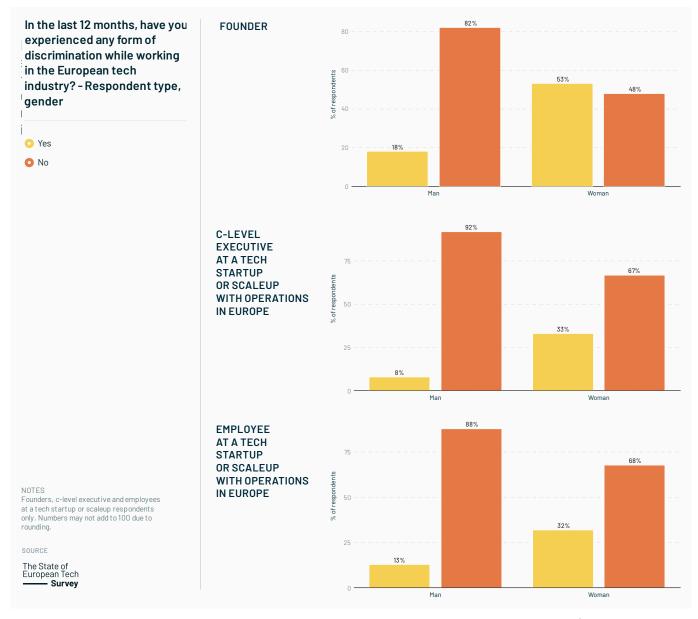
I see a lot of talk, but not a lot of action. Funds like Impact X & Backed VC have invested in us and a few others on the list, and of course the Google Black Founders Fund has sent huge waves through the space by showing what happens when you #FundBlackFounders... but there's still a way to go.

Think about the talent we're missing and the breakthroughs that never happened as talented founders were blocked from raising investment because of the content of melanin their skin cells produce. The next generation will look back at the inequalities in funding in the way we look back at segregation and other such folly. Change is happening, but it needs to speed up. There are big problems to solve and we need the best talent from a full range of varied backgrounds.

Rachael Corson, Afrocenchix | Co-Founding Managing Director

#### Women founders are most likely to have faced discrimination

The issue of discrimination is most prevalent for the founder community. 53% of women founders that responded to our survey indicated that they had faced some form of discrimination in the past 12 months while working in the European tech industry. The experience of discrimination is not as commonly cited by women that are C-level executives at European tech startups and scale-ups, but in any case, a significant proportion (33%) have encountered it, significantly more than the 8% of men in similar positions.



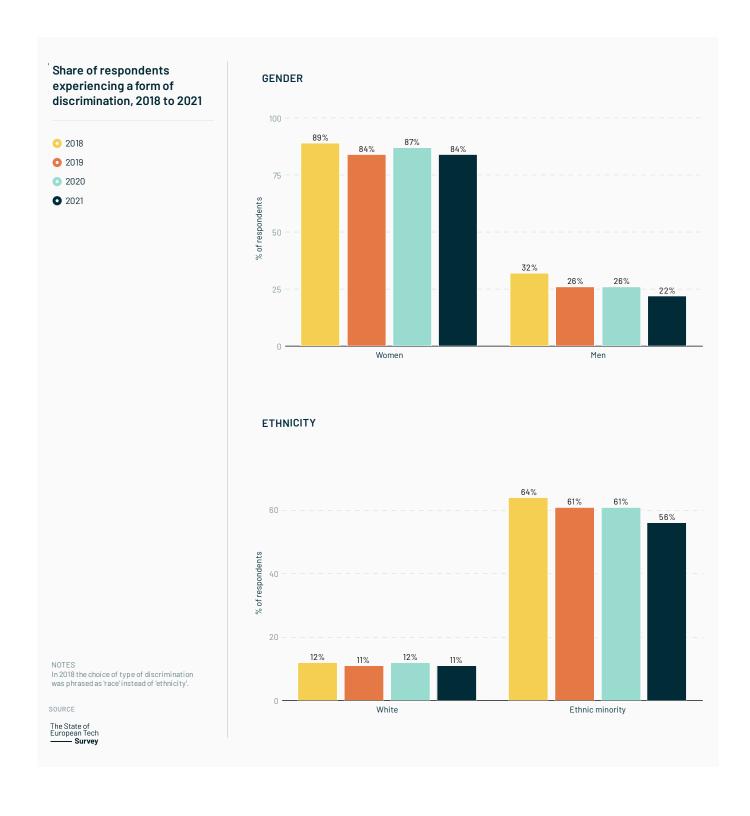


orrick



### But there are seeds of hope in some of the survey data on discrimination

Gender, age, and ethnicity are the most cited types of discrimination among respondents who share having experienced discrimination in the past 12 months. Over the past four years, the share of men experiencing gender discrimination has fallen from 32% to 22%, while the share of women citing gender discrimination has fallen much less, from 89% to 84% . The share of ethnic minority individuals citing ethnic discrimination has fallen from 64% to 56%.





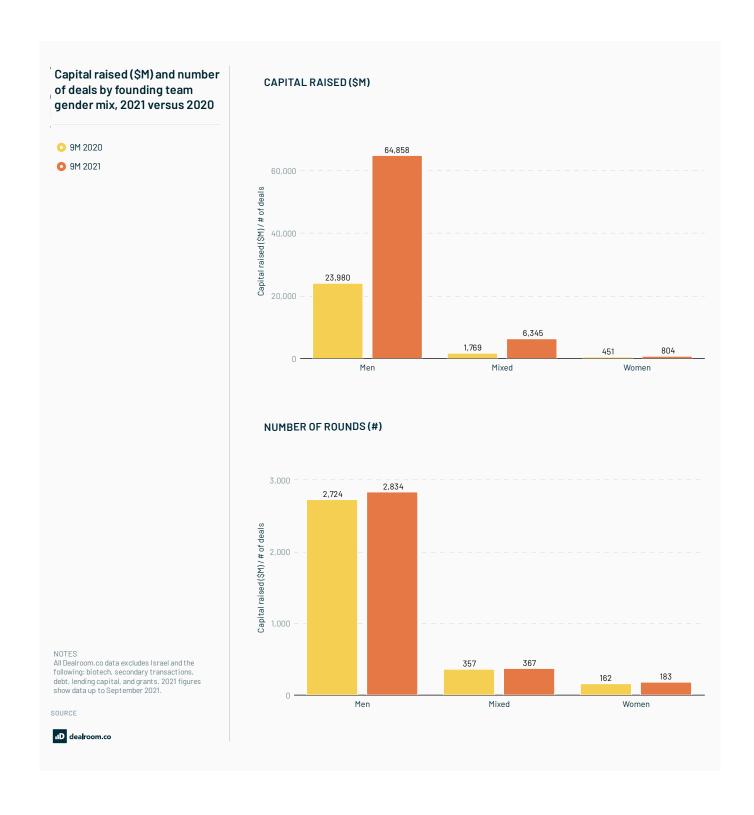






### Are we making progress?

While the share of both total funding and rounds raised by all-women founding teams declined in 2021, absolute numbers increased. The dollar amount of funding going to all-women founding teams increased by nearly 80%, while the funding going to mixed-gender founding teams grew by more than 250%. 2021 might be the first year we see \$1B of capital raised by all-women founding teams based on data up to September. It is a small but meaningful milestone to celebrate.

















We have to continue our efforts to fully exploit Europe's diversity in terms of gender and cultural and geographical backgrounds.

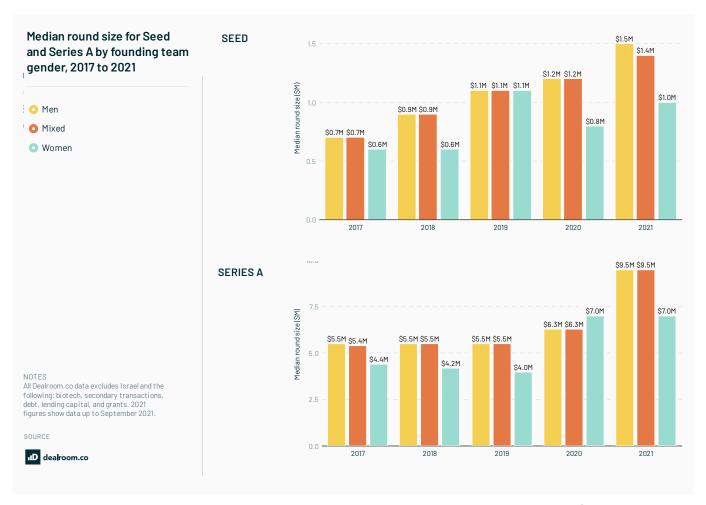
No innovative European startup is the same as another. Each has their own specific needs and opportunities. This means that we should always focus on being as fast as possible and flexible to tailor our support to the specific circumstances of these companies. We have made great steps in putting this in place. For example, startups can apply to the EIC Accelerator at any time with a short questionnaire, slide deck and video pitch, and get a response in less than 4 weeks.

We've also put in place a unique funding offer combining non-dilutive grants with substantial equity investments, as well as a growing set of Business Acceleration services. But there is still untapped potential across Europe. We have to continue our efforts to fully exploit Europe's diversity in terms of gender and cultural and geographical backgrounds.

Jean-David Malo, European Innovation Council and Small and Medium-sized Enterprises Executive Agency (EISMEA) | Director

# Are women founders being set for success?

All-male and mixed-gender founding teams raise larger rounds at both Seed and Series A than companies founded by women only. This trend raises questions about how women in tech are currently perceived by investors, and their future success. By raising less in the early stages, do all-women teams start their journey at a disadvantage? And if so, what effect might that have on future generations of women, and their aspirations and ability to succeed in tech?











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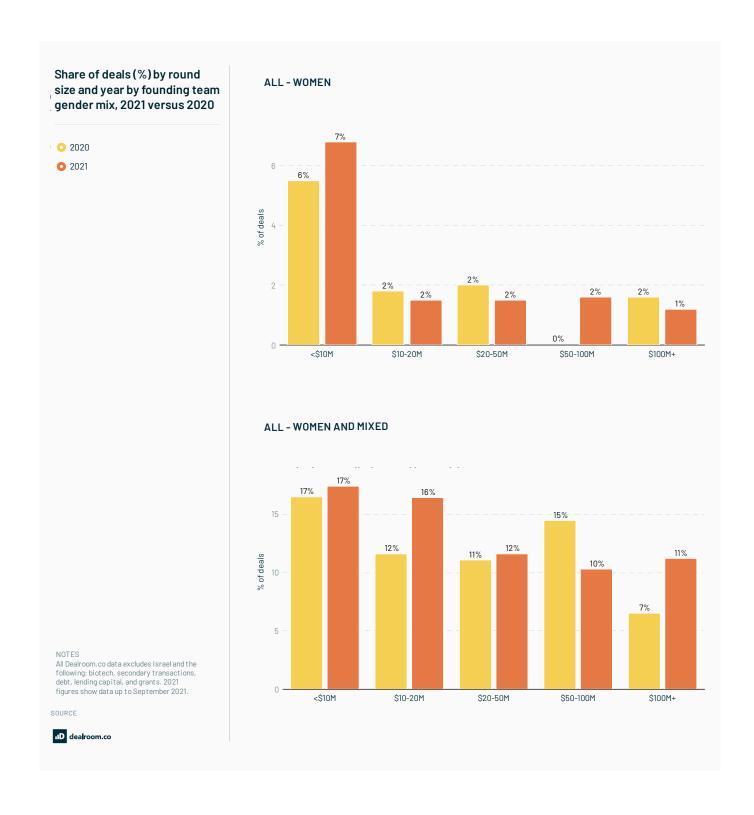


# The share of all-women teams has increased in smaller funding rounds

While the overall picture of gender diversity is disappointing, it's a small encouragement to see incremental progress made in early rounds.

Looking at funding rounds of less than \$10M, the share of deals captured by allwomen founding teams has increased by one percentage point since 2020.

In contrast to the previous year, 2021 also saw at least one all-women team represented in each deal size bracket of funding rounds. Not a leap of progress by any means, but a small step in the right direction.







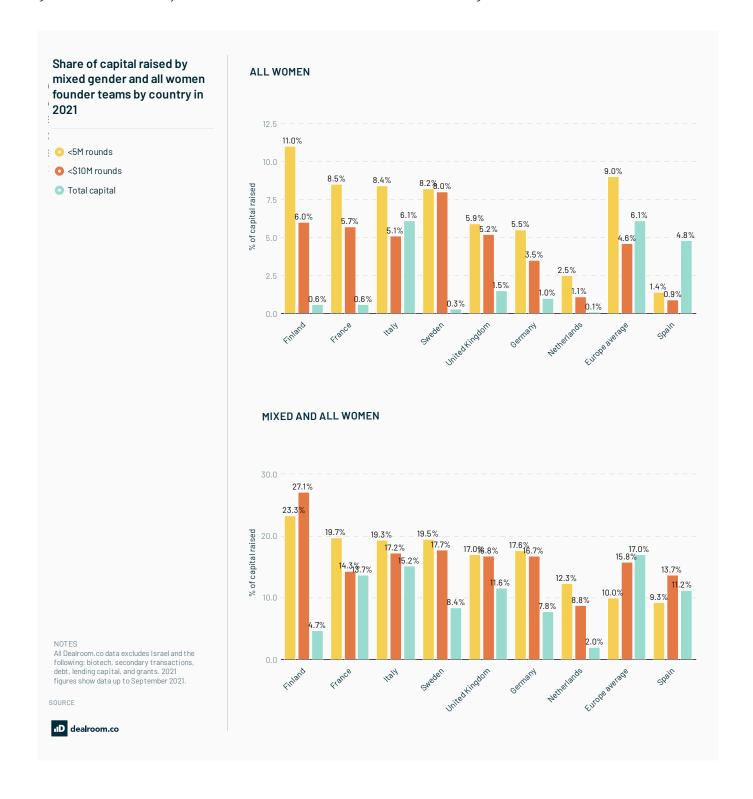




# Women founders are most represented in smaller rounds

We looked at eight European countries and the share of funding raised in each country captured by all-women or mixed-gender teams. Gender diversity is highest in the smallest funding rounds, and quickly tails off as rounds get larger.

Given shifting attitudes on gender across generations, it is not surprising to see younger cohorts making more progress on diversity. That said, at the current pace, it would still take far too long for these incremental improvements to lead to a truly gender diverse tech ecosystem. Concerted efforts are needed at all levels of funding.









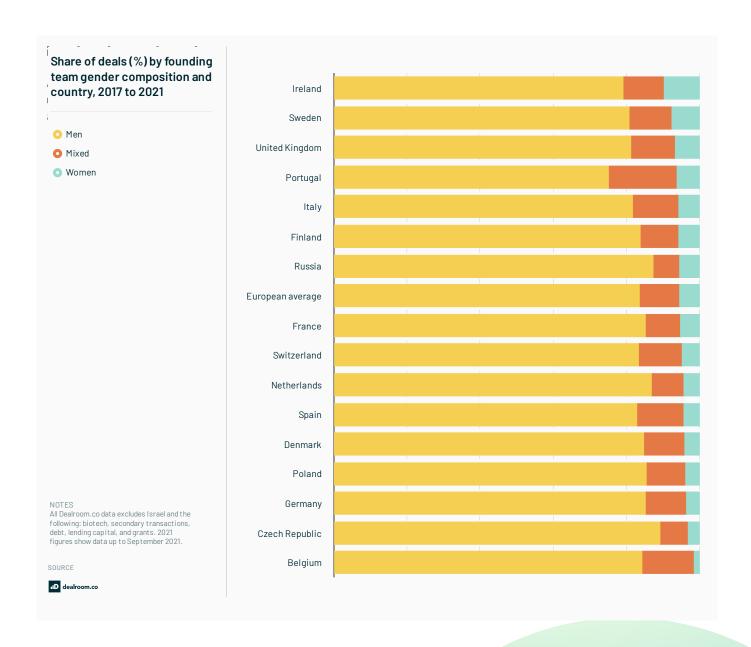






# Gender diversity in fundraising varies across the continent

While gender diversity in founding teams remains poor across Europe, there are some variations across countries. Portugal has the lowest rate of all-men teams receiving funding at 75% while Ireland has the highest rate of all-women founding teams at 10%.













# Some signs of improvement in Denmark, Finland and Portugal

The share of diverse teams has notably improved in a handful of countries, such as Denmark, Finland and Portugal. In others, the gender mix of founding teams receiving venture funding has remained roughly unchanged in time, including in Europe's largest countries, such as the UK, France and Germany.















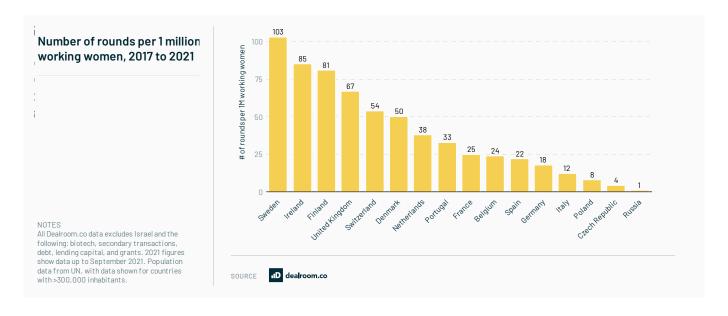






# Sweden, Ireland and Finland lead in funding women founders

Leading countries by overall capital invested in the country, such as Germany and France, rank well below some of their counterparts when it comes to the density of mixed-gender and all-women founded startups receiving funding relative to the general working population of women. While results vary across Europe, Sweden, Finland and Ireland have the highest relative density in the region.



# Methodology

We believe data is a crucial building block of progress in any area, as it allows us to better understand the current trajectory, and course-correct based on that. Yet, in the past years of writing this report, we've struggled to find reliable data on ethnic diversity in tech at a cross-continental European level. Last year, Extend Ventures, a not-for-profit organisation led by Erika Brodnock and Tom Adeyoola compiled the first ever report on Diversity Beyond Gender for the UK market.

This year, in an effort to improve on this reporting gap, we partnered with Extend Ventures and Dealroom with the goal to expand this analysis at a regional level to help diverse entrepreneurs turn their ideas and visions into successful companies.

As part of this wider analysis, we used a sample of 4,684 European tech companies that raised \$2M or more since the start of 2020, to give a snapshot view of the types of companies and talent - whether young or established - that are currently being funded in European tech. As such, funding is grouped by company stage (Seed, early and late stage) as defined by Dealroom.

For about 3,000 of these companies, Extend Ventures were able to map out the ethnic backgrounds of their founding teams and leadership "using a machine learning algorithm [they] are training to detect the perceived ethnicity of founders". While there are many limitations to this methodology, and we do not expect it to be anywhere near 100% accurate, we and the team at Extend Ventures are confident that it gives a directionally accurate picture.







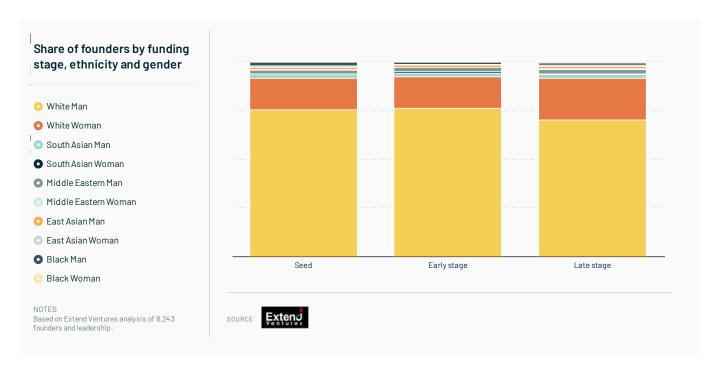


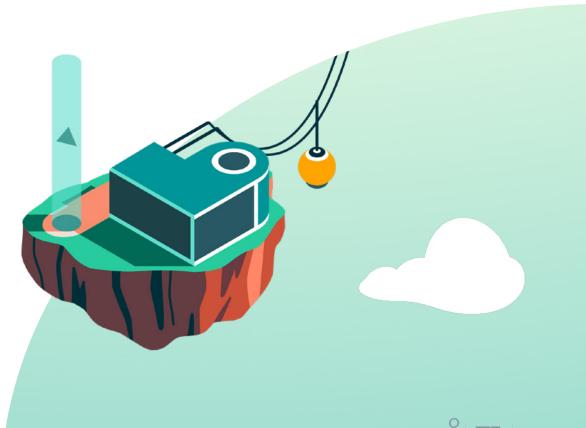


# **Diversity makeup**

The makeup of founders and leadership in the dataset is fairly homogenous across all stages with 92% of white founders and 8% belonging to ethnic minorities.

Across ethnic minorities, Middle Eastern and South Asian men were most represented across companies of  $different \, stages \, with \, 2\% \, of \, all \, founders. \, The \, gender \, divide \, is \, equally \, visible \, across \, all \, minority \, groups \, too.$ 













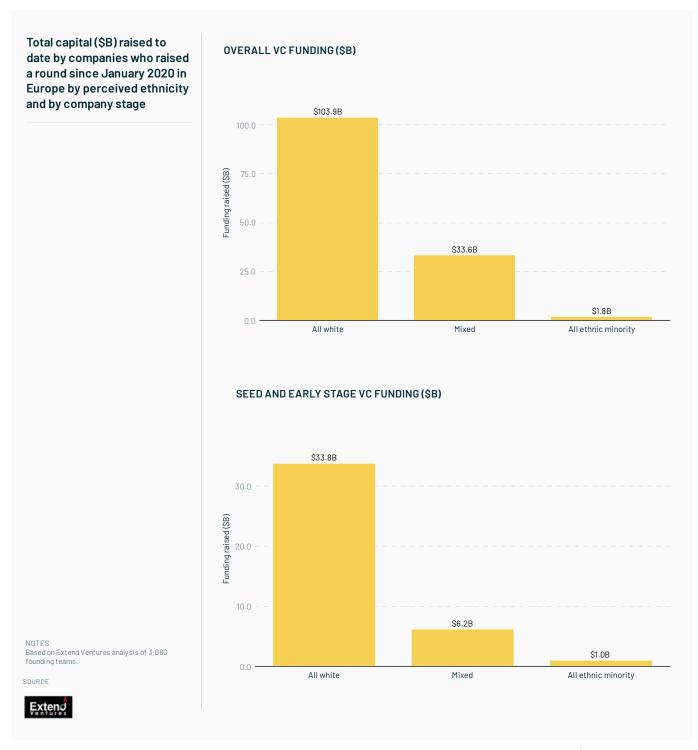
# 34¢ for every \$1

The companies and founding teams in the final sample we analysed, as outlined above, have raised a total of \$139B over the course of their journey to date, and the overwhelming majority of that went to white founders.

Of that total funding, \$104B was captured by all-white founding teams, \$34B was raised by teams with founders of multiple ethnicities, and only \$1.8B was raised by teams made up of solely ethnic minority founders.

As we saw when looking at gender diversity, it also looks like the lack of ethnic diversity compounds over time, as companies established longer ago are more likely to have all-white founding teams, and capture a bigger share of total funding through larger rounds.

Companies still in their early stages of funding may therefore give a better indication of the direction of travel, as this is where progress registers first. In fact, 55% of all funding raised for ethnic minority founding teams was captured by companies at the beginning of their journey. In total teams of all ethnic minority founders have raised a total \$1B for companies still in their early stages. On the other hand, the share of early stage funding for mixed teams is only 18%.















Black founders are fundamentally over mentored and under funded. Venture capital just hasn't made its way to them yet.

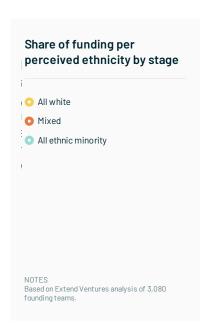
88% of Black founders in the UK self-fund at least part of their venture. There's always been entrepreneurialism in the Black community - there is no pipeline issue, actually an allocation issue. The lens is configured to white predominantly male founders, as a result the capable underrepresented founders are not being identified or catered for.

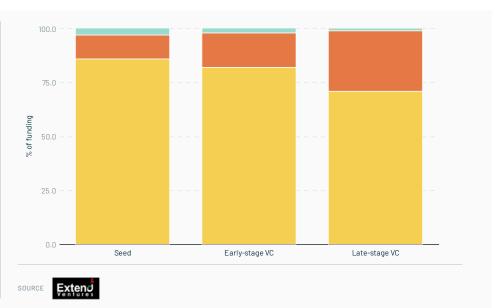
The dial has not moved in a significant way. A big issue is many of the institutions are attempting to solve the disparity without the appropriate approach. It is still very top heavy. A big part of the ecosystem still remains unstimulated due to such organisations remits being post seed. Utilising the existing tentacles and supporting existing communities like Black Valley, Black Girl Fest, Black Tech Fest, Code in Black Females and YSYS to support and build a robust ecosystem.

Karl Lokko, Black Seed | Co-founder and Chairman

# There is more diversity in late stage teams

The share of all ethnic minority teams decreases at each stage, with more mature companies capturing only 1% of all funding raised to date by the sample. It is notable that more funding rounds are typically raised by founding teams that are all-white, and so the more these large rounds are raised, the greater the dilutive impact on the overall share of capital raised by more diverse teams. For mixed teams however, there seems to be a greater level of diversity at the later stage. It is unclear whether this reflects a conscious effort of hiring more diverse CEOs and/or leaders once the company grows or whether there has been a slowdown of progress in more recent cohorts of companies.









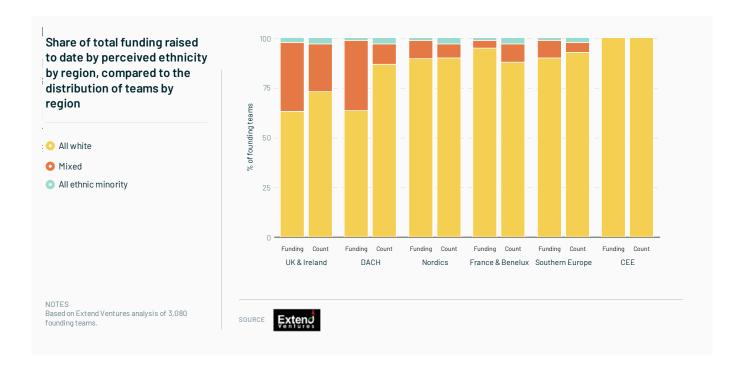


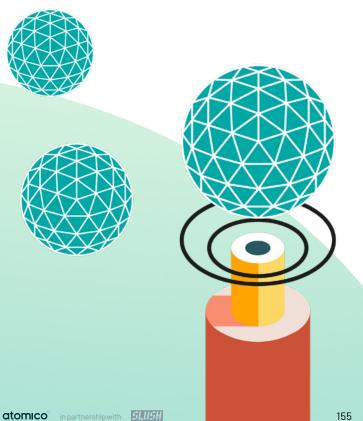


# Diversity varies meaningfully across regions

This is the first attempt at providing data on ethnic diversity at a European-wide level, and given sample size, we have provided a regional view. It shows significant differences between regions.

The UK & Ireland, along with DACH, see the largest share of total funding going to mixed and ethnic minority only founders, with 37% and 36% respectively. These are higher relative to the share of mixed teams in the region as well with 27% and 13% of founding teams either mixed or all ethnic minority.











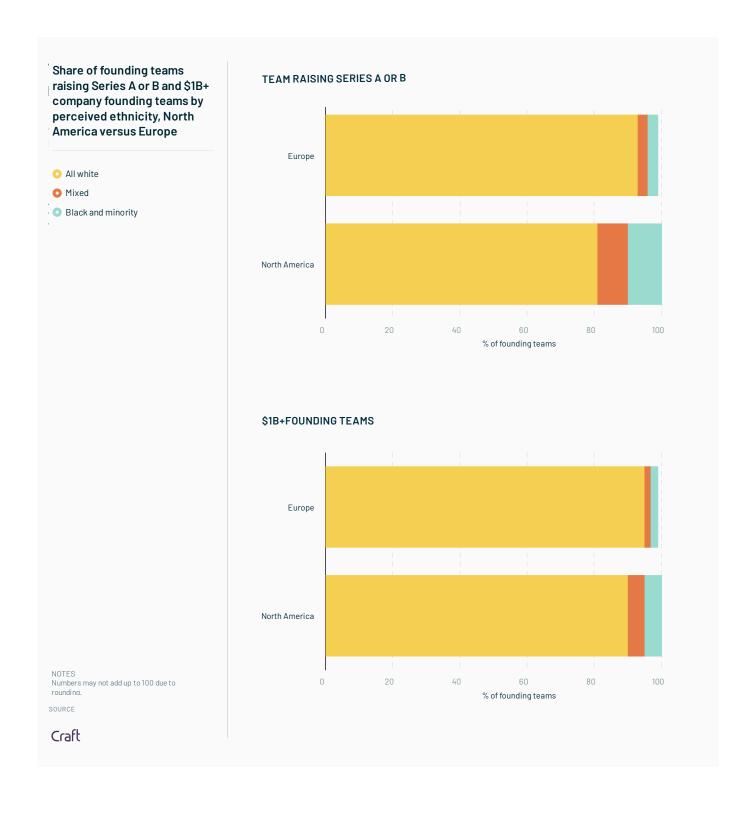


# **Europe in context**

How does Europe compare to other regions?

Although the following analysis is not like-for-like, Craft shared an analysis they performed on Series A and Series B companies across both North America and Europe. North America displays a higher share of diverse founding teams, with 19% of them having at least one black or ethnic minority founder.

Similarly to Europe, the team composition for unicorn companies is on average less diverse, with only 10% of teams having at least one black or ethnic minority founder though this is still twice as high as in Europe.







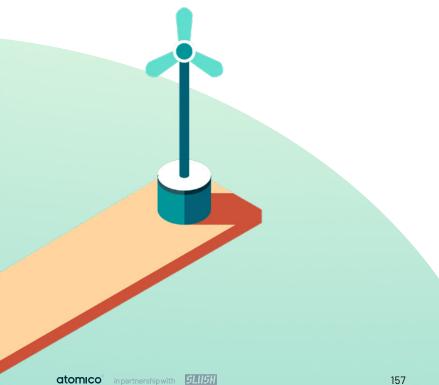




It is sobering that when Marshmallow closed its \$85M round, that amount doubled the total VC investment that went to Black-led UK companies over the previous 15 years.

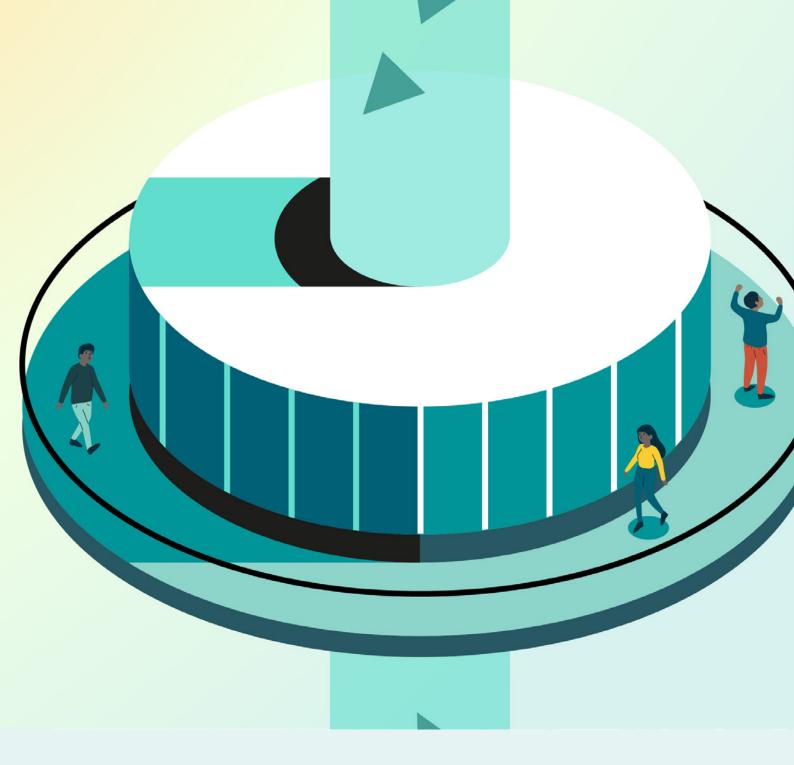
2021 has been extremely good for the digital and tech companies in the Impact X portfolio. We saw our first portfolio unicorn which is the UK's second Black unicorn - Marshmallow. World Remit aka Zepz was the first. Both companies announced their status in the 2nd half of 2021. That milestone amplified the June announcement that finally a third country has joined the US and China in minting over 100 tech unicorns, the UK. This is another marker of progress in the European tech ecosystem. Sobering, however, is that when Marshmallow closed its \$85m round at a \$1.25B valuation, that amount doubled the total venture capital investment that had occurred in Black led UK companies over the previous 15 years as reported by Extend Ventures in Diversity Beyond Gender.

Eric Collins, Impact X | CEO & General Partner









# 04.2 From ideas to gamechangers





# Europe has a solid deep tech foundation - and turning ideas into worldchanging companies

European fintech is soaring, and the region is also doubling down on specialised and frontier tech including open source, crypto and deeptech. But there is still more to do to ensure science in university labs has a path to commercialisation - academics cite a lack of aligned incentives.

#### **INSIGHTS**

# Web3 and crypto continue to grow

The 10 largest rounds raised by European crypto/Web3 companies in the first nine months of 2021 collected a total \$3.2B in new capital. This includes Europe's largest ever crypto round (and Europe's largest ever Series B) raised by France's Sorare in September 2021.

# A record year for Deep Tech funding

European deep tech companies have already raised close to \$20 billion in the first nine months of 2021. This is more than twice the level invested in during the entirety of 2020. Rounds of \$5M or less account for around 50% of the activity.

# **Academics want to commercialise** their ideas

University labs play a crucial part in the deep tech pipeline. 25% of academics say the most important step is to increase incentives for commercialisation versus publishing. 18% say supporting commercialisation of intellectual property is most important.









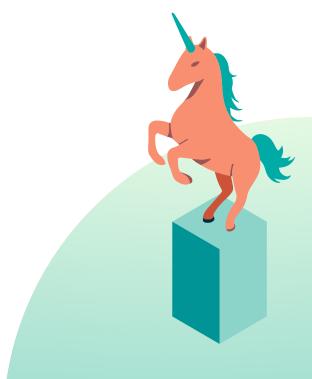
# The ideas of today are the game changers of tomorrow

So how can we qualify the trends and get a possible glimpse of the future? As ideas evolve into companies, it is not uncommon for the business model, go-to-market strategy or even sector to evolve as well - leading to an ever-evolving taxonomy.

In this year's report, we are attempting to gain insights across different themes and sectors by analysing both investor sentiment and capital flow.

In our survey, we presented investors with a list of themes and asked them to chose the ones they were most excited about. The table lists those different themes as well as the definition of the companies that belong to each as described in the survey.

erview of key themes		Definition	
	Frontier / deep tech	Pushing the boundaries of science and engineering	
	Planet Positive	Working towards transitioning to sustainable energy, water, as well as solutions for recycling and handling waste)	
	Future Finance	Powering financial and insurance systems (excluding crypto and decentralised finance)	
	Decentralised finance and crypto	Re-imagining the services and underlying infrastructuring powering future finance (carved out of future finance as its own theme)	
	Digital Work	Empowering workers and enhance productivity	
	Empowered Individuals	Championing new forms of online education, powering the creator economy or personal productivity	
	Improving Health	Improving health care and health systems	
	Future of Food	Reinventing how food and drink is produced, distributed and consumed	
	Internet Infrastructure	Building the pipes and safety net that form the foundational infrastructure of every modern business	
	Industrial Automation	Making industry, manufacturing, production and construction more efficient	
	Future of consumption	Making commerce more engaging, sustainable or ethical	
	Mobility	Moving people and goods	
	Digital life and play	Enabling individuals and social communities to lead happier, more connected and fulfilled lives	
	Real estate	Pushing the boundaries of the built environment	
S			
on the themes and definitions from the	The State of		











The illustration below provides some examples of how these themes were then mapped against different partners' taxonomy to gain insights into both private and public markets.

#### TAXONOMY CHALLENGE ACCEPTED

SELECT THEMES		DEFINITION	PRIVATE MARKETS TAXONOMY	PUBLIC MARKETS TAXONOMY
FRONTIER / DEEP TECH		Pushing the boundaries of science and engineering	deep tech	Aerospace and Defense Biotechnology Consumer Electronics Electronic Components Pharmaceuticals Electronic Equipment and Instruments Household Appliances Life Sciences Tools and Services Semiconductor Equipment Semiconductors Technology Hardware Storage and Peripherals  S&P Global
PLANET POSITIVE		Working towards transitioning to sustainable energy, water, as well as solutions for recycling and handling waste)	purpose based on alignment with SDGs	Building Products Coal and Consumable Fuels Commodity Chemicals Construction and Engineering Construction Machinery and Heavy Trucks Construction Materials Copper Diversified Chemicals Diversified Metals and Mining Electric Utilities Environmental and Facilities Services Forest Products Fertilizers and Agricultural Chemicals Gas Utilities Gold Homebuilding Industrial Gases Oil and Gas Drilling Integrated Oil and Gas Independent Power Producers and Energy Traders Metal and Glass Containers Multi-Utilities Oil and Gas Equipment and Services Oil and Gas Exploration and Production Paper Packaging Oil and Gas Refining and Marketing Oil and Gas Storage and Transportation Tires and Rubber Water Utilities Precious Metals and Minerals Renewable Electricity Silver Specialty Chemicals Steel Textiles
FUTURE FINANCE	€ (B) §	Power financial and insurance systems, excluding crypto and decentralised finance	fintech  dealroom.co	Asset Management and Custody Banks Consumer Finance Diversified Banks Diversified Capital Markets Diversified REITs Financial Exchanges and Data Industrial REITs Insurance Brokers Mortgage REITs Investment Banking and Brokerage Life and Health Insurance Multi-line Insurance Multi-Sector Holdings
DECENTRALISED FINANCE & CRYPTO	(¢)	Carved out of future finance for the purpose of the analysis but similarly re-imagining the services and underlying infras- tructuring powering future finance	(blockchain / cryptocurrency)  PitchBook	Office REITs Other Diversified Financial Services Property and Casualty Insurance Regional Banks, Reinsurance Residential REITs Retail REITs Specialized Finance Thrifts and Mortgage Finance  S&P Global

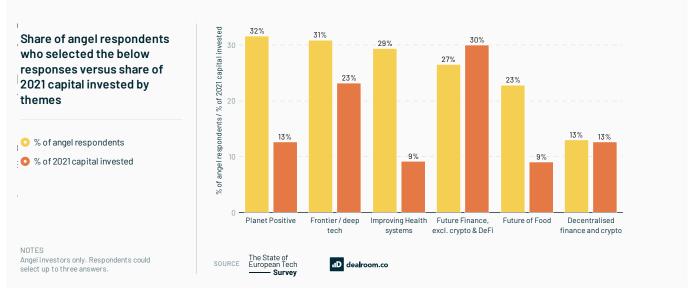
SOURCE S&P Global atomico ₁D dealroom.co

# Planet Positive, deep tech and health systems are top of mind for angel investors

The network of active angel investors continues to strengthen in Europe and as they often are the first money in, the themes they are most excited about are potentially an interesting leading indicator.

Across the board, survey respondents are most excited about Planet Positive companies (e.g. companies working towards transitioning to sustainable energy, water, as well as solutions for recycling and handling waste) and angels are no different.

Yet there is still a relatively smaller share of companies fitting this thesis that received funding in 2021. The biggest 'convergence' between capital flow and theme excitement is deep tech. It is the second most cited theme by angels, a segment defined by Dealroom that raised 23% of total funding in 2021. Future finance is a close second - the continued excitement from respondents also speaks to the edge Europe has in this space.





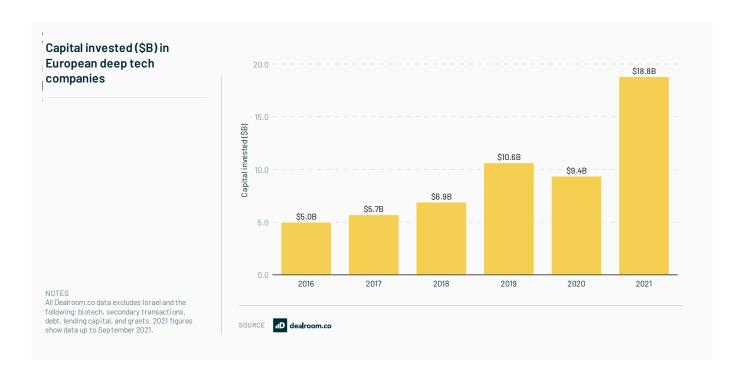






# 2021 is a record year for deep tech funding in Europe

2021 has proven to be a record year for European deep tech companies, which have already raised close to \$20 billion in funding in just the first nine months of the year. This is already more than twice the level of capital invested in deep tech companies during the entirety of 2020.





Deep tech startups are at the core of the new wave of innovation combining hardware and digital. The new platforms will be platforms for autonomous cars and flying taxis or for automation of work or home tasks.

While digital startups have made shopping or communication more convenient, Deep Tech startups solve our deep societal problems. Deep Tech startups will provide limitless, sustainable energy, as well as new materials for more efficient construction and an increase in food supplies while reducing the impact on the environment.

Deep Tech startups are based on three factors in which Europe is a world leader: a strong hardware component, non-easily replicable intellectual property coming from science, and talent with a high level of skills in engineering and science. Europe has one of the best education systems and is also attracting the best talent thanks to the startup visas that are spreading across most of Europe. We only have a bottleneck that needs to be tackled: financial instruments adapted to the high risk and long term investments needed for Deep Tech startups.

Mariya Gabriel, European Union | EU Commissioner for Innovation, Research, Culture, Education and Youth





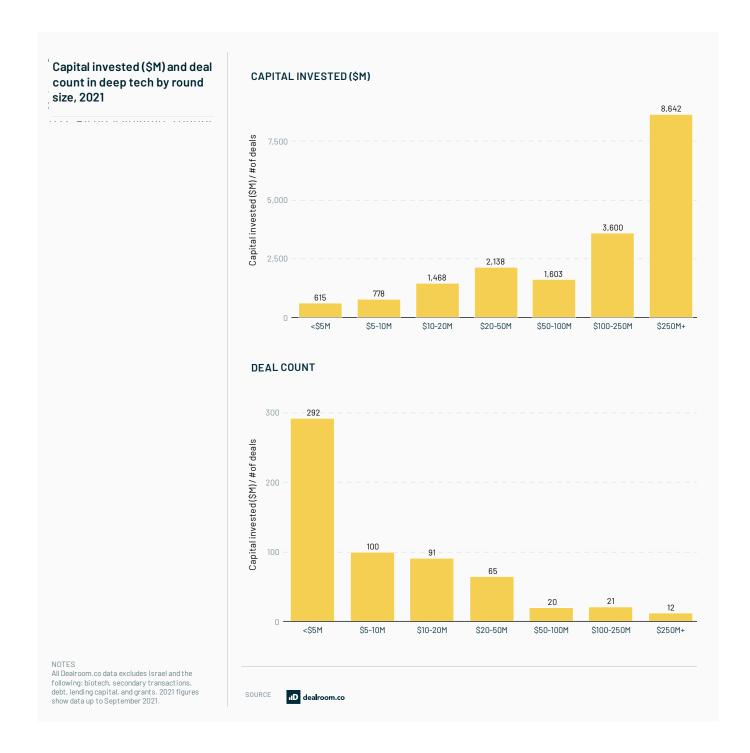


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# Close to 50% of deep tech deals are below \$5M

As is to be expected, the majority of capital invested into deep tech companies is concentrated in rounds of \$100M or more, which account for 65% of total investment levels in the first nine months of 2021. By deal volume, rounds of \$5M or less account for around 50% of the activity.







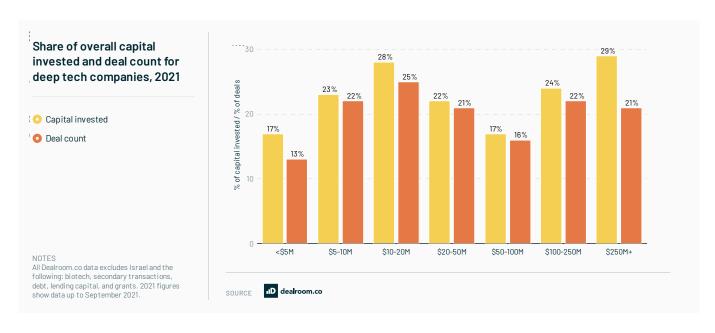




# Is there a funding gap for deep tech at Pre-Seed and Seed?

Deep tech companies accounted for around 21% of total funding rounds in Europe during the first nine months of 2021. Deep tech's relative share of total deal activity varies, however, depending round size. Notably, the share of early-stage rounds of \$5M or less raised by deep tech companies is materially lower than the overall average or larger round size buckets. Just 13% of these rounds were raised by deep tech companies, representing only 17% of capital invested.

This raises, though does not fully address, the question of whether there is a funding gap for deep tech companies at the Pre-Seed and Seed stages where rounds of this size are most common. There is also a notable difference for rounds of \$50-100M, which also fall below the overall average.



# What is next for deep tech?

As deep tech companies mature and attract capital from a broader range of investors, there tends to be a gradual shift in the industry perception of what does and does not represent the current 'frontier'.

In 2021, many companies that have long since been considered to be at the frontier of pushing technology boundaries in areas such electric vertical takeoff and landing aircraft (eVTOL), space tech and synthetic biology, went on to raise mega funding rounds in both the public and private markets. Will they continue to be perceived as the 'frontier' of deep tech? What will emerge as the next frontier?



	Company	HQ country	Deal size (\$M)	Round type	Round date
1	Northvolt	Sweden	\$2,750M	Growth	Jun-21
2	Graphcore	United Kingdom	\$682M	Growth	Oct-21
3	Arrival	United Kingdom	\$660M	SPAC IPO	Mar-21
4	CMR Surgical	United Kingdom	\$600M	Series D	Jun-21
5	OneWeb	United Kingdom	\$550M	Growth	Apr-21
6	Exscientia	United Kingdom	\$525M	Series D	Apr-21
7	OneWeb	United Kingdom	\$500M	Growth	Jun-21
8	Lilium	Germany	\$450M	SPAC IPO	Mar-21
9	OneWeb	United Kingdom	\$400M	Growth	Jan-21
10	OneWeb	United Kingdom	\$300M	Growth	Aug-21







# STATE OF TECH 21

# **European moonshots**

There is no limit to the ambition of Europe's boldest founders. From nuclear fusion to electric jet airliners to green steel and biomanufactured chemicals, European tech companies are taking on some of humanity's hardest problems. The era of the European moonshot has well and truly arrived.



#### 011h (Spain) Sustainable building development



**BioNTech** (Germany)

Biopharmaceutical company pioneering the development of individualised therapies for cancer and other diseases



#### Carbo Culture (Finland)

Carbon tech startup that removes carbon from the atmosphere



#### **Destinus** (Switzerland)

Transportation company building near-space vehicles and the infrastructure to power the transportation network



#### Dioxycle (France)

Capture and convert carbon dioxide into chemical products



### Einride (Sweden)

Electric and autonomous freight tech company



#### Exscientia (United Kingdom)

Pharmatech company that uses an end-to-end Al platform to design and discover new drugs



#### FabricNano (United Kingdom)

Cell-free manufacturing company that develops a DNA-based flow reactor to unlock the future of biochemistry



#### H2 Green Steel (Sweden)

Large-scale steel producer based on a fossil-free manufacturing process



#### Healx (United Kingdom)

Al-powered, patientinspired technology company, pioneering the next generation of drug discovery for rare diseases



#### **Heart Aerospace** (Sweden)

Electric regional airplanes



Helsing.ai (Germany)

Al in implementing security



#### **ICEYE** (Finland)

Empowers others to make better decisions in B2B and B2G industries



#### LabGenius (United Kingdom)

Biopharmaceutical company developing protein therapeutics using a machine learning-driven evolution engine



#### Lilium (Germany)

Electronically powered vertical takeoff aircraft company



#### Manna Drone Delivery (Ireland)

Provides drone delivery as a service stack to restaurant chains, dark kitchens, and online food delivery platforms



#### Mosa Meat (the Netherlands)

Food technology company producing slaughter-free hamburgers made from cow cells



#### Northvolt (Sweden)

Lithium-ion battery manufacturing producing eco-friendly batteries

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#### Renaissance Fusion (France)

High-temperature superconductor and stellarator company



#### Spinnova (Finland)

**Ecological innovation** that turns cellulose into textile fibre simply, without harmful chemicals



















There are many promising European SaaS startups in the making that have enormous potential to produce companies equal to the Americans.

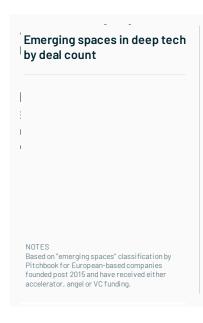
The Metaverse, NFTs and crypto/blockchain are obviously very hyped at the moment and will continue to be so, but I'm genuinely excited about deep tech and the next-generation SaaS companies utilising product-led growth and open source distribution models. As we've passed the 'Al hype' we've seen some major outcomes, especially in the US (Snowflake, Databricks, Confluent, etc.), as companies of all sizes have started to process and store increasing amounts of data. But there are many promising European SaaS startups in the making that have enormous potential to produce companies equal to the Americans. UiPath has been a great example of this, but there's plenty more to come.

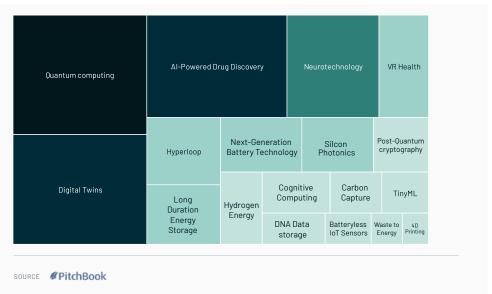
Kim Fai Kok, Framtid | Co-Founder

# Emerging clusters around carbon culture and hydrogen energy point to the next frontiers in deep tech

Clusters of deal activity provide insights into emerging spaces and into specific pain points that nextgeneration startups are looking to solve. Filtering specifically for European deep tech companies started post-2015 and that have received early-stage funding provides a window into some emerging themes that are starting to pick up steam.

The smaller clusters (i.e. those with the smaller deal count) can be telling of a more nascent trend (e.g. carbon capture, DNA data storage, hydrogen energy) versus larger clusters with greater activity, such as quantum computing and Al-powered drug discovery, which have already drawn wider attention from founders and investors.









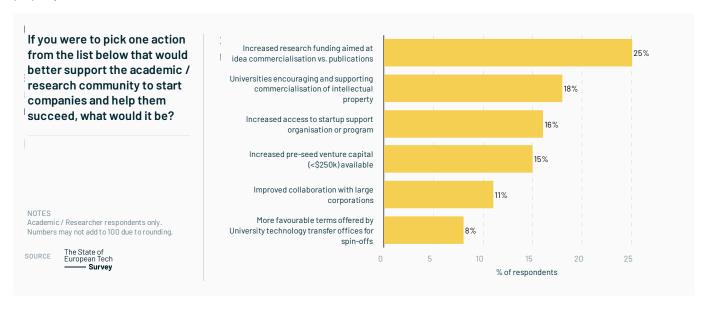




# Academics want more support for commercialising their ideas

One way to drive further investments into cutting-edge technologies is through spinouts from research institutions. As part of our survey, we asked academic and researcher respondents to pick one action that would help to better support their community to start companies and help them succeed.

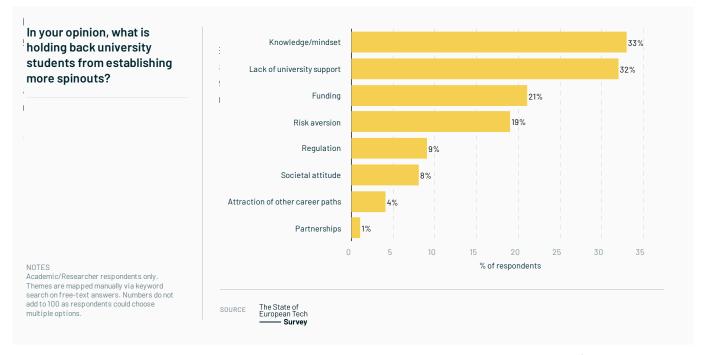
The most frequently cited action selected by respondents (25% of responses) was to increase the availability of research funding that is aimed specifically at idea commercialisation instead of publications. This was followed by greater encouragement and support from universities in the commercialisation of intellectual property.



# A lack of knowledge and barriers set up by universities holds back academic entrepreneurs

As a follow-up question, we asked survey respondents to share their written perspectives on the barriers that are holding back university students from establishing more spinouts. The highest concentration of responses (33%) focused on a lack of knowledge and/or entrepreneurial mindset.

This was followed closely by responses that focused on actual or perceived barriers imposed by universities that discourage spinout activity. These responses, for example, highlighted a misalignment or lack of incentives, challenges around intellectual property, as well as a perceived lack of available time to focus on the potential commercialisation of research efforts.













Founders who can translate cutting-edge scientific innovation to real world application are the future of the European technology ecosystem. We know Europe is sitting on a wealth of scientific talent with world class ingenuity. However, we urgently need to unshackle their entrepreneurial potential by setting spinouts up for success from day one.

As it stands, the European spinout process is more of a hindrance than a help to founders. This system needs to be overhauled, and replaced with a process that is standardised, transparent, and swift. Crucially, it must be designed with the needs of the entrepreneur in mind, rather than focusing on the risk aversion of their university. I started spinouts.fyi to shine a light on this issue, and would love to hear from you if you have a perspective on this vital topic.

Nathan Benaich, Air Street Capital | General Partner







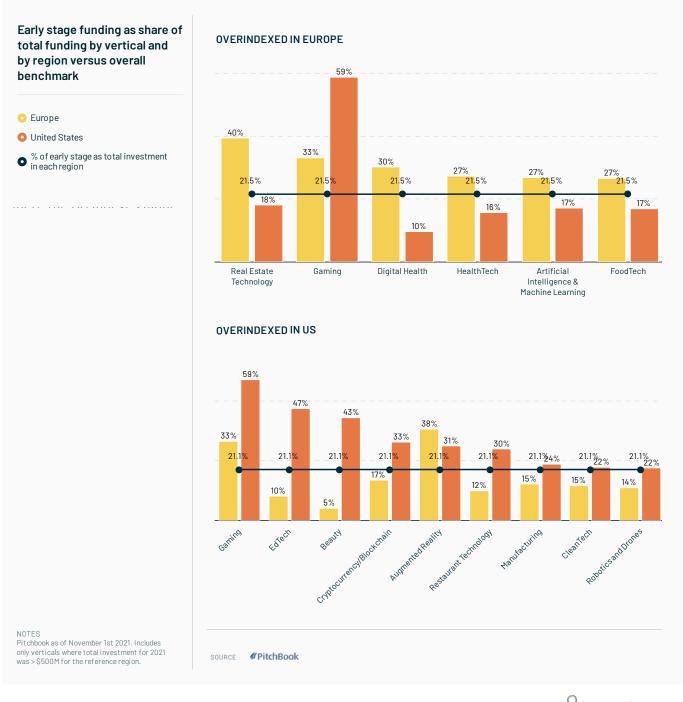


# The share of funding for early stage companies varies widely by vertical and by region

Seed and Series A companies provide a window into the deals that took place in the past three years and becomes a valuable leading indicator of the themes defining the next generation of potential scale-ups. In order to identify key themes, we compared the share of early-stage funding with the total funding at all stages for a range of themes categorised by Pitchbook.

We then produced the same analysis for both Europe and the United States to surface any key differences between the two regions in terms of the thematic concentration of early-stage funding activity, separating out themes where Europe indexes higher for early-stage funding and also those where the US indexes higher.

In Europe, early-stage investment accounted for 21.5% of total investment in 2021 to date. Any category where the share of early-stage investment is greater than this benchmark is skewed earlier. This includes gaming, digital health and foodtech. In the US, the categories that skew most heavily to early-stage investment include gaming, crypto/blockchain, beauty and AR, pointing towards growing activity in consumercentric models.









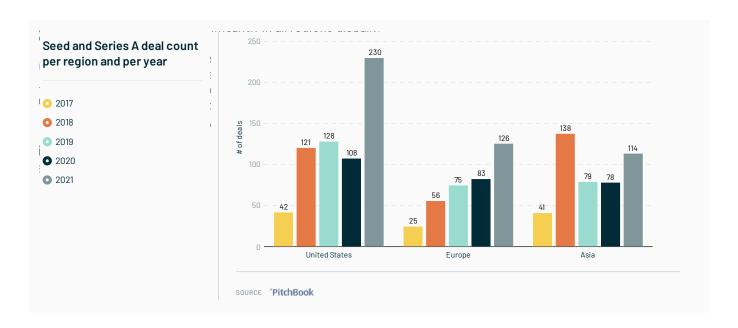




# Crypto and blockchain deal count is up 5x in Europe over the past 5 years

2021 has arguably been an important breakthrough year for wider awareness and adoption of Web3, fuelling increased investor interest. As such, it is perhaps not surprising to see that early-stage deal count across Seed and Series A stages has increased significantly in all regions globally.

Despite a significant increase in Seed and Series A rounds in Europe in 2021 and a consistent growth since 2017, an explosion of activity in the US in 2021 has seen a large gap open up between the two regions. There is a growing number of emerging funds specialising in crypto/Web3 in Europe, such as Semantic Ventures and Fabric Ventures, but the scale of drypowder available in the US is significantly larger, thanks to mega funds raised by the likes of a16z Crypto and Paradigm.





More and more value and data is moving onto better, more resilient, open rails that can be broadly referred to as Web3.

As 'offline to online' has mostly finished playing out as a thesis, we believe we're now approaching an inflection point for an 'online to on-chain' migration: more and more value and data is moving onto better, more resilient, open rails that can be broadly referred to as Web3.

The design space for the on-chain economy is potentially vast and still mostly unexplored. The gravitational pull on an increasingly global, distributed pool of developers and communities is hard to resist, with new coordination mechanisms and incentives applied to some of the most pivotal and interesting problems of the modern world. Wagmi.

Alex Shelkovnikov, Semantic VC | Co-Founder





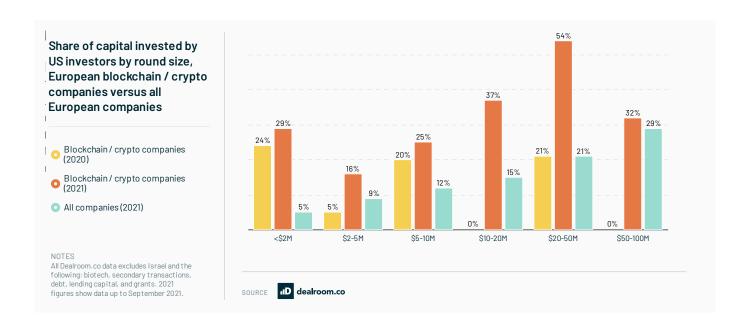




# US crypto investors are active across all stages in Europe

The quality of European talent and startups in the crypto and blockchain space continues to attract the interest of investors from outside the region. In fact, as a relative share of overall participation in funding rounds for European crypto and blockchain companies, US investors are significantly more active than in the broader European tech market as a whole.

The pace of their participation in crypto and blockchain increased materially in 2021 and at a faster rate than the rest of the market too. Looking at rounds of \$20-50M raised by European crypto and blockchain companies, for example, US investors accounted for more than 50% of the total capital invested.





2022 should be an exciting year for crypto with Web3 applications increasingly being embedded into mainstream platforms such as Discord or Twitter.

This will make crypto much more accessible to a mass audience and will drive innovation in the space. Central Eastern Europe, with the likes of Ramp Network or Tenderly coming from there, has an amazing density of Web3 talent and I am excited to back the next winners to emerge from the region.

Separately, the API-ification of infrastructure is a gamechanger. In our portfolio, we've seen this year the likes of Weavr, Primer, Appwrite and Liveblocks remove friction and complexity in building applications - both B2C and B2B.

On the gaming front, Play-To-Earn is profoundly changing the way games are designed and monetised. With Europe being home to some of the best gaming talent globally, I look forward to seeing teams from all across the continent following Sorare's lead to build the next wave of Play-To-Earn games.



# Crypto goes big in Europe. Wagmi.

Europe's leading crypto companies captured the attention of the global investor community to raise huge growth rounds in 2021. The top 10 largest rounds raised by European crypto/Web3 companies during the first nine months of 2021 collected an aggregate \$3.2B in new capital.

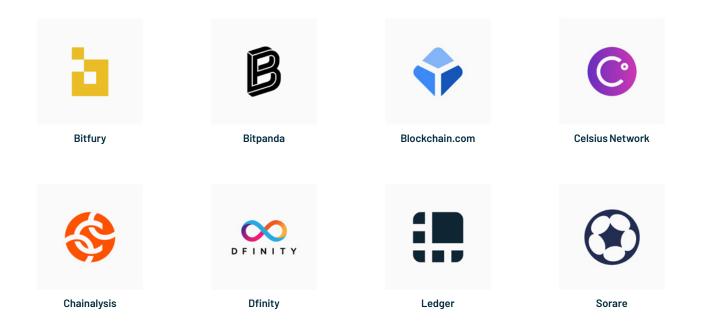
This includes Europe's largest ever crypto round (and Europe's largest ever Series B) raised by France's Sorare in September 2021. Austria's Bitpanda and the UK's Genesis Digital Assets are notable for both having raised two separate rounds that made the top 10 for the year. These rounds are an indication that European crypto has gone increasingly mainstream, at least in the eyes of the global investor base.



		Company	Country	Round stage	Round size(\$M)	Date
1	1	Sorare	France	Series B	\$680M	Sep 2021
Ì	2	Genesis Digital Assets	United Kingdom	Growth	\$431M	Sep 2021
1	3	Ledger	France	Series C	\$380M	Jun 2021
	4	Ecoin	United Kingdom	Seed Round	\$324M	Jun 2021
	5	Blockchain.com	United Kingdom	Series C	\$300M	Mar 2021
	6	Bottlepay	United Kingdom	Buyout	\$290M	Oct 2021
	7	Bitpanda	Austria	Series C	\$263M	Aug 2021
	8	Bitso	Gibraltar	Series C	\$250M	May 2021
	9	Bitpanda	Austria	Series B	\$182M	May 2021
	10	Genesis Digital Assets	United Kingdom	Growth	\$125M	Jul 2021

# European blockchain / crypto companies reaching a \$1B+ valuation

The rapid rise in funding activity over the past 12 months should not mask the fact that Europe has already produced a number of successful, growth stage companies in the crypto and blockchain space that were founded 10 years ago, such as Bitfury and Blockchain.com. In total, Europe has now produced at least eight crypto and blockchain unicorns, including five that surpassed the billion-dollar milestone for the first time during 2021, such as Sorare, Ledger and Bitpanda.



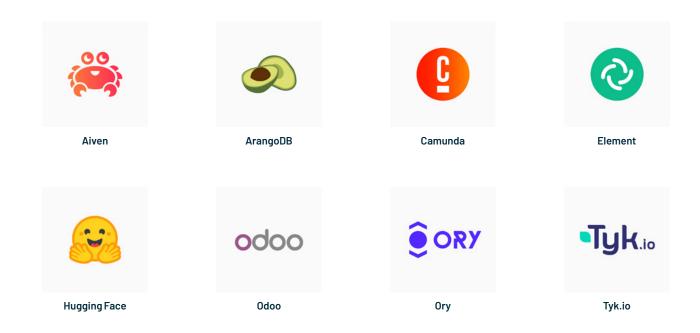






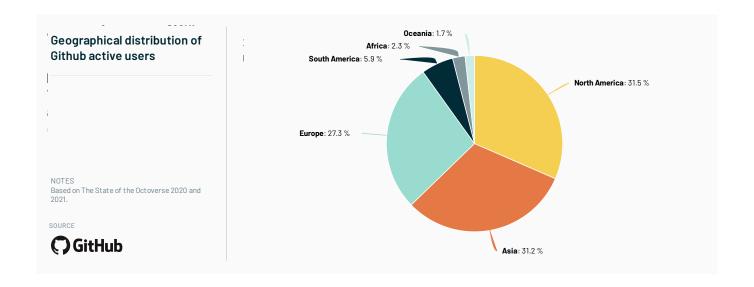
# Selected VC-backed open source companies that raised funding in 2021

Another important and fast-growing theme in European tech is the growing significance of open source, which is attracting increasing levels of investor interest and capital. Total capital invested in European open source companies has already reached almost \$1.4B in just the first nine months of 2021, according to Tracxn, up more than 7x on the less than \$200M raised in the full year of 2020. The most significant funding rounds of 2021 also elevated two further European open source companies to unicorn status, namely Aiven and Odoo.



# Europe houses 30% of open source developers worldwide

Europe's growing strength in open source should not come as a surprise. Firstly, Europe is home to close to 20 million developers that are actively engaging with open source via GitHub, equating to 27.3% of the global active user base. Secondly, the accelerated digital transformation catalysed by the pandemic has served as a powerful tailwind for open source, leading to step change in the number of new open source repositories created, according to GitHub's State of Octoverse 2021 report.









# Funding levels have exploded across a broad range of sectors

The accelerated levels of investment in the European tech ecosystem have flowed into a broad range of industry sectors, including food, health and gaming. In absolute terms, fintech companies have been the largest beneficiaries with total capital invested increasing to almost \$22B in just the first nine months of 2021.

Unsurprisingly, there has also been a rapid growth in funding to enterprise software companies, which have raised more than \$12B by the end of September 2021, already up more than 2x versus the annual total for 2020.



















There is a mindset shift on the side of founders and enterprises. The fear of stagnation is no theoretical concept anymore, as enterprises are now losing market share to disruptors on a daily basis.

On the one hand, founders have understood that it is possible to solve for the complex and often somewhat hidden needs of enterprises, rather than just the obvious consumer needs they experience on a day to day basis. On the other hand, enterprises are facing strong pressure to increase performance.

Enterprises realise that to attract strong talent as well as optimise processes, they need to adopt solutions that enable their digital transformation.

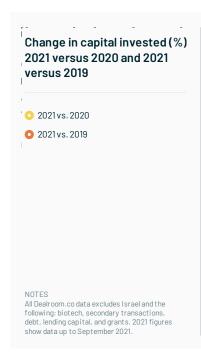
As a result, demand for innovation is soaring and the initial reservations big companies had against startups are fading. Founders are capitalising on this shift, partnering with enterprises that move fast enough to digitalise, and disrupting those that stay behind.

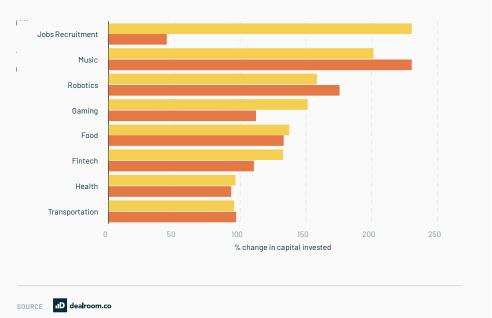
Judith Dada, La Famiglia | General Partner

# Strong tailwinds continue to power certain verticals

Zooming out to broader sectors and verticals, the impact of the pandemic has been mixed. Sectors such as recruitment, music, robotics and gaming have continued to benefit from strong tailwinds and have even further accelerated in 2021. Listed are the star performers: sectors that are on course to triple investment levels since 2019, while more than doubling compared to 2020.

These industries speak to broader changes in the market - be it the raging war for talent, the rise of the creator economy and the appeal of audio, with large rounds raised by the likes of Epidemic Sound or Dice, or the 3B gamers globally that continue to fuel growth in the space.









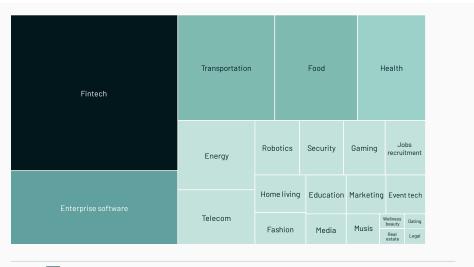


# Fintech ahead of the pack

In absolute terms, fintech had the most significant increase in investment in the past year, followed by enterprise software and transportation.

Absolute change by industry vertical of capital invested (\$M), 2020 versus 2021

All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 is annualised based on data to September 2021.



dealroom.co



Embedded finance allows any business to act like a fintech, eliminating the need for a bank in the middle of each transaction. This means better control over the customer journey under one 'digital roof'.

I'm particularly enthusiastic about the possibilities offered by embedded finance, the integration of financial services into nonfinancial customer journeys. Starling is well-placed to grab the opportunities arising from this, through our Banking as a Service, or rather Starling as a Service, offering.

Not only that, ease-of-payment can become part of the marketing push. Car companies are already working on embedded finance processes where drivers can pay for anything from fuel to parking via vehicle voice assistants. There's no need to get out of the driving seat.

I'm also excited by Central Bank Digital Currencies (CBDCs). In fact, I sit on the Bank of England's CBDC Engagement Forum. But I don't think they will disrupt the financial ecosystem in the coming year.

Anne Boden, Starling Bank | Founder and CEO

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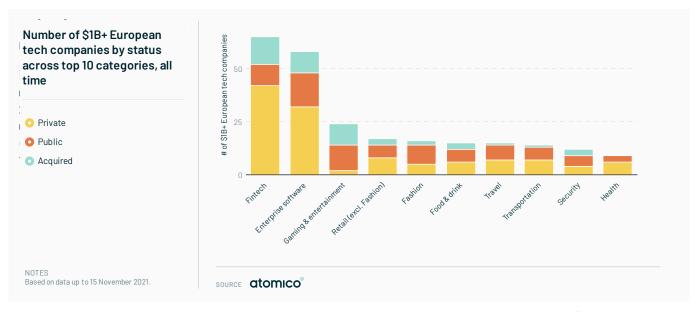
# Companies are scaling to unicorn status faster than ever

In September 2021, Flink became the fastest ever European startup to scale to unicorn valuation. This surpassed Gorillas, the record holder for eight months, which in turn eclipsed Hopin's 2020 record in March 2021. This year has been groundbreaking, with newly minted unicorns dethroning the previous leaders such as Skype (29 months), Graphcore (31 months) and Northvolt (32 months).



# Fintech companies make up 20% of all \$B+ companies and 33% of those that are still private

Fintech has proven to be the dominant category in terms of producing billion-dollar companies from Europe, accounting for 20% of all \$B+ companies from Europe and one in three of those that are still private. In total, Europe has produced 65 fintech companies that have reached unicorn status. Enterprise software is also very well represented, having now generated more billion-dollar public companies than any other category. Gaming and entertainment makes up the final place in the top three, thanks to Europe's strong historical track record in the space.







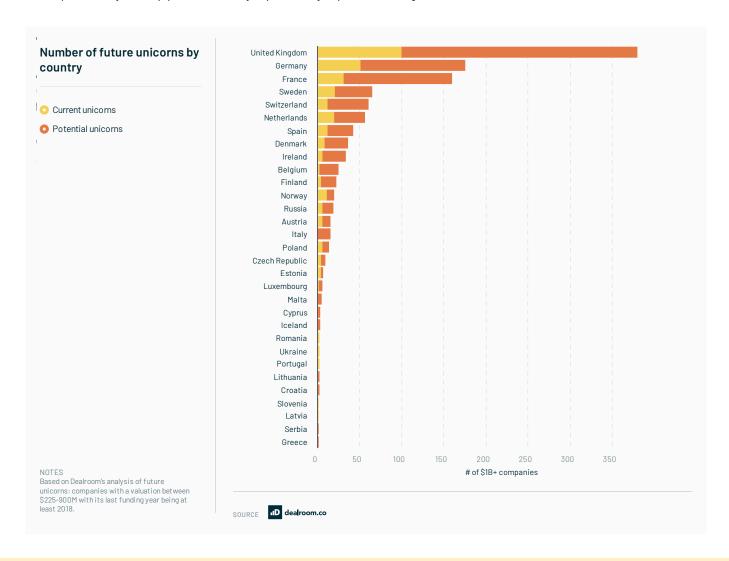




# More unicorns to join the stables, from more countries

We relied on Dealroom's methodology for 'future unicorns' to get a sense of where the ecosystem might be headed. These are companies with a valuation between \$225-900M with its last funding year being at least 2018.

Looking at the landscape of tech companies in Europe today, we are anticipating a strong pipeline of future unicorns. Europe could already be home to more than 850 future \$B+ companies, or more than a thousand unicorns in total. Iceland, Serbia and Greece are expected to join the ranks of unicorn home countries. A few countries have a particularly active pipeline, with Italy expected to jump to 15 and Belgium to 24.





Looking ahead to 2022 I think there will be a renewed focus on businesses with sustainable business models and those that are having strong positive societal impact.

We found incredible founders building in 'out of favour' sectors like social networks (for example Organise which is building a network for people to improve their rights at work and Mirthy, a network for older adults). We also invested in the future of entertainment and gaming, including in virtual reality company SideQuest. I hope this goes beyond a trend and instead is a durable shift, given the potential that technology has to tackle the biggest challenges we face.

Check Warner, Ada Ventures | Partner









# 04.3 **Collective mission**



# Europe is keen for ESG - but there is still more noise than follow-through among VCs.

European entrepreneurs want to move the needle on social and environmental challenges. But, while more is being invested in purpose-driven companies, the share of total funding they receive has decreased relative to other areas. It's been a fantastic year for investing in climate, but funding lags on other Sustainable Development Goals.

#### **INSIGHTS**

Europe has the largest share of global early-stage investment in purposedriven tech companies

Europe has the largest share of total capital invested in earlystage purpose-driven tech companies on a global basis, accounting for 61% of all funding at Pre-Seed and Seed stages (<\$5M) and 53% of total funding invested in aggregate across Pre-Seed to Series B (up to \$20M) stages.

But the share of European capital flowing into purpose-driven tech has declined

Despite a significant acceleration in the level of investment in purpose-driven companies in absolute dollar terms, it has been outpaced by the increased funding amounts raised by more mature companies that do not have purpose embedded into their business models. As a consequence, the relative share of total capital invested in purpose-driven tech companies in Europe in 2021 has declined by 5 percentage points compared to 2020.

Europe's purpose-driven unicorn herd grows

Europe now has 21 purpose-driven unicorns, of which 13 were added in 2021 alone. Stockholm attracted the most capital for purpose-driven startups in 2021, followed by London and Paris.











Only by ensuring the leadership on the new wave of innovation, Europe will be able to be in control of its own future. What happened with the previous wave of innovation around digital startups cannot happen again.

I am convinced that although regulation is indeed an important element, we should focus our EU efforts on ensuring that Europe becomes the leader of the new wave of innovation around deep tech startups with a hardware component and focused on the SDGs. We need to look less abroad, and look more inside and support our great innovators and startups. We need to have more deep tech unicorns per capita than any other regions of the world. To make this goal a reality, we need to build a pan-European Innovation Ecosystem where industry, universities, founders and investors work together. It would allow any founder to din customers and investors from anywhere in Europe. This ecosystem should ensure territorial innovation cohesion beyond big cities and into rural areas. The implementation of this ecosystem will require synergetic work among European, National and Regional authorities coordinating all EU Funds.

Mariya Gabriel, European Union | EU Commissioner for Innovation, Research, Culture, Education and Youth

# How we define ESG, Purpose and Planet Positive in SoET

**ESG** — Reducing harm

PURPOSE-DRIVEN COMPANIES (IMPACT) ———— Building a sustainabe future for all by addressing one or more SDGs

PLANET POSITIVE — → Sustainable use of the Planet's resources



Clean Water & Sanitation



Affordable & Clean Energy



**SDG 12** Responsible . Consumption & Production

#### **EMPOWERING INDIVIDUALS**



SDG 4 Quality Education



**IMPROVING** 

**HEALTH** 

SDG 3 Good Health and Wellbeing

CLIMATE TECH STARTUPS



**SDG 13** Climate Action



**SDG 14** Life Below Water



**SDG 15** Life on Land SDG 8 Decent Work and Economic Growth



**SDG 10** Inequalities

source atomico







In collaboration with Dealroom, this report has developed a methodology to measure entrepreneurial activity and capital invested in purpose-driven tech companies across Europe. This is based on a simple framework aligned with the United Nations Sustainable Development Goals ('SDGs') extending across all 17 SDGs.

For each of the individual SDGs, Dealroom's team has manually assigned keywords to tag companies on its platform with relevant categories. Each company is then individually reviewed and assigned to either 'core' or 'side' depending on the business model alignment with the SDGs, in other words whether it is core to a company's business model, or simply a peripheral or indirect aspect of the business model.

As always, we understand the methodology has limitations and welcome feedback both in terms of scope and methodology for future iterations. The dataset and methodology are accessible on the 'Impact & Innovation' section of their website.

Overview of SDGs included in analysis and mapping to keywords on Dealroom platform

Selected Dealr Extreme poverty, unbanked, disaster prevention, microlending SDG 1: No Poverty End poverty in all its forms everywhere End hunger, achieve food security, and improved nutrition and promote sustainable agriculture Food security, vertical farming, SDG 2: Zero Hunger Prenatal care, road safety, telemedicine, contraception, antimicrobial resistance, elderly care SDG 3: Good Health and Well-being Ensure healthy lives and promote well-being for all at all ages Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Universal primary education, equal education, SDG 4: Quality Education Al measuring bias, reproductive SDG 5: Gender Equality Achieve gender equality and empower all women and girls rights, female health, non-binary Ensure availability and sustainable management of water and sanitation for all SDG 6: Clean Water and Sanitation Ensure access to affordable, reliable, sustainable and modern Solar energy, wind energy, tidal SDG 7: Affordable and Clean Energy power, hydrogen, off-grid Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all Gender pay gap, equal pay, inclusive employment, fair trade SDG 8: Decent work and economic growth Sustainable industrialization, universal access to technology, inclusive industrialization Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation SDG 9: Industry, Innovation and infrastructure Safe migration, refugees SDG 10: Reduced inequalities Reduce inequality within and among countries integration, racial discrimination Air quality measurement, urban waste reduction, affordable Make cities and human settlements inclusive, safe, resilient and sustainable SDG 11: Sustainable Cities and Communities housing Food waste, sustainable fashion, circular, sustainable materials SDG 12: Responsible consumption and Production Ensure sustainable consumption and production patterns Carbon capture, carbon offset. SDG 13: Climate Action Take urgent action to combat climate change and its impacts climate tech, alternative protein Marine conservation, seafood substitutes, overfishing, plastic pollution Conserve and sustainably use the oceans, seas and marine resources for sustainable development SDG 14: Life below Water Protect, restore and promote sustainable use of terrestrial SDG 15: Life on Land ecosystems, sustainably manage forests, combat descrification, and halt and reverse land degradation and halt biodiversity loss Forestry, biodiversity, wildfires Promote peaceful and inclusive societies for sustainabl Govtech, digital democracy, corruption prevention SDG 16: Peace, justice and strong institutions development, provide access to justice for all and build effective. accountable and inclusive institutions at all levels Strengthen the means of implementation and revitalize the global partnership for sustainable development SDG partnership, impact partnership SDG 17: Partnerships

NOTES All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. Companies are counted against each SDG they are targeting.











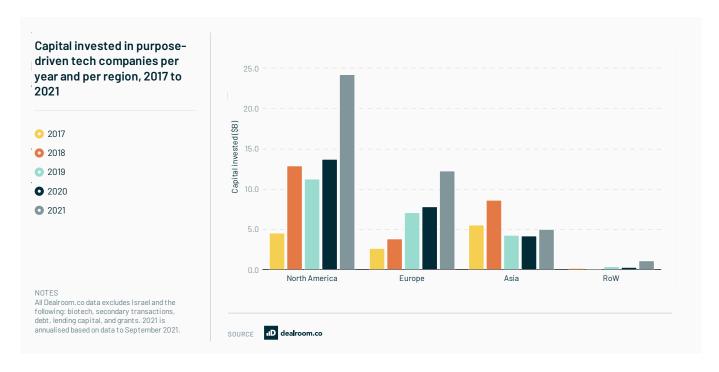


# Investors are increasingly backing purpose-driven **European tech companies**

The total value of cumulative capital invested into purpose-driven European tech companies over the past five years stands at \$34B, growing consistently year-onyear throughout that period.

At an expected annual total of more than \$12B in 2021, investment levels have grown 4.7x since 2017. Although Europe trails North America in terms of total investment, Europe is seeing a higher share of investment in purpose-driven tech companies relative to the total value of capital invested.

In 2021, 16% of capital invested into European tech went to purpose-driven companies, versus 10% in North America.





Building sustainability into a company's DNA isn't just the right thing to do, it's what a generation of customers and employees now expect.

Every company and every individual has a role to play in fighting climate change, and at Zapp we decided very early on to utilise an all-electric fleet, forge local partnerships to reduce food waste, and invest in carbon tracking and offsetting for emissions we can't yet avoid. To further embed sustainability, and with the help of our new Head of Sustainability, we'll soon be launching our sustainability champions network made up of employees right across Zapp's various business functions.

Steve O'Hear, Zapp | VP of Strategy



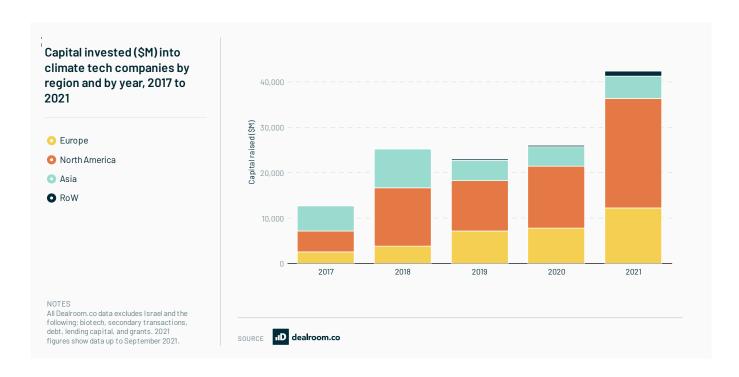






# Climate tech has grown 5x in the last five years

Globally, the volume of investments in climate tech has grown significantly in the past five years. However, this growth is not evenly distributed. While climate tech investments in North America and Europe have grown by an estimated 5x, Asia is lagging behind with no growth in the same time period.





We can compete with the US and Asia on multiple fronts. I am specifically excited about climate tech and Web3 where I believe Europe can lead the way and become the hotspot internationally.

It is amazing to see how the European startup space has evolved over time to become the vibrant ecosystem it is today. It is not all wins, though. Growth remains limited at pre-seed and seed stages, where the unicorns of tomorrow are created today. Women also continue to receive less funding than their male counterparts, and people of colour fare even worse. While there's ample proof that diverse companies perform better, network, bias, stereotypes and pattern matching still drive VC decisionmaking. A more diverse environment in tech will foster innovation and raise the bar for everybody. There are green shoots that provide hope for the future, but we still have a long way to go to make the European startup ecosystem diverse and inclusive.

Janneke Niessen, CapitalT | Co-Founder





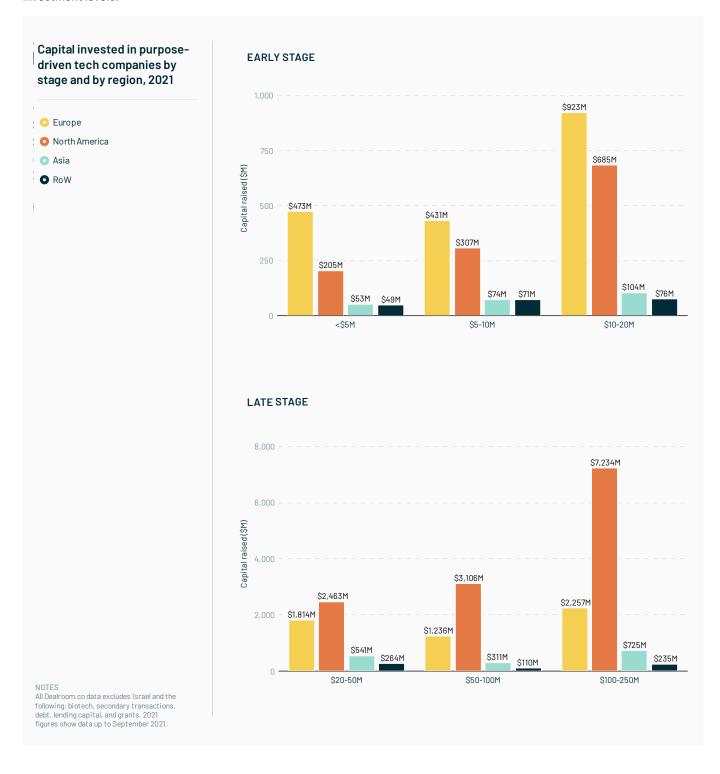




# Europe has the largest share of global early-stage investment in purpose-driven tech companies

Europe has the largest share of total capital invested in early-stage purpose-driven tech companies on a global basis, accounting for 61% of all funding at Pre-Seed and Seed stages (<\$5M) and 53% of total funding invested in aggregate across Pre-Seed to Series B (up to \$20M) stages. In later-stage rounds (\$20M+), however, the picture is inverted with North American purpose-driven tech companies capturing 63% of total capital invested on a global basis.

Early-stage investment activity is a strong forward-looking indicator of future funding patterns and so as Europe's more recent, earlier cohorts of purpose-driven tech companies mature and raise larger rounds, they should help drive increased investment levels.





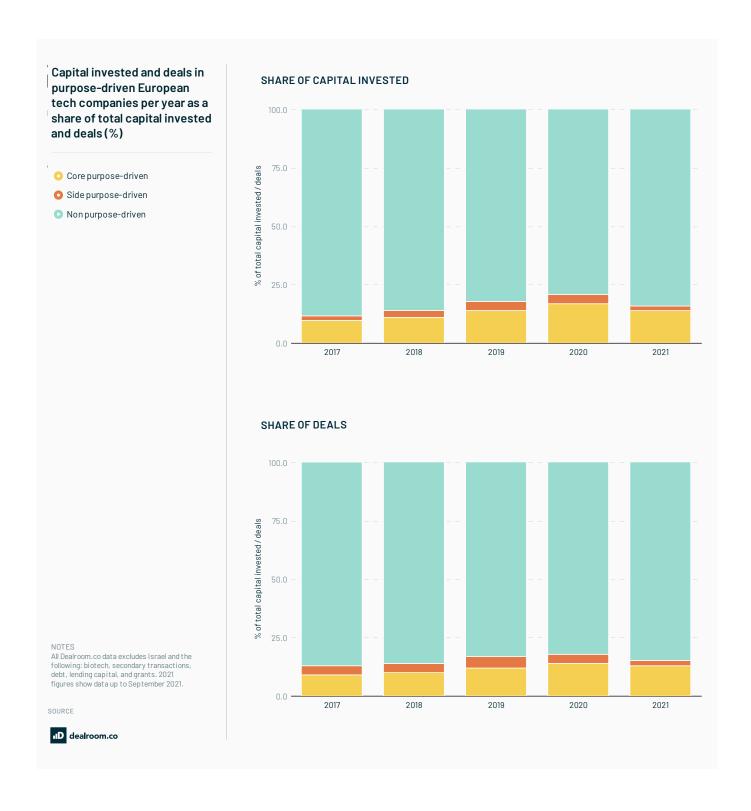






# But the share of European capital flowing into purpose-driven tech has declined

Despite a significant acceleration in the level of investment in purpose-driven companies in absolute dollar terms, it has been outpaced by the increased funding amounts raised by companies that do not have purpose embedded into their business models. As a consequence, the relative share of total capital invested in purposedriven tech companies in Europe in 2021 has declined by 5 percentage points compared to 2020.











# More and more purpose-driven European tech companies are raising megarounds

The top 10 largest rounds closed by Europe's leading purpose-driven tech companies in 2021 to date have raised in excess of \$4.8B. The increase in round size has meant that the bar to enter the top 10 largest rounds in 2021 has leapt from \$87M in 2020 to \$130M in 2021. Northvolt's giant funding round of \$2.8B represented the single largest funding round raised by any tech company in Europe in 2021.

#### Top 10 largest deals raised by purpose-driven tech companies in 2021

	Company	Description	HQ city	HQ country	Round size (\$M)	Round type	Round date
1	Northvolt	Lithium-ion batteries	Stockholm	Sweden	\$2,800M	Growth Equity VC	Jun-21
2	Back Market	Refurbished electronics marketplace	Paris	France	\$335M	Series D	May-21
3	Kry	Telemedicine platform	Stockholm	Sweden	\$312M	Series D	Apr-21
4	Vinted	Second-hand fashion marketplace	Vilnius	Lithuania	\$275M	Series F	Apr-21
5	Volocopter	Fully electric helicopter	Bruchsal	Germany	\$241M	Series D	Mar-21
6	Vestiaire Collective	Second-hand luxury fashion marketplace	Paris	France	\$210M	Growth Equity VC	Sep-21
7	Alan	Digital health insurance	Paris	France	\$203M	Series D	Apr-21
8	Vestiaire Collective	Second-hand luxury fashion marketplace	Paris	France	\$196M	Late VC	Mar-21
9	Enpal	Online solar panels provider	Berlin	Germany	\$174M	Series C	Oct-21
10	Huma	Digitalising health care and research	London	United Kingdom	\$130M	Series C	May-21

All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021.

SOURCE





I am most interested in investing in topics that have a positive impact and aim to reach any of the sustainable development goals whilst providing attractive returns.

I am a big believer in decarbonisation. The next generation of decacorns will come from this space! There is no lack of funding here however, it is the companies that are missing so far. One thing is for sure: we will not recover from the Covid crisis by rebuilding the world as we knew it before. We must build new, and better. That's why we asked European countries to invest 20% of the recovery money they would receive from the EU into their digital transition, and 37% into their Green transition. Because investing in those two transitions is the best - if not the only way to come out of this stronger, more resilient to future crisis and more competitive on the global market. This isn't just good thoughts, it's concrete actions and hard measures.

Gesa Miczaika, Auxxo Female Catalyst Fund | General Partner





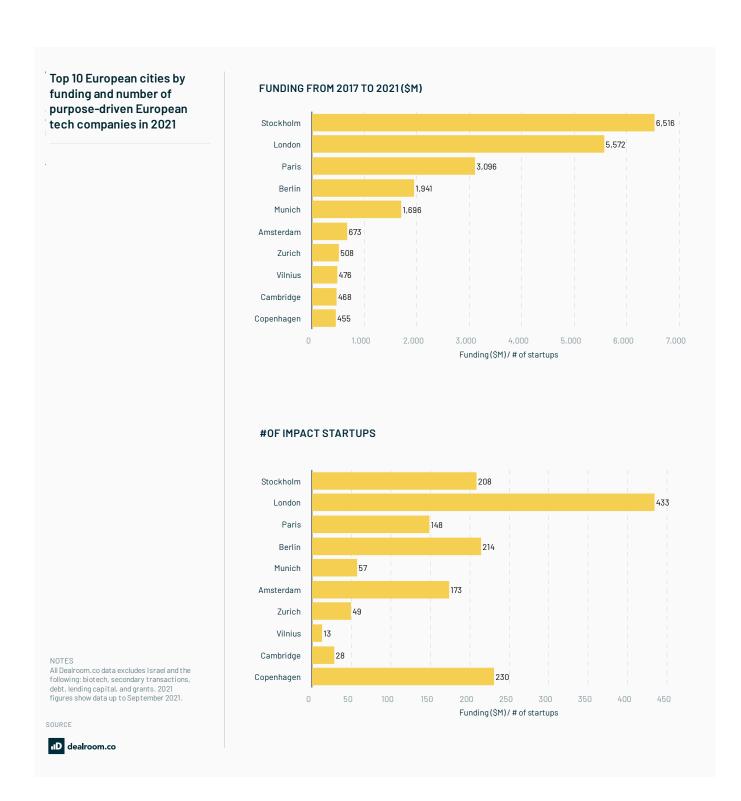




# Stockholm: the hub for purpose-driven capital

Thanks to the impact of Northvolt's massive funding rounds, as well as other success stories such as Kry, Stockholm has become the leading city for investment in purpose-driven tech companies on a cumulative basis over the past five years.

Interestingly, Vilnius joins the top 10 cities based on cumulative capital invested despite only having 13 identified purpose-driven tech companies, according to Dealroom. It is propelled to this position by the outsized impact of Vinted, which has raised two large growth rounds, both in excess of \$100M.





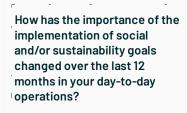


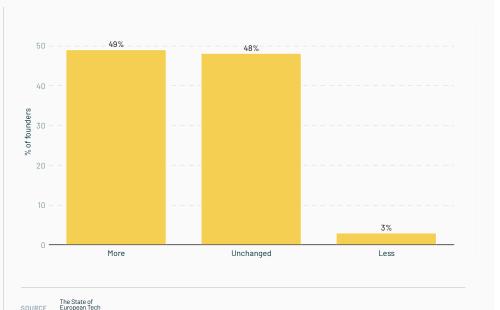




# More founders are placing an increased importance on implementing ESG goals into their day-to-day operations

Our survey asked founders to share how the importance of implementing goals related to ESG into their day-to-day operations had changed over the past 12 months and revealed a clear shift in founder sentiment with around half of all founders indicating it has become more important.





Founder respondents only. Numbers may not add up to 100 due to rounding.



Consumer businesses in this day and age must tap into an authentic purpose and values that their customers can identify with.

At Depop we enable people to buy and sell, and to build a business if they want to, but in a bigger sense - beyond the transactional - we enable them to be part of a systemic shift in the fashion industry, and a more sustainable way to shop. We've seen a real appetite, from younger consumers in particular, to embrace not just our platform but what it represents - a move towards more mindful, creative, community-based consumption. Lots of the most successful consumer-focused tech businesses in recent years - from Bulb to Olio, Babylon Health to HURR - offer a new generation of buyers access to a new way of doing things, and to a mission they want to buy into. For me, this is integral to the future of consumer tech.

Maria Raga, Depop | CEO









# Companies addressing SDGs related to climate and sustainable practices dominate funding flows

The top-funded Sustainability Development Goals (SDGs) have seen a significant jump in funding in 2021. Affordable and clean energy (SDG 7) surpassed \$5B in annual funding for the first time in 2021. Affordable and clean energy (SDG 7), climate action (SDG 13) and sustainable cities and communities (SDG 11) have now all surpassed \$10B in cumulative funding since 2017.





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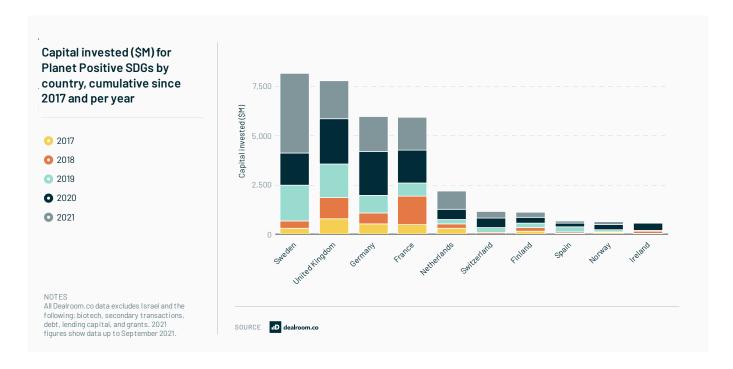






# Investments in Planet Positive SDGs have stepped up in the last few years

SDGs aggregated under the 'Planet Positive' theme have seen a significant increase in investment over the past 5 years with the greatest concentration of funding flowing to Sweden, the UK, Germany and France. Outside of the top 10 countries by total capital investment, however, there is a long tail of European countries that have seen little to no funding in startups addressing 'Planet Positive' SDGs.





In Europe, it feels like the stars are aligning for sustainable companies.

I think European consumers of technology are definitely looking for a higher purpose but both European demand and supply are aligning when it comes to electric vertical take off and landing technology. Our very first investors were European, we are building and testing our Jet in the heart of Europe, we are hiring engineers from across Europe, there are other eVTOL companies being built in Europe and National and local governments across Europe are promoting more environmentally friendly transport policies.

Daniel Wiegand, Lilium | Co-Founder and CEO



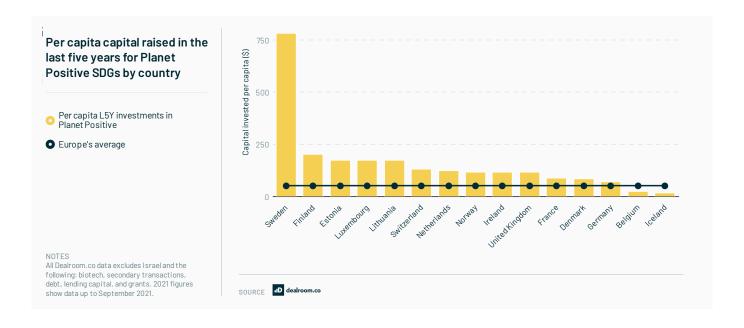






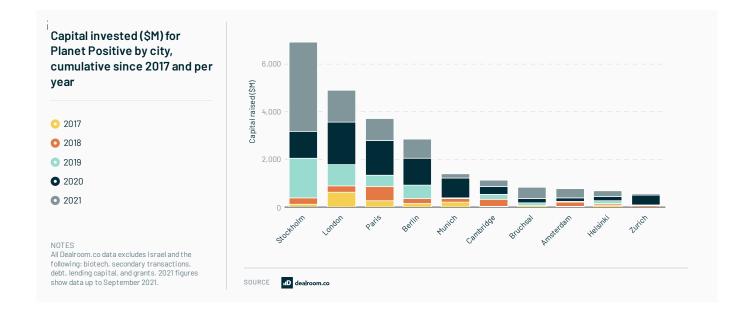
# Sweden punches above its weight in terms of Planet Positive investments

Sweden leads the pack in terms of per capita investments - at roughly 4x ahead of closest runner-ups Finland and Estonia - thanks to the success of Stockholm-based Northvolt.



# Stockholm is the top city for Planet Positive

On a city level, Stockholm comes in first for Planet Positive, largely thanks to being the hometown of Northvolt, followed by European tech hubs London, Paris and Berlin.











# Climate tech companies are most sought after

Across all SDGs, the most common by total deal count over the past five years is climate action (SDG 13). In Berlin, investment in climate action is double the second SDG - in this case, affordable and clean energy (SDG 7).

#### Top SDG per city by last five years total deal count

	Deal count #1SDG	#2 SDG(x)	#1SDG	#2 SDG
London	220	1.7x	Climate action(#13)	Responsible consumption and production (#12)
Berlin	108	2.0x	Climate action (#13)	Affordable and clean energy (#7)
Stockholm	101	1.4x	Climate action (#13)	Responsible consumption and production (#12)
Paris	59	1.4x	Climate action (#13)	Affordable and clean energy (#7)
Amsterdam	54	1.4x	Climate action (#13)	Sustainable cities and communities (#11)
Helsinki & Espoo	46	1.0x	Climate action (#13)	Responsible consumption and production (#12)
Copenhagen	42	1.0x	Responsible consumption and production (#12)	Climate action(#13)
Munich	41	1.0x	Sustainable cities and communities (#11)	Climate action(#13)
Cambridge	37	1.5x	Climate action (#13)	Affordable and clean energy (#7)
Zurich	24	1.6x	Climate action (#13)	Affordable and clean energy (#7)

All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021





The mission for a better future for all resonates deeply with me and it sits at the core of our identity as Europeans. It also informs our work as investors in two ways.

First, to build European companies that can become bigger than companies in the US or Asia, we must learn to leverage the collective European strength. Unfortunately separate Nation States with different agendas and a lack of unity, for example in the digital or labour market, are still reality for companies operating in Europe, especially those wishing to attract non-EU talent.

Second, I believe companies that go beyond just answering our needs as consumers have the perfect breeding ground in Europe. From childcare, education, to health and elderly care, or production line workers, Europe is championing one of the most progressive welfare systems globally. Yet, too big of a part of the workforce in these segments has so far been left out from the benefits of digital transformation. To realise a real European promise of progress for all and for companies to have a chance to innovate, the EU must learn to better align its regulation expertise with entrepreneurial freedoms.

Judith Dada, La Famiglia | General Partner

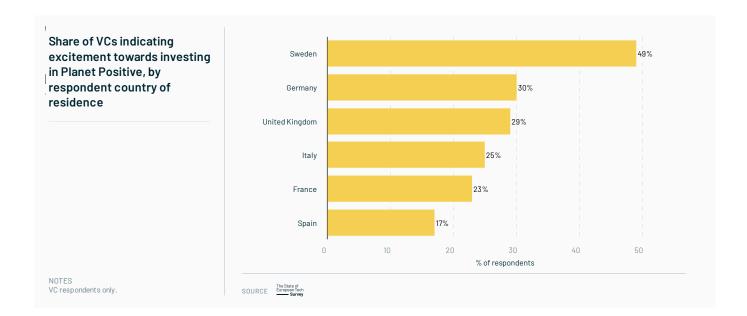


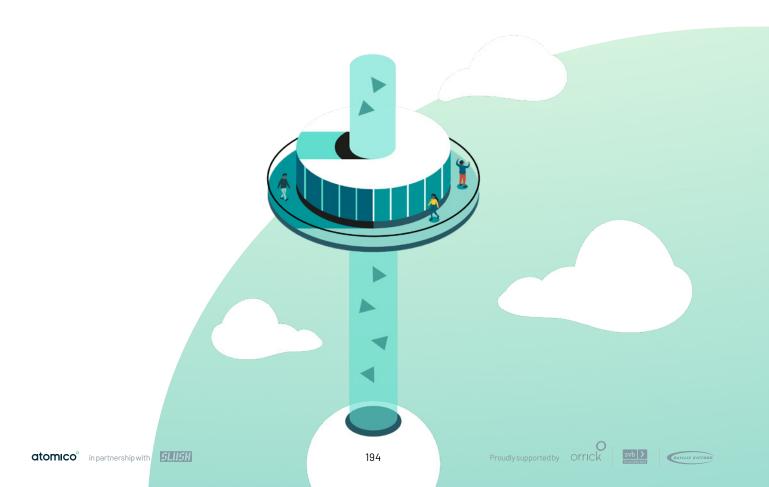




# VCs are excited about Swedish climate tech

And in fact when slicing the themes VCs are most interested in by country, Sweden stands out on climate with 49% of respondent VCs indicating excitement towards investing in companies tackling the climate crisis.



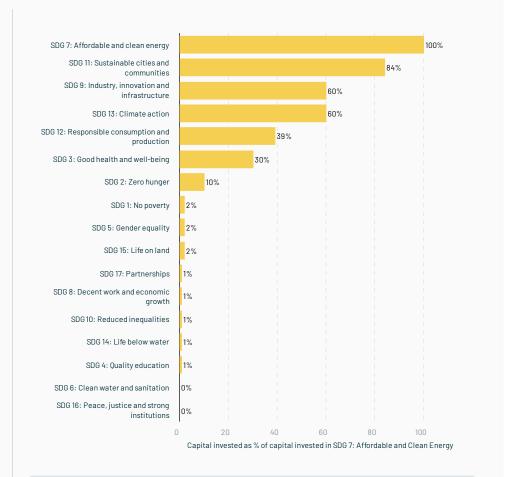




# Despite fantastic news for climate, funding is lacking in some SDGs

While funding has flooded into companies tackling affordable and clean energy, there is a significant gap between the top and bottom goals targeted, with the leading five SDGs receiving 87% of funding as of September 2021.

Capital invested in purposedriven European tech companies per SDG as a share of capital invested in SDG affordable and clean energy (SDG 7)



All Dealroom, co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. Companies are counted against each SDG they are targeting. 2021 figures show data up to September 2021.

SOURCE dealroom.co













More and more investors are realising that if they want to future proof their portfolios and contribute meaningfully to combating climate change, they'll need to broaden their time horizons, have more patience and take bigger swings.

Traditionally, European investors tend to be more conservative than US investors who place major importance on the founders' vision and growth potential. Atomico has been a pioneer in helping to broaden and burnish the European tech scene by championing individual founders' potential to create ground-breaking solutions that benefit people and the planet. Delivering on our ambitious plans to reimagine how food is grown in cities via a modular, data-driven approach to farming has required us to find forwardthinking, visionary partners.

The support we received from impact-focused VCs like Atomico and other early investors has been decisive in delivering on that vision. In the 5 years since we built our first in-store farm, Infarm has created the world's largest cloud-connected vertical farming network. The capex that companies like Infarm require to scale did initially limit the pool of potential investors. However, we've seen a remarkable change in the past three years, as more and more investors are realising that if they want to future proof their portfolios and contribute meaningfully to combating climate change, they'll need to broaden their time horizons, have more patience and take bigger swings.

Osnat Michaeli, Infarm | Co-Founder and Chief Brand Officer









# Purpose-driven \$1B+ companies

Europe's got purpose. The region now has 21 \$1B+ purpose-driven companies (core focus) of which 13 were added in 2021 alone.



Founded in 2019 Reached \$1B+ in 2021



Founded in 2018 Reached \$1B+ in 2021



Founded in 2016 Reached \$1B+ in 2019



Founded in 2016 Reached \$1B+ in 2021



Founded in 2016 Reached \$1B+ in 2021



Founded in 2015 Reached \$1B+ in 2020



Founded in 2015 Reached \$1B+ in 2020



Founded in 2015 Reached \$1B+ in 2021



Founded in 2014 Reached \$1B+ in 2021



Founded in 2014 Reached \$1B+ in 2021



Founded in 2013 Reached \$1B+ in 2019



Founded in 2013 Reached \$1B+ in 2019



Founded in 2013 Reached \$1B+ in 2021



Founded in 2012 Reached \$1B+ in 2016



Founded in 2012 Reached \$1B+ in 2021



Founded in 2011 Reached \$1B+ in 2021



Founded in 2011 Reached \$1B+ in 2021



Founded in 2008 Reached \$1B+ in 2019



Founded in 2008 Reached \$1B+ in 2021



Founded in 2006 Reached \$1B+ in 2015













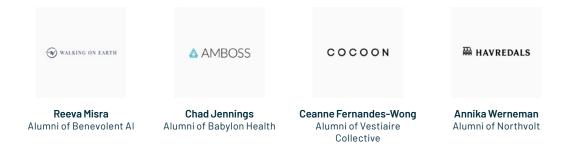
# Notable exits in 2021 of purpose-driven companies

Four purpose-led companies went public in 2021 with one \$1B+ acquisition.



# Select purpose \$1B+ alumni founders

Although these 'purpose' unicorns are still young with a median age of 7 years since their founding date, we are already seeing the effect of talent recycling with operators turning into founders of next generation of purpose-driven companies.









**CHAPTER** 



# Attracting worldclass investors

Europe is seeing broader and deeper investment than ever before. Despite more competition from alternative funding sources, European VCs are adapting to the new market and competitive dynamics.

# Attracting world-class investors

VC has become the leading funding mechanism for entrepreneurs, but to stay competitive, VCs have to keep innovating. As the opportunity set matures, global investors are doubling down: from seed rounds to public markets, there are now more international investors and buyers active in Europe. While investors across the board have more conviction in European tech, pension funds still lag behind on their allocation to tech.

#### **ARTICLES**

#### 05.1 Fundraising

European VC is beating US VC (and European PE), and outperforms now across two decades (1,3,5,10,15,20 year horizons), and appetite for the European venture capital asset class increased amongst LPs this year. Despite this, pension funds remain a relatively unrealised source of funding for GPs. LPs showed their interest in first-time funds who witnessed increased investment this year.

#### 05.2 VC: Disrupt or be disrupted

It's clear that competition to get access to and win over the best founders is increasing - from the first cheque that is invested all the way through to the late-stage growth stage of the market.

# 05.3 Europe's evolving capital markets

Across every metric, Europe's capital markets are maturing. There are more investors of every type, at every funding stage, and from international as well as domestic funds.









# 05.1 **Fundraising**







#### **ARTICLE 05.1**

European VC is beating US VC (and European PE), and outperforms now across two decades (1,3,5,10,15,20 year horizons), and appetite for the European venture capital asset class increased amongst LPs this year. Despite this, pension funds remain a relatively unrealised source of funding potential. In 2022, first time funds, Planet Positive and Deep Tech are key trends to watch.

#### **INSIGHTS**

European VC is beating US VC (and European PE), and outperforms now across two decades

European venture capital continues to be a highly attractive asset class - overperforming key comparables on a 1, 3, 5 and 10 year horizon and on par on the 15 year horizon.

LPs have kept up with the pace of a fast-growing ecosystem and are betting on first-time funds, but pension funds have unlocked potential 20% of funding was captured by LPs in H1 2021, up from 14% in 2020. However, European pension funds are lagging behind; with over \$3T in total assets, their yearly investment in European venture represents less than 0.018% of their total. Raising that to 1% would have a seismic shift.

Investing in the future of the planet

LPs are most excited about investing in Planet Positive and socially responsible companies, especially via emerging fund managers. Deep Tech is a close second interest.





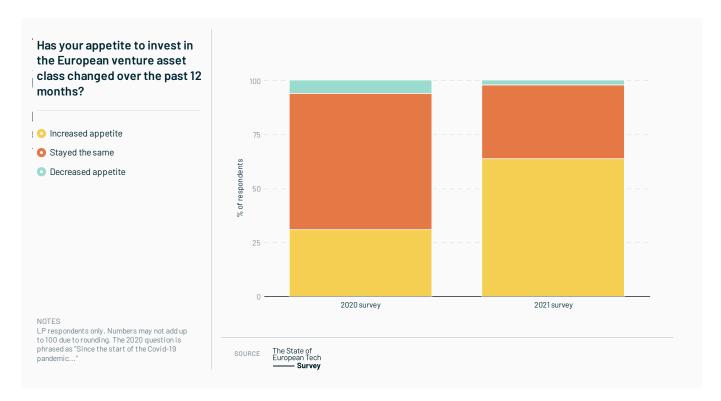




# LP appetite for the venture asset class increases

Limited Partners ('LP') sentiment toward investing in the venture asset class has strengthened over the past 12 months, with 64% of respondents now reporting an increased appetite for it.

Notably, only 2% of LPs report being less interested in the asset class. The change in sentiment represents a significant strengthening since last year, when only 31% of LP respondents reported an increased appetite for venture.





LPs are now coming to the realization that to maintain the incredible returns the venture asset class can offer, they will need to be bolder and start developing conviction internally on certain sectors.

With the record breaking amount of capital flowing into venture as an asset class, we believe that specialization (sector, geographic or others) is going to be hugely important for firms to effectively compete and rise above the noise. Historically, LPs have had the mindset that we back managers specifically because we trust them to identify the promising sectors and spaces for us. But with the rise of specialist funds, LPs are implicitly making a bet on a given sector or space. That said, it's important for GPs to be mindful of how narrowly defined your sector is. You want to be specialist enough to be differentiated in the ecosystem and provide relevant expertise, but also have enough latitude to make sure you can catch those outliers that will drive true outsized performance.

Thomas Moon, Sapphire Partners | Vice President





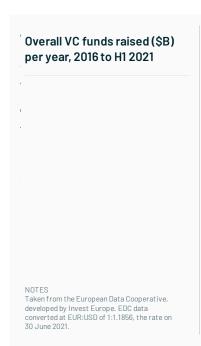


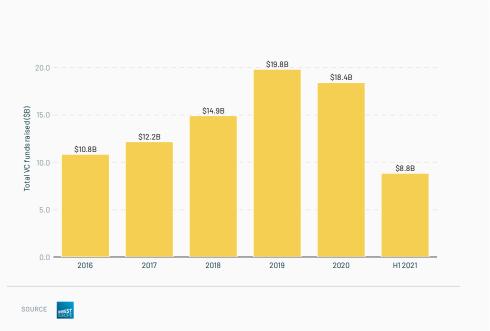


# LP investing into European VCs is keeping pace with the ecosystem

LP activity is a crucial part of the European tech puzzle, as current allocations to the asset class fuel future VC activity and deployment cycles.

Preliminary results for European VC fundraising in 2021 are encouraging, with activity in the first six months slightly ahead of H12020, at \$8.8B raised (versus \$7.8B). Some large funds closing in Q3 2021 - namely Index Ventures Growth VI, closing at \$2B - are also set to contribute to a promising year. For comparison, European VC fundraising in 2020 also remained consistent with previous years, with over \$18B of funds raised.





# Selected examples of alternative fundraising models used by **European VCs**

2021 was also marked by several European VCs using alternative models to raise funds. For example, in March 2021, Passion Capital was the first European VC fund to invite retail investors to participate in its fundraising via crowdfunding platform Seedrs, albeit representing a very small share of the overall fund (£350k of a £45m fund). Forward Partners and Seraphim joined the ranks of publicly-traded VCs in 2021 as well. The former floated on the London stock Exchange via a £25M IPO and Seraphim raised £180M in July 2021. Molten Ventures, meanwhile, joined the main market of the London Stock Exchange and entered the FTSE250 in 2021 after a long successful run in the public markets since its initial IPO in 2016. It is worth noting that these alternative models to fundraising are not reflected in the data captured by Invest Europe.



#### Molten Ventures The largest tech-only focused VC

on the LSE with a market value of \$1.9B. First listed in 2016.



#### Forward Partners

Went public on the London Stock Exchange's sub-market for smaller companies, AIM.

204



#### Seraphim Space Investment Trust

Raised £180M in IPO on the London Stock Exchange's main market in July 2021.



#### **Passion Capital**

A first in Europe: crowdfunded part of its \$62M fund.











Whether you look at it from a returns perspective or the breadth of the opportunity set, European tech is one of the most exciting investment opportunities for institutional investors today.

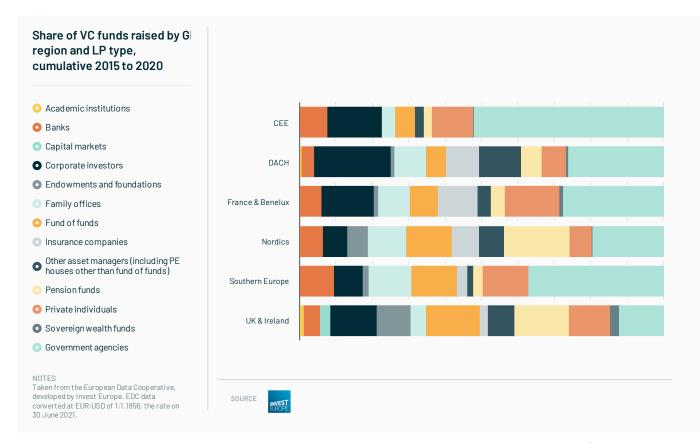
European tech has proven to be a multi-trillion dollar opportunity, with the value of public and private companies growing to \$3 trillion as of 2021. Looking ahead this value is set to grow at compounding speed fuelled by the acceleration of digital tailwinds to \$6 trillion by 2030 at a conservative estimate. From a returns perspective, European VCs have consistently delivered strong returns to their investors - on par or exceeding their peers on the other side of the pond. The founders we see in Europe today have the best credentials yet - they have bigger ambitions, are more experienced and are better networked. The depth of talent and the size of the market opportunity provide strong foundations for European VC to continue to access the best companies and deliver world-class returns to investors.

Hiro Tamura, Atomico | Partner

#### UK VC funds are raised from the most distinct set of sources

Of all the European regions, venture capital in the UK and Ireland is raised from the most distinct set of LP types and with a relatively evenly distributed set of funding sources, including pension funds, fund of funds, sovereign wealth funds and corporate investors.

UK VCs also have the lowest share (12%) of capital raised from government agencies of any region in Europe. By comparison, for example, the majority of VC funding raised in Central and Eastern Europe (52%) originates from government agencies.













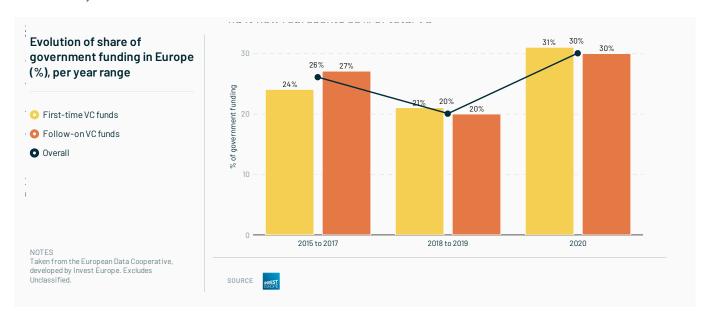


# Government agencies increase as a share of total VC funds raised

In the years 2018 to 2019, we saw a material change relative to the previous two years, as government funding decreased both for first-time and follow-on VC funds.

In 2020 however, government funding reached new heights, and it now represents 30% of total VC funding. This is likely in part related to the pandemic, as governments were propelled into action in order to support their economies through Covid-19.

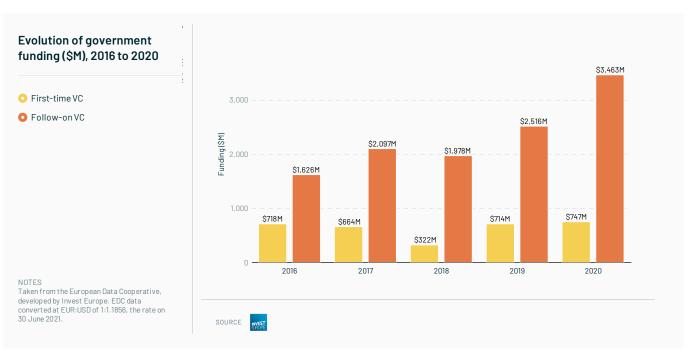
It is, however, also likely a reflection of the increased scale and focus of government initiatives throughout Europe, including at a European level, to inject capital into the European tech ecosystem to support the development of the local investor ecosystem.



# Government funding increased by almost \$1B in 2020 versus 2019

In absolute terms, the total level of government agency funds invested into European VCs topped \$4.2B for the first time in 2020, increasing from \$3.2B in 2019.

While government agencies have increased their investment into follow-on funds in the past year, the sums invested into first-time funds have stayed consistent over the past five years.











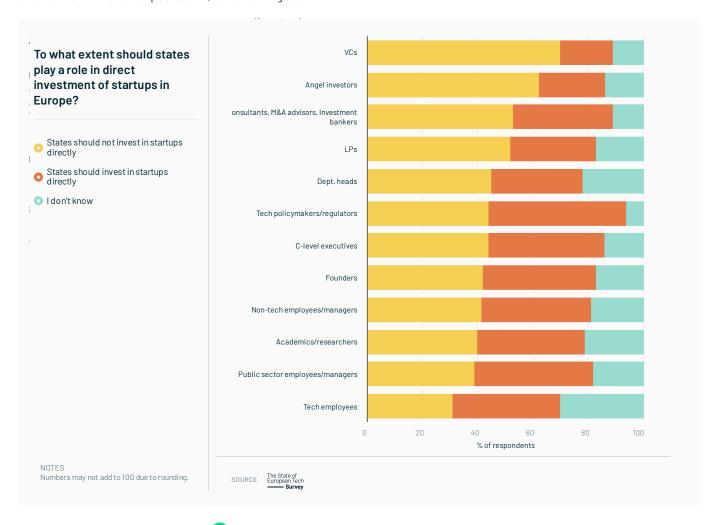


# Founders are split on whether governments should invest directly in startups

Overall, sentiment towards the role that governments should play in direct investment into startups is mixed. Close to 50% of respondents in our survey said they do not think states should invest directly in European startups, though unsurprisingly, this is driven primarily by investors: 70% of VCs, 63% of angels, and over 50% of LPs indicate that states should not play a direct role.

On the other hand, founders are much more evenly split on the question, with 41% saying states should play a role, and 42% saying they shouldn't.

Given the market-driven competitive forces present within European tech investment, it remains to be seen how governments might develop a proposition for direct investment that is accretive to market dynamics and to founders; whether that be through a specialist focus on more purpose-driven capital, more patient financing, alternative risk/return expectations, or something else.











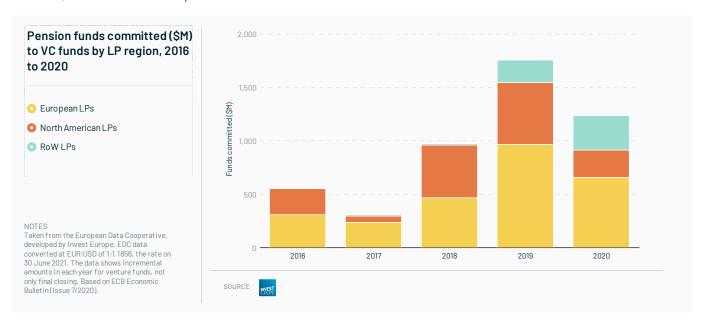


# \$1B+ raised from global pension funds, but potential still unrealised

Pension funds, particularly those based in Europe, remain a source of mostly unrealised potential for the European venture asset class. Pension funds play a key role in household retirement across the continent, and represent around 20%of an average household's net financial wealth, according to a recent study by the European Central Bank.

Over the past five years, funds raised from pension funds by general partners (GPs) more than doubled in Europe, with a peak of \$1.8B in 2019.

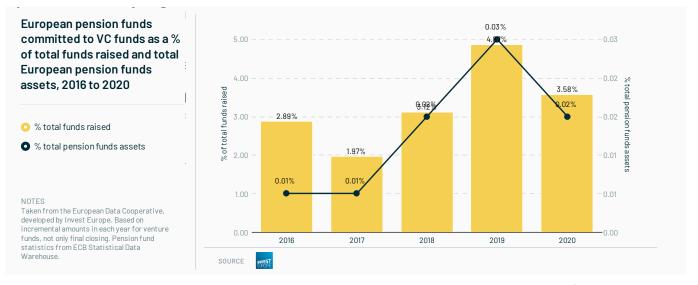
Interestingly, only around 50% of total funds raised by VCs from pension funds come from European pension funds specifically. Indeed, European pension funds invested less than \$700M in total into European VC funds in 2020.



# European pension fund capital allocation to VC in 2020 represents just 0.018% of their total assets under management

European pension funds have assets under management of more than \$3T. This means that the close to \$700M invested by European pension funds in 2020 is equivalent to just 0.018% of their total assets under management. This is the only chart in the whole report that would require us to use three decimal places in order to observe shifts in the data.

By increasing their allocation of total assets to venture up to just 1%, the total amount invested each year would increase to close to \$40B. This would represent a seismic shift, as it would be equivalent to more than double the total amount raised by European VC funds in 2020.









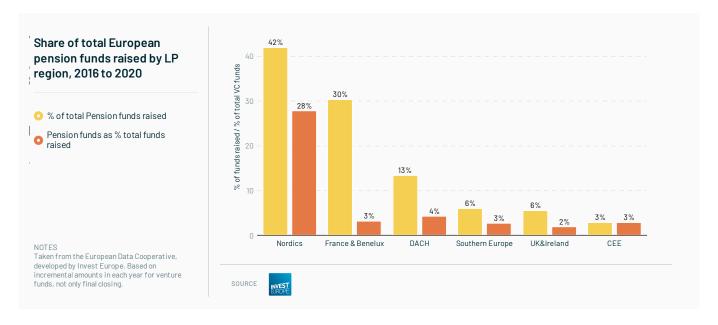


# UK & Irish pension funds are most underinvested

Amongst European pension funds, the most active LPs are based in the Nordics, France and the Benelux. Collectively, LPs from those sub-regions account for more than 70% of all pension fund allocations to European VC over the past five years.

Nordic VCs, in particular, have benefitted from the progressive, pro-venture approach taken by local pension funds; pension funds represent almost 30% of all VC funds raised by VC based in the Nordics, more than 6x higher than the next region (DACH).

Pension funds based in the UK & Ireland, by contrast, account for only 6% of total pension fund investments into European VC.



# Meanwhile, European venture capital continues to be a highly attractive asset class

As an asset class, European venture capital continues to be highly attractive, overperforming key comparables on a 1, 3, 5 and 10 year horizon and on par on the 15 year horizon.

At the same time, the delta of venture fund performance has widened between the top and bottom performers.













Given the 0% interest rate elsewhere, capital markets have discovered venture capital as an attractive asset class.

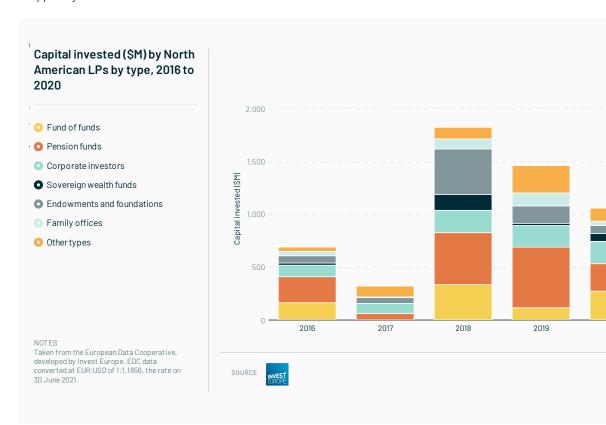
Also, the economy is still in the process of being digitized. This combination makes this a great time to build startups. Regarding completely new areas I am eager to learn how crypto and decarbonisation develop.

Angels have grown up in Europe. There is a rise in super angels. I see angel syndicates playing a very significant role in rounds, in some cases crowding out smaller VCs. In addition, successful angels are being backed by others, building syndicates or "deal by deal" funds. Given the abundance of capital, it is however also becoming increasingly difficult for angels with little understanding of the entrepreneurial process or of the specific industry to enter competitive rounds. Founders are turning from supplicants to requestors.

Gesa Miczaika, Auxxo Female Catalyst Fund | General Partner

#### North American LP investment in Europe fell in 2020

The flow of commitments from North American LPs to European VCs remains muted. Total commitments in 2020 actually fell on an absolute basis by 27%. The low total value of commitments means that trends are prone to material swings from one year to the next. For example, commitments from North American Fund of Funds grew by 2.4x in 2020 versus 2019, while commitments from North American pension funds dropped by half.









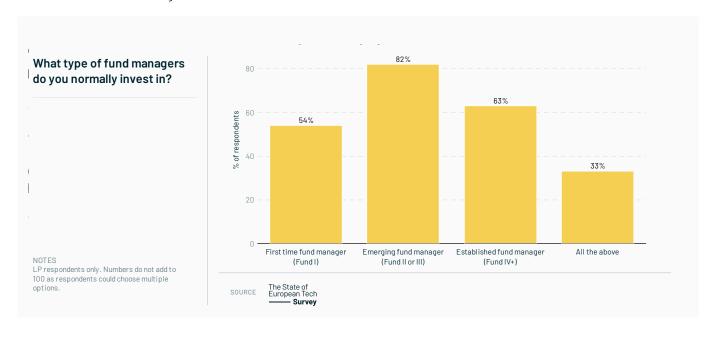


# Most LP respondents to our survey have a preference for emerging fund managers

LP respondents to the survey were asked to state the preferred types of fund managers they invest in, selecting any that applied from a selection including firsttime fund managers, emerging fund managers or established fund managers.

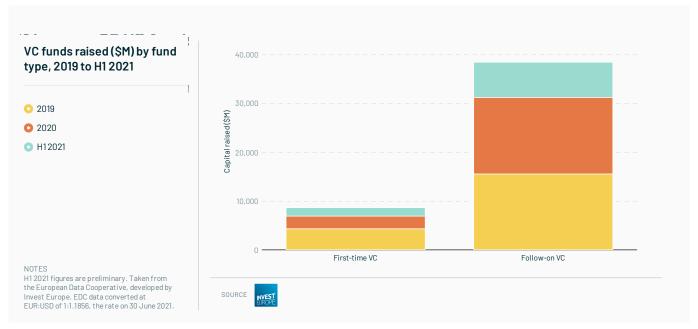
While LP respondents were most likely to select emerging fund managers as their preference, more than 50% of respondents stated an appetite to invest in first-time fund managers.

There is also a meaningful share of LP respondents that are building a diversified portfolio of fund managers and indicated a preference to invest in fund managers from across all of these categories.



# \$1 in every \$5 VC funds raised is going to first-time funds

There has been an uptick in the amount raised by first-time VC funds in H1 2021, with close to 20% of all funds raised captured by first-time funds, up from 14% in 2020. In absolute terms, first-time VC funds have raised more during H12021 compared to H12020, while funding for follow-on VC funds is currently tracking slightly behind last year's totals.







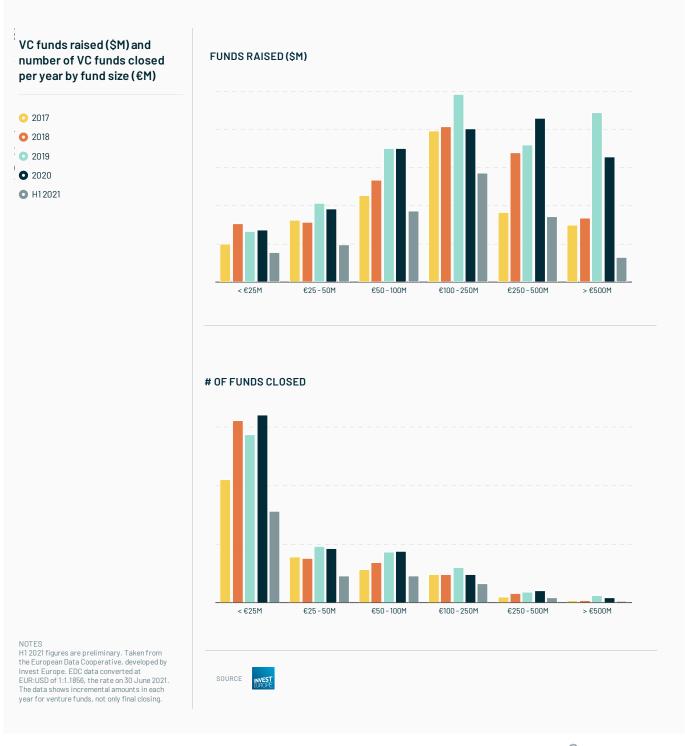




# Small funds account for the largest volume of new funds

The number of larger funds (>€250M) raised each year in Europe remains small and also subject to fluctuation. In 2020, just 14 funds of greater than €250M were closed during the year. During the first half of 2021, the number of largest funds closed has totalled just five.

In comparison to the frequency and scale of megafunds raised in the US, Europe remains on a different footing. Smaller funds (< £25M) continue to account for the largest volume of new funds closed each year with 2021 on track to break another record in terms of total VC funds raised by these micro funds. This pool is also now starting to include a new generation of 'solo GPs' that are breaking out on their own to raise dedicated pools of capital from external investors, including institutional LPs, to invest on an individual basis. As the rate of 'talent recycling' within the European investor community accelerates, this should further propel this trend in Europe.



















While the relative scarcity of capital continues to be an issue in Europe, due to the paucity of large private institutional investors, the recent successes attract foreign and non-traditional investors - this is ominous...

I believe that over the last few years, the importance of geographic ecosystems (physical locations grouping together entrepreneurs, human resources, investors, service providers and clients) diminished. Existing ecosystems did not disappear, but success was proven possible starting from remote locations. In this context, Europe became the birthplace of significant successes and was recognized as an attractive location for starting and investing in future global leaders. While the relative scarcity of capital continues to be an issue in Europe, due to the paucity of large private institutional investors, the recent successes attract foreign and non-traditional investors. This is ominous as availability of capital clearly drives creation of startups and hence expands the top of the funnel for the future.

Dan Lupu, Earlybird Venture Capital | Partner

# **Examples of solo GPs**

We have attempted to collate a snapshot of the new generation of 'solo GPs' that is emerging in Europe. It's exciting to see this growing cohort of former founders, operators and investors now focusing their efforts to build new, innovative models to support the next generation of European tech founders. Notably, the strongest cluster of these solo GPs is based in Germany.



Rodrigo Martinez Madrid, Spain



**Neil Murray** Copenhagen, Denmark



**Connor Murphy** Berlin, Germany



**Helery Pots** Tallinn, Estonia



Nathan Benaich Europe and United States



**Dec Kelly** Berlin, Germany



Andreas Klinger Berlin, Germany



**Maximilian Claussen** Berlin, Germany



Manuel Grossmann Berlin, Germany



Nico Wittenborn New York, United States











For too long, equity investment has been the only option for many innovative companies to obtain funding, often at very unfair terms. But really, raising money and giving up equity need not be the same concept.

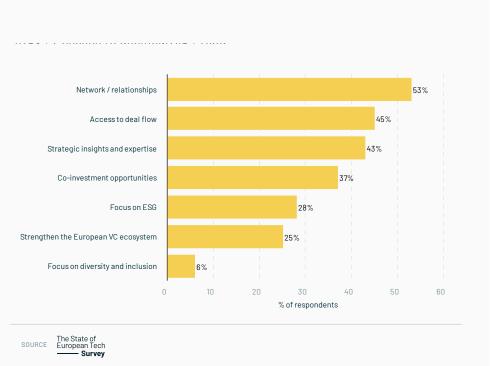
We live in an age of empowered founders - empowered to choose what investor they want to work with and empowered to control their equity better. In the past, too many founders could not be incentivised to build sustainable long-term solutions to tough problems because at some point the equity math just didn't make sense anymore - it can be tough to still feel real ownership when the stake in your business is minuscule compared to other investors around the table. If used sensibly, venture debt will strengthen innovative companies by significantly boosting business trajectory, protecting ownership and control of founders, as well as leaving more room to incentivise key talent, which in the current war for talent will be crucial for building lasting businesses.

Judith Dada, La Famiglia | General Partner

# Network access is a top criteria for LPs

We asked LP respondents to our survey to select the most important criteria for considerations to back a GP beyond their performance/track record and strategy. The most frequently selected responses highlighted by LPs were network and relationships (53%), access to dealflow (45%) and strategic insights and expertise (43%). It is also of note that a focus on ESG was selected by 28% of respondents, while a focus on diversity and inclusion was only selected by 6% of LPs.







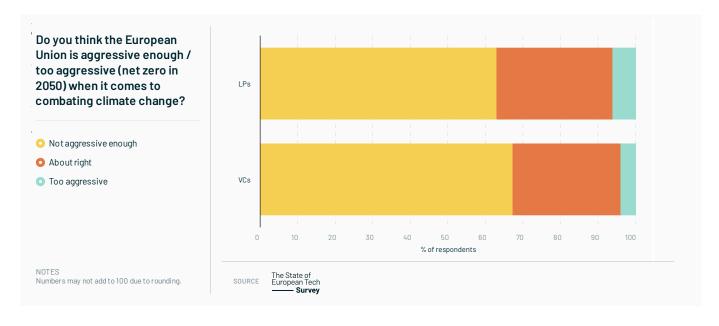




# Capital allocators want more climate strategy

LPs and VCs generally believe the climate change mitigation strategies led by the European Union should be more aggressive.

This poses the question: will they increasingly take matters into their own hands, and leverage the funds at their disposal to develop the solutions?

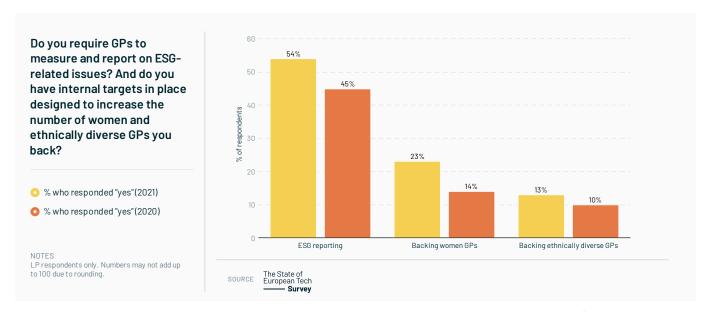


# ESG and GP diversity and inclusion is becoming more important to LPs

Commitment to environmental, social and corporate governance (ESG) among LPs has increased since 2020, with 54% of them now stating that they have put in place ESG targets in respect to the funds they invest in.

The number of LPs committing to targets to investing in woman and ethnically diverse GPs has also risen - though the share lags significantly behind those with ESG-specific targets. It is also notable that there has been a more pronounced increase in the number of LPs with targets for investing in woman GPs than those that have set targets for investing in ethnically-diverse GPs, despite an increased focus on discrimination against ethnic and racial minorities in tech gaining ground in the

The number of LPs setting KPIs in these areas is of course not a measure of the ultimate outcomes, but should at least drive greater awareness and focus on allocating capital to a more diverse set of GPs.













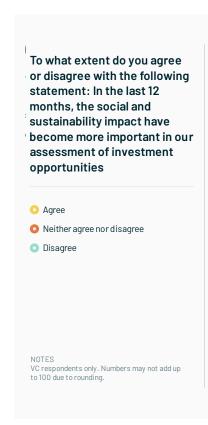
I am more optimistic than ever about racial diversity in VC. However, it's still very difficult for diverse founders to break out unless they've created wealth themselves by building companies and recycling capital later on.

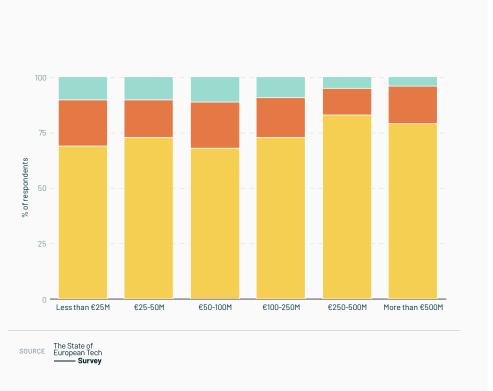
In the UK, Marshmallow became a unicorn this year. Oja, led by a Black female founder, just raised \$3.4m. VC funds are becoming more intentional in identifying diverse founders and seeing the opportunity there. We need more diverse managers and a more inclusive investment landscape. The ingredients are here to build a fairer ecosystem: Andy Davis is angel investing, Black Seed is building a seed ecosystem in Brixton, Impact X at the growth stage. But this needs to be amplified, with greater awareness, visibility and also greater capital commitments. We need talented diverse people in finance to see VC as a route. There are some great programs already like Included VC in Europe, which is increasing the diversity within the investment pool, or Future VC and the Newton Programme, providing a more global exposure to VC.

Rodney Appiah, Cornerstone Partners | Chairman and Co-Founder

#### VCs are more focused on impact

VCs respondents from funds of all sizes overwhelmingly indicated an increased focus on impact when assessing investment opportunities (73%) compared to 12 months ago. Respondents from larger funds (>€250M fund size) were more likely to respond that they have placed increased importance on impact with more than 80% of respondents agreeing with the statement.













It is worth diving one step deeper, and looking at how selection criteria for fund managers vary between different stages. What we find is that at each stage, LPs prioritise the qualities that can differentiate fund managers among their peers. For example, LPs who primarily invest in first-time fund managers are most focused on tapping into a new network. What is also really striking is that those who invest across all types of fund managers and are therefore "fund managers agnostic" are also active participants in strengthening the VC landscape in Europe.

#### What are the most important expectations from the GPs you invest in beyond track record and strategy?

	FIRST TIME FUND MANAGER (FUND I)	EMERGING FUND MANAGER (FUND II OR III)	ESTABLISHED FUND MANAGER (FUND IV +)	FUND MANAGERS AGNOSTIC
01 Network/ Relationships	50%	58%	62%	53%
02 Co-investment Opportunities	35%	48%	55%	47%
O3 Strategic Insights & Expertise	35%	42%	48%	44%
04 Focus on ESG	30%	38%	41%	38%
05 Access to Deal Flow	25%	31%	34%	34%
Strengther the European VC Ecosystem	25%	21%	14%	28%
07 Focus on Diversity & Inclusion	10%	2%	3%	9%





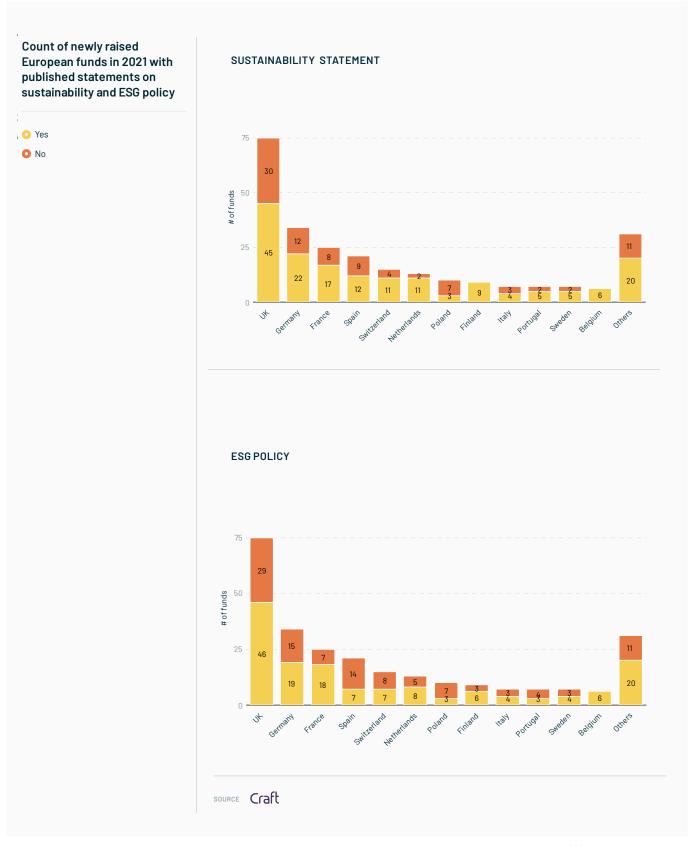






## Half of newly raised venture funds have an ESG policy

Looking at new European venture funds raised in 2021, we found that overall, more than half of them listed either a sustainability statement or ESG policy on their website. Looking at the top ten countries by count of new funds, the disclosure level is on average above 50%, with a few exceptions in Spain, Switzerland and Poland which trail behind on one or both measures. Finland and Belgium lead the way, with nearly all new funds listing both ESG policies and sustainability statements.









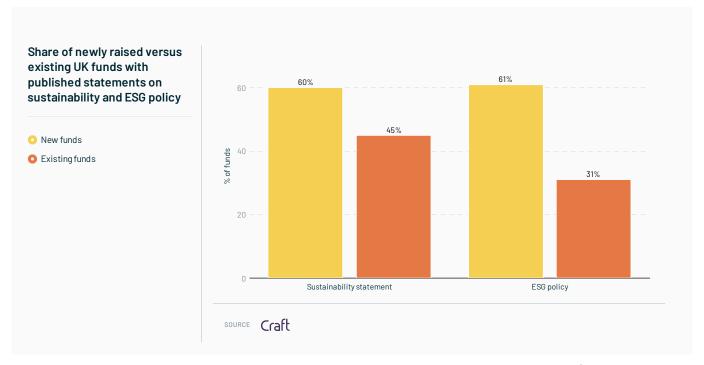
The VC community needs to educate themselves on the problems that we are facing with the climate crisis and the various VC opportunities that have arisen in this space.

I am excited by the fact that investors are finally realising that positive impact and profit can go hand in hand. There is still work to do to educate ourselves on climate problems, and which can be solved by VC funding being more proactive in these spaces. We need to be aware of the changes in regulations that will accelerate the growth in this space as these will open opportunities to invest in less obvious Climate Tech startups, as well as areas such as deep tech, or slightly higher Capex companies that have not traditionally been easy for VCs to invest in. The VC community also needs to work closely with universities and researchers to ensure that we are more aligned to help needed solutions get to market quickly.

Heidi Lindvall, Pale Blue Dot | General Partner

# A clear direction of travel in commitments to ESG and sustainability

Zooming in on the UK, which is home to the largest number of European VC funds, it's interesting to compare the implementation and disclosure of sustainability statements and ESG policies between those fund managers that have raised new funds during 2021 and the broader universe of established fund managers that have not raised a new fund in the past 12 months. What this shows is that fund managers that raised in 2021 have a greater likelihood of having these in place, especially in respect to the implementation of ESG policies. It's fair to speculate that the expectation of greater LP interest in these commitments is helping to drive a greater level of adoption within the GP community.









Do you have a preference for generalist or specialist VC funds? NO PREFERENCE

of LP respondents said they don't have a preference for the type of VC funds they invest in

The State of European Tech Survey

SPECIALIST VC FUNDS

of LP respondents said they prefer investing in specialist VC funds versus 17% who picked generalist VC funds

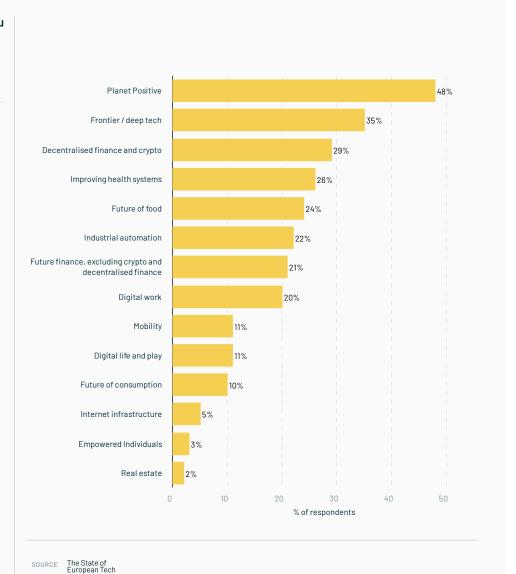
The State of European Tech Survey



# LPs are excited about different themes, but purpose cuts through

When looking at which themes LPs find particularly interesting in European tech, Planet Positive stands out across the board.

What sector/theme would you consider as the most promising for venture capital investments in Europe in the near future?



LP respondents only. Numbers do not add to 100 as respondents could choose multiple





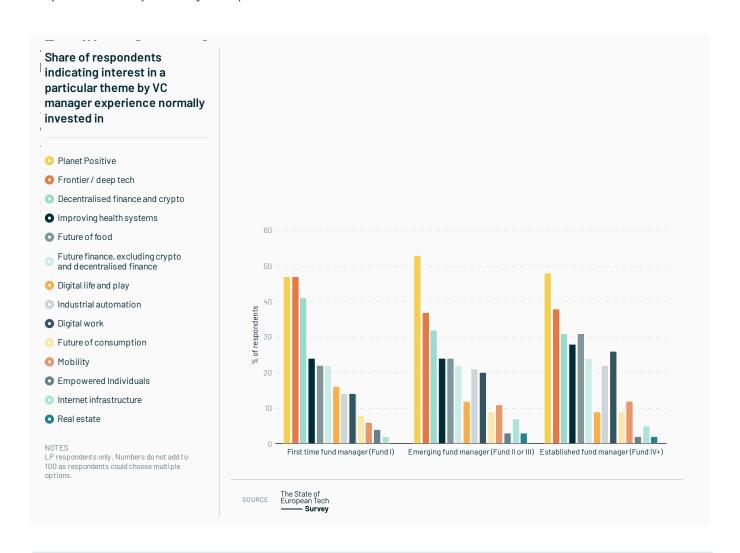




## LPs with preference for emerging fund managers are most interested in the health of the planet

Looking at the themes LPs see as most promising for VC investment in Europe by the type of fund managers they normally invest in, 53% of those LPs with a preference for emerging managers mention Planet Positive. This is closely followed by those with a preference for first-time and established managers at 47% and 48% respectively.

Those investing in first time managers also express a particular interest in Deep Tech. Interestingly, LPs who typically invest in specialist funds are overall most interested in Planet Positive, Frontier Tech, Decentralised Finance/Crypto, and Improving Health. These themes all fit under a broad umbrella of future-gazing, mission-oriented tech. Are LPs with an interested in this type of investment more likely to find what they're looking for in specialist funds?



## First-time fund managers are raising Planet Positive funds

The list of VCs that raised new funds in 2021 paints an interesting picture of the changing face of VC in Europe. Looking only at the top 10 largest funds raised this year to date, four of them are first-time funds and four of them have a dedicated impact focus, including food, cities and climate. It's clear that a new generation of VCs is emerging in Europe with a strong impact-driven mission and values. There is an ever deeper and more sophisticated pool of VCs with strong reputations and track records, especially emerging from the Seed stage. For example, funds such as LocalGlobe, Firstminute Capital, Stride.VC, Fabric Ventures and Icebreaker.vc all raised new, larger funds in 2021.







221



#### Select European VC funds raised in 2021 by fund size and country

#### \$250M+

	Investor	Fund Size (\$M)	Fund Country
1	Index Ventures	\$2,000M	United Kingdom
2	Balderton Capital	\$1,280M	United Kingdom
3	83North	\$550M	United Kingdom
4	World Fund	\$406M	Germany
5	Eight Roads	\$400M	United Kingdom
6	Blue Horizon	\$395M	Switzerland
7	DN Capital	\$358M	United Kingdom
8	2150 VC	\$313M	United Kingdom
9	Revaia	\$294M	France
10	Singular VC	\$265M	France

#### \$100-250M

	Investor	Fund Size (\$M)	Fund Country
11	Bayern Kapital	\$238M	Germany
12	LocalGlobe	\$220M	United Kingdom
13	Five Seasons Ventures	\$211M	France
14	Redalpine Venture Partners	\$161M	Switzerland
15	Firstminute Capital	\$160M	United Kingdom
16	Amadeus Capital Partners	\$152M	United Kingdom
17	Norrsken VC	\$148M	Sweden
18	Stride.VC	\$140M	United Kingdom
19	btov Partners	\$135M	Switzerland
20	Element Ventures	\$130M	United Kingdom
21	Fabric Ventures	\$130M	Luxembourg
22	Heal Capital	\$122M	Germany
23	Dawn Capital	\$120M	United Kingdom
24	re.Mind Capital	\$120M	Malta
25	The Untitled Ventures	\$119M	United Kingdom
26	Icebreaker.vc	\$119M	Finland
27	Maki.vc	\$118M	Finland
28	Atlantic Food Labs	\$117M	Germany
29	Novo Holdings	\$104M	Denmark
30	Al1 Ventures	\$100M	Russia

#### <\$100M

	Investor	Fund Size(\$M)	Fund Country
31	SNÖ	\$100M	Norway
32	Earlybird Venture Capital	\$88M	Germany
33	Visionaries Club	\$85M	Germany
34	Frontline Ventures	\$85M	Ireland
35	Angular Ventures	\$80M	United Kingdom
36	Kaya VC	\$80M	Czech Republic
37	IPR.VC	\$77M	Finland
38	Speedinvest	\$71M	Austria
39	Norselab	\$70M	Norway
40	Pitalia Capital	\$69M	United Kingdom
41	Par Equity	\$69M	United Kingdom
42	Redrice Ventures	\$69M	United Kingdom
43	Brunnur Ventures	\$64M	Iceland
44	Fuel Ventures	\$64M	United Kingdom
45	Moonfire	\$60M	United Kingdom
46	OTB Ventures	\$60M	Netherlands
47	BackingMinds	\$60M	Sweden
48	Goodwell Investments	\$60M	Netherlands
49	Frumtak Ventures	\$57M	Iceland
50	DAA Capital Partners	\$50M	Switzerland
51	Hambro Perks	\$50M	United Kingdom
52	Momenta Ventures	\$50M	Switzerland

NOTES Based on European VC 2021 vintage funds headquartered in Europe.

SOURCE #PitchBook



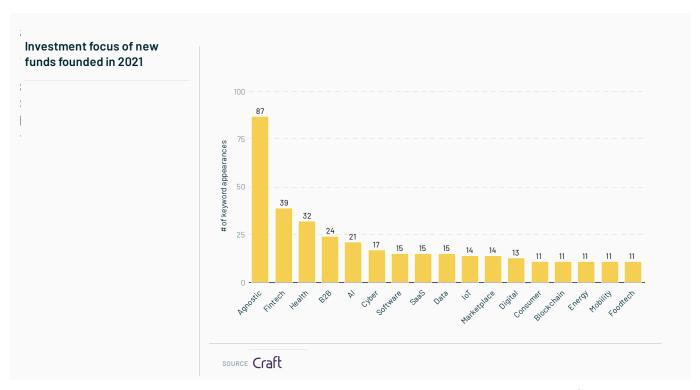






## Fintech, health and B2B software are key thematic focus areas of new funds raised in 2021

Beyond the emergence of new first-time funds with a dedicated focus on purpose, we partnered with Craft to quantify the thematic focus of the more than 250 VCs that raised new funds in 2021. A third of those funds position themselves as sectoragnostic, but for those that disclose specific thematic interests, the most prevalent areas of focus are fintech, health and B2B software. It's interesting that crypto and blockchain was not frequently cited as a specialist thematic focus area by the 2021 vintage of funds.











## Rise of the European crypto funds

Europe has long since been home to OG crypto investors that have stayed the course through every market cycle and 'crypto winter'. This year many of them returned to LPs to double down on the opportunity, buoyed by strong returns as European crypto winners helped to deliver benchmark-beating returns. Greenfield One announced Europe's largest dedicated crypto VC fund to date in November 2021 at \$160M. Other notable fundraises in 2021 included Fabric Ventures raising a second fund at \$130M.



Semantic Ventures (United Kingdom)



**Fabric Ventures** (United Kingdom) Raised \$130M in 2021



Greenfield One Management (Germany) Raised \$160M in 2021



Libertus Capital (United Kingdom) Raised \$9.7M in 2020



Tioga Capital Partners (Belgium) Raised \$50M in 2020



**Bitscale Capital** (Switzerland)



**Outlier Ventures** (United Kingdom)



**BitFury Capital** Raised \$80M in 2018



FinLab (Germany) Raised \$99.7M in 2020











I'm an American who chose to build my venture fund, January Ventures, in Europe because I believe the ecosystem here is just getting started.

We are seeing more entrepreneurs choosing to stay in Europe to build their companies instead of moving to the US. We are seeing experienced operators from the European headquarters of big tech companies increasingly joining local start-ups and scale-ups. And we are seeing it become more of a social norm to choose a job in tech over other careers. Still, I see gaps and opportunities. We need more experienced operators in venture in Europe. We need more diversity - of thought, of background, of experience. And we need to break down silos, in order to create a more collaborative ecosystem across Europe.

Maren Bannon, January Ventures | General Partner













05.2 VC: Disrupt or be disrupted







#### **ARTICLE 05.2**

It's clear that competition to win over the best founders has significantly increased this year and is being felt by investors at every stage. More competition in the market has had certain consequences, like increased valuations, but VCs are innovating to stay in the game.

#### **INSIGHTS**

# More competition for investment opportunities

Competition for investment is high across the board - the biggest perceived change in competitive intensity took place at Seed stage, where 93% of respondents reported increased intensity this year, compared to 57% last year.

## European VC dry powder is not equally distributed

European VCs are seated on \$47B of dry powder. The UK & Ireland, France and the Benelux capture 60% of it, but VC dry powder has tripled In Central and Eastern Europe since 2016.

## Intense competition leading to valuation inflation

Valuation and cheque size inflation are the most cited consequences of heightened competition; pre-emptive rounds are top of mind for later stage investors, and a third of respondents mentioned lighter due diligence.





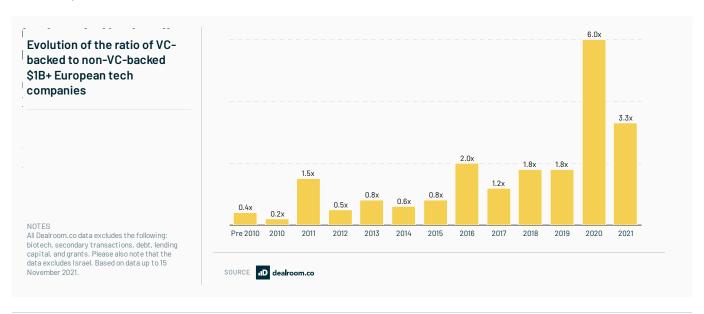


# Venture is the leading funding mechanism for Europe's latest generation of unicorns

Over the course of the last decade, venture capital has become a funding mechanism of choice for Europe's most ambitious entrepreneurs that aspire to become global category leaders and build companies of scale with enduring success.

The increase in the availability of venture capital, the sophistication of VC investors and also general awareness of the perceived value of raising it, has resulted in a clear shift in the ratio of companies that scale to billion-dollar valuations and beyond with or without raising venture capital.

Looking back, it was more common to see companies scale to large outcomes without having raised venture capital. More recently, the number of large companies that have raised venture captial to fund their journey far exceeds those that take alternative paths.

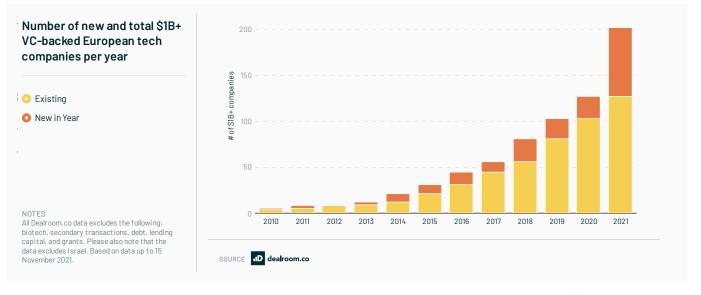


#### 202 VC-backed unicorns

Just two years ago, at the time of publication of the 2019 edition of this report, there were 99 VC-backed companies that had reached a unicorn status.

By the end of 2019, Vinted had become Europe's 100th VC-backed unicorn.

In less than 24 months since then, the number of VC-backed \$1B+ companies has more than doubled, fuelled by a rapid acceleration in the number of unicorns that surpassed the billion-dollar valuation milestone in 2021. The European VC-backed unicorn herd has grown from 115 at the end of 2020 to 202 at the time of writing the report.





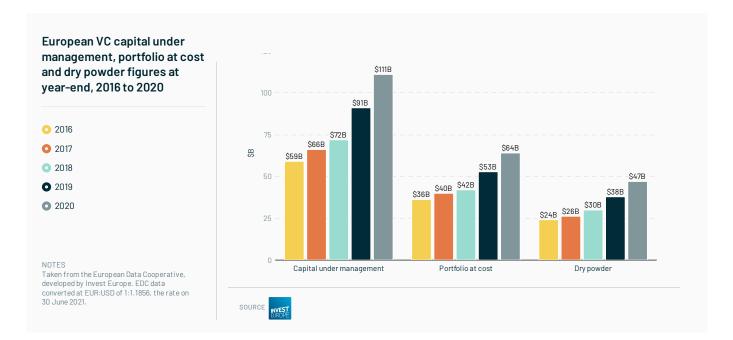




## European VC capital under management doubled between 2016-2020

The European venture asset class is scaling. Capital under management for European VCs has more than doubled in size from 2016 to 2020 from \$59B to \$111B, while dry powder, which refers to the amount of available capital available for future deployment, has now reached a new high of \$47B in 2020.

The growth in the amount of dry powder has been accelerating in recent years as fundraising levels have increased in Europe. Dry powder is a helpful metric and serves to provide a greater sense of the available liquidity in the market held by local investors in comparison to other metrics such as annual VC funds raised.





There is more (long needed) growth capital going into our market helping European companies to think bigger and become global category leaders, instead of local champions.

In our view the VC market is right now undergoing its biggest disruption in history. New players enter with new playbooks. Capital has commoditised. Network becomes key to win deals. Look at multi-stage US VCs opening offices in Europe; new emerging single GP managers such as Harry Stebbings' 20VC or Max Claussen's System One; or hedge funds such as Tiger or Coatue who provide fast and "less complex" capital. But at the same time Europe is highly decentralised and not easy to enter for international players: at Visionaries we unite successful digital entrepreneurs, family businesses & industry leaders in a micro VC to complement the world's best VCs. To be honest there has never been a better time for us to be an "entrepreneur in VC" constantly challenging ourselves to continue building the best product for founders.

Robert Lacher, Visionaries Club & La Famiglia | Founding Partner





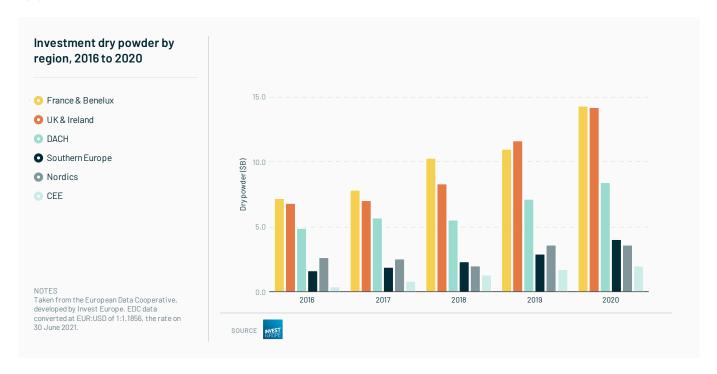




# European VC dry powder is not equally distributed geographically

In aggregate, European VCs are seated on \$47B of dry powder. Dry powder here refers to the amount of money VCs have left to spend. Two regions, (1) UK & Ireland and (2) France and the Benelux region, capture 60% of the available dry powder.

There are clear signs however of growing dry powder across all sub-regions. In Central and Eastern Europe, for example, VC dry powder has grown by over 3x since 2016.





The current move to more remote deal sourcing has been great for Jobandtalent as a company based in Spain. Proximity to an investor is no longer an advantage.

The main investment hurdle is being a Spanish company. Spain is still a young ecosystem that has not generated yet any €10B+ tech company, which generates some fears for investors about our capacity to create global winners in our country. We are not in one of the top tech hubs with a high concentration of VC-Growth investors, and that put us in disadvantage in the past when we were raising funds against companies that were closer to the cash.

Juan Urdiales, Jobandtalent | Co-Founder and Co-CEO







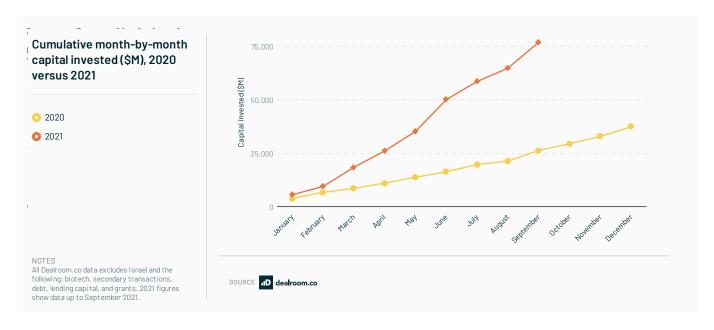


## Pace of capital deployment into start-ups accelerated over the course of 2021

The pace of deployment of capital into startups in 2021 has ramped up over the course of the year. January kicked off the year with a record month of capital invested and launched a series of record-breaking with each month beating any prior year-on-year records.

The activity also accelerated as the year went on, culminating at \$15B invested in a single month in June. The ecosystem saw \$12B of capital invested in the last month of our reporting.

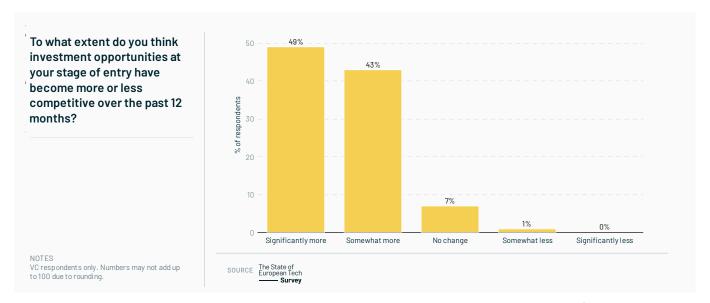
As of September 2021, the cumulative investments into the European tech ecosystem is nearly 3x the equivalent at the same time last year 2020.



## **Competition is intense**

The rapid acceleration in the velocity of capital deployment into the European tech ecosystem coupled with a large growth in the number of active investors has unsurprisingly resulted in an intensification of the competitive dynamics of today's market reality.

93% of VC respondents to the survey stated that investment opportunities have become significantly or slightly more competitive in the past 12 months. This marks a significant change in sentiment compared to 2020. There is no doubt that competition has heated up.







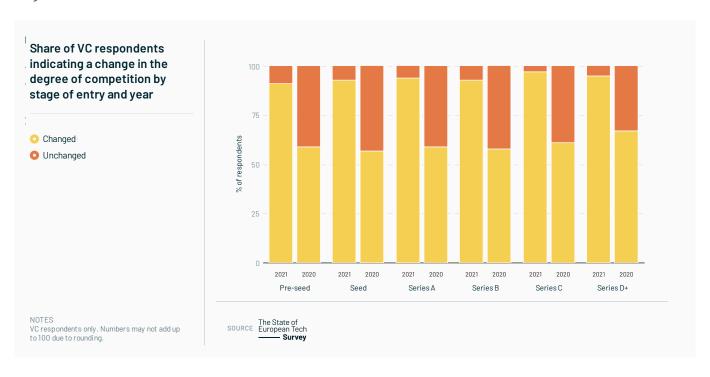




# Increased competition is being felt by investors at every stage

Investor sentiment on the changes taking place to the competitive landscape is broadly aligned irrespective of their preferred stage of entry.

It's clear that competition to get access to and win over the best founders is changing from the first cheque that is invested all the way through to the late-stage growth stage of the market.





At Lightspeed, we made our first Europe investment back in 2009, then invested in Blockchain.com in the UK in 2014 and have now invested >\$500M in Europe so have always been big believers in the geography...

... and I am biased being English myself! After these investments, our interest in Europe has only grown and that's a result of seeing such strong founders emerge who have gone on to build companies like Multiverse, Calm, Vinted, Zapp and Grafana. These are often 2nd or 3rd time founders who have built experienced management teams around them which only increases my optimism for Europe. I would point at companies such as Multiverse where founders like Euan Blair are disrupting the apprenticeship market first in the UK and then in the US and they will very much become a global winner by focusing on Europe first. We have always believed in Europe's ability to create global successes which is also why you see Blockchain.com start in the UK and now be a winner across many countries.

Nicole Quinn, Lightspeed Venture Partners | Partner





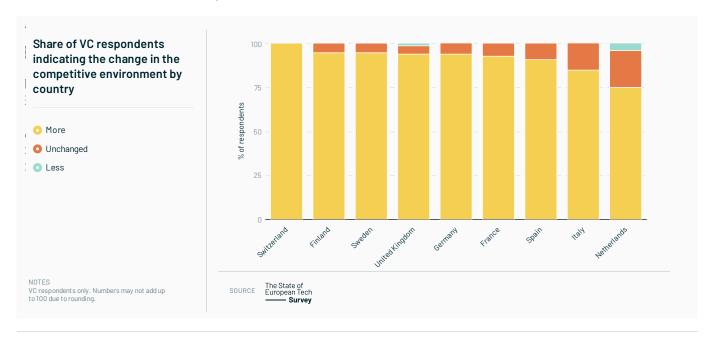




# This perceived increase in competition is felt by VC respondents from across Europe

The perceived increase in competition is shared by VC respondents based across different markets in Europe.

VC respondents from the Netherlands had a slightly different outlook on how competition has changed, though even those respondents overwhelmingly perceived the market to have become more competitive.

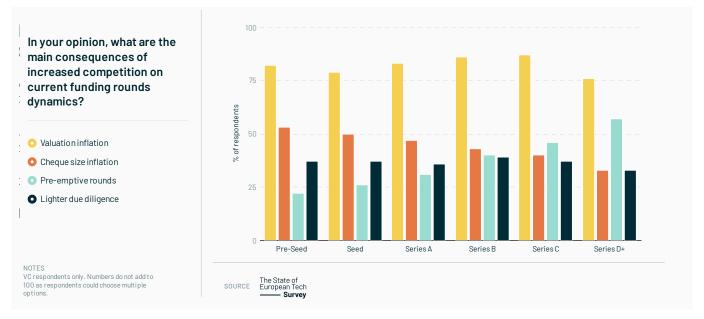


## Inflated valuations are the perceived main consequences of increase competition

We asked investors to share their perspectives on the implications of increased competition on current funding round dynamics.

Unsurprisingly, valuation inflation is the most cited impact, a sentiment shared by investors at every preferred stage of investment. As they need to square higher valuations with fund ownership targets, it's perhaps also not surprising that cheque size inflation is also frequently-cited consequence of today's market dynamics.

The need to act differently in order to beat the competition is why pre-emptive rounds have become an increasingly common feature of the market, most notably at the later stages. As funding round timelines compress due to the increased velocity of the market, it's clear that investors are seeing lighter due diligence as another implication of the current market environment.









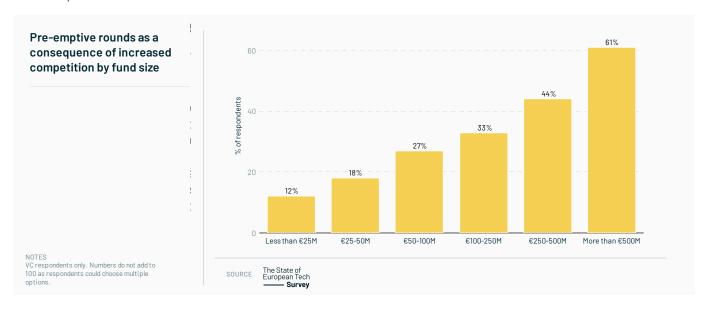


#### Double clicking on pre-emptive rounds

It's interesting to note how VC perspectives on the increased prevalence of preemptive rounds varied depending on the size of the fund they work for.

Respondents working at larger funds (€500M) had a significantly higher probability of calling out the level of pre-emptive rounds than those working at smaller funds. This obviously aligns with the variance seen in responses based on a VC respondent's preferred stage of investment.

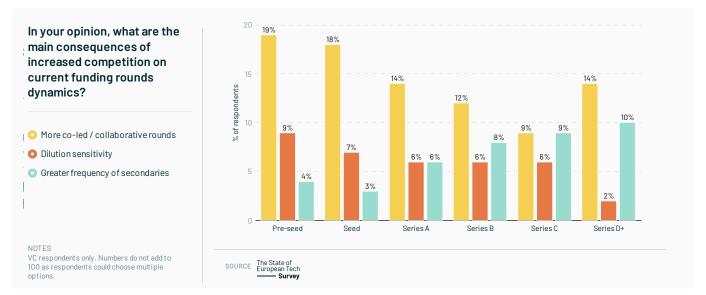
Interestingly, survey responses also showed that respondents that had a higher probability of citing pre-emptive rounds as a consequence of the changing market dynamics were also the most likely to cite that the market has become significantly more competitive.



## More collaboration is one way to counter competition

Beyond the considerations that we have already highlighted, VCs also shared their perspectives on other, perhaps secondary, consequences of increased competition.

These include greater propensity for co-led or collaborative rounds, a change in the dilution sensitivity of founders (less dilution!), and a greater frequency of secondary share sales to enable founders, early team members or investors to take some liquidity. These trends were cited with much lower frequency, but they have certain become more common in the market, though to varying degrees by stage. They are further indications of how VCs are responding to competition, but also of a change in the negotiating leverage held by founders that find themselves with multiple investors competing for their partnership.













It's fantastic to see the ecosystem expanding to include different investors, many of whom bring diverse perspectives.

For example, just this year at Ada Ventures we've co-invested with impact investors, investors narrowly focused on specific sectors, investors providing a hybrid debt and equity model and investors targeting overlooked founders. This is a really healthy sign and I hope it will lead to less group-think and a wider range of businesses and founders getting funded.

Check Warner, Ada Ventures | Partner







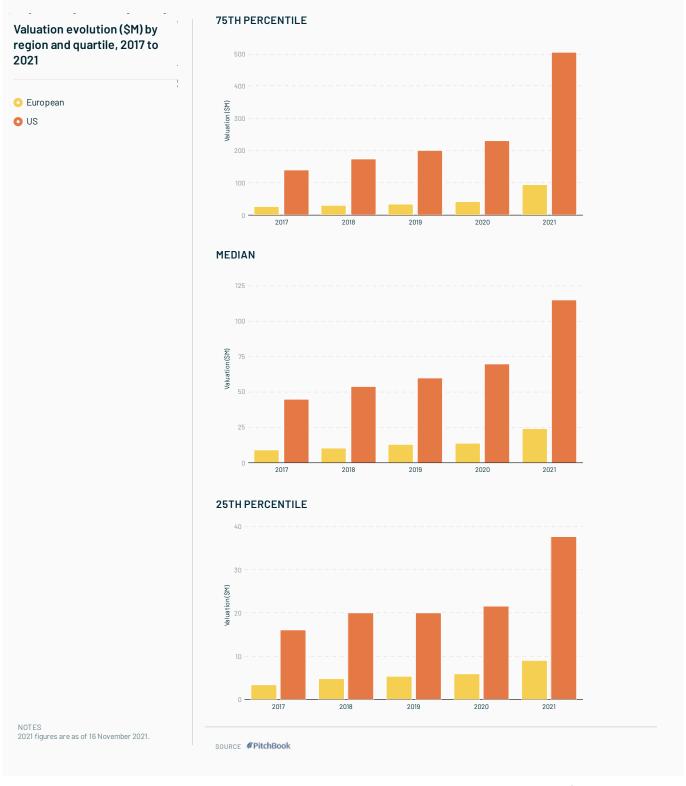


# A step-change in valuations globally in 2021

The perceived change in valuations is reflected in the actual data. This year saw a step change in valuations on both sides of the Atlantic. The median pre-money valuation of a funding round in the US reached \$115M in 2021, up 64% from \$70M in 2020 and 156% from \$45M in 2017.

In Europe, the median pre-money valuation across all rounds increased 71% from \$14M in 2020 to \$24M in 2021. The median pre-money valuation is up 167% from \$9Min 2017. The trend lines are the same, but valuations in Europe remain much lower on average than in the US.

It's clear, however, that the underlying dynamics differ markedly between the top and bottom quartile opportunities. While valuations at the 25th percentile increased 50%year-on-year in Europe, they increased by 132% for those at the 75th percentile.









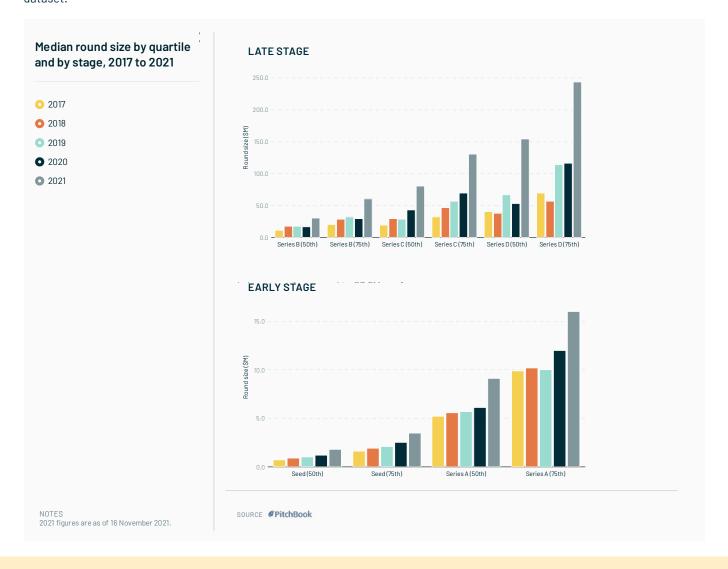


#### Round sizes and round stage labels are disconnected

In today's market, it's hard to hold on to any norms. Seed rounds today look like yesterday's Series A rounds. Series A rounds look like Series B rounds, and so on. Rounds sizes and round labels, at least as the market once understood them, have become disconnected.

At Seed, for example, the median round size increased again in 2021 to \$1.8M, up 50% from 2020 and 2.6x versus five years ago. At the 75th percentile, Seed rounds have now increased to \$3.5M, up from \$2.5M in 2020.

At Series A, the median round size has now increased to \$9.1M, while the average round size at the 75th percentile grew to \$16M. These increases in round sizes over time with a notable step change in 2021 are reflected at every round stage in the dataset.





The competition for funding is certainly hotting up as some of the US players establish operations in Europe.

We're also seeing more-traditional US-headquartered technology companies continue to expand their presence across the region. All of which creates momentum behind venture funding, but it doesn't influence or change my perspective per se. I focus on the founders, their teams, their vision and mission, and the ability of the product and/or service to transform a market. The fact that most of those companies are in Europe is more a function of my past and my personal and professional network—and being based in Estonia these days means I have my ear closer to the regional ground than before.

Ott Kaukver, Checkout.com | CTO









The era of its product light, top-line focused ventures is coming to an end and the region has built-up an impressive repertoire of tech-first startups that became thought and category leaders on a global scale.

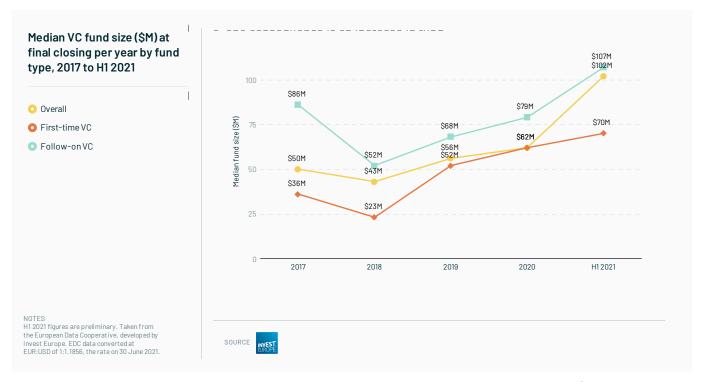
Europe's tech ecosystem is maturing but far from maturity. Every year, I'm continuously impressed by the rising calibre of talent. I also believe the unbundling of equity is here to stay. Companies shouldn't use expansive equity dollars on initiatives with capped upside - Sales & Marketing spend for example. As the power shifts from a buyers (i.e. investors) to a sellers (i.e. founders) market, we'll increasingly see companies pushing for a healthier capital structure (including equity, debt and other forms of financing), as is commonplace for public companies.

Max Rimpel, General Catalyst | Partner

# VC funds also keep growing in size, yet another testament to the market's competitiveness

As funds look to calibrate increased cheque sizes with fund models that often optimise for portfolio diversification and ownership, especially at the early stages, one consequence is an increase in fund sizes to ensure investors have the firepower to execute their strategy.

This is reflected in the data that shows a continued increase in median fund sizes. The median VC fund closed in 2021 hit a new record high for Europe at \$102M, up from \$62M in 2020 and more than double the median in 2017. This trend is visible both for first-time funds, as well as for follow-on funds, both of which hit new record levels in 2021.





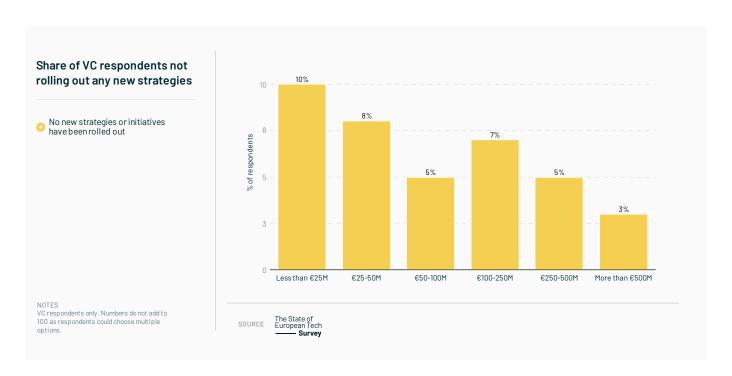






#### Innovating to stay competitive

To better understand how VCs are innovating and adapting their strategies to stay competitive we asked respondents to share what, if anything, they are doing differently. Over 90% of VCs, representing all fund sizes, shared that they are rolling out at least one or more new initiatives or changes in strategy to stay competitive.





Founders are not homogenous — they have different backgrounds and personalities, and it's reflected in their companies. It makes sense that the hyper-growth model of the traditional Silicon Valley-style VC is not suitable for every entrepreneur or business.

The rise of alternative financing will help fund more diverse founders, enable the growth of different types of companies and result in a broader variety of problems being solved. Building a company is challenging; making it successful is exceptional. The type of funding that fits your goals, ambitions and entrepreneurship style best is one of the most critical choices a founder must make. Every funding type carries its own opportunities, challenges and expectations. Having options will allow more companies and founders to make their ambitions a reality, resulting in a stronger ecosystem for all.

Janneke Niessen, CapitalT | Co-Founder





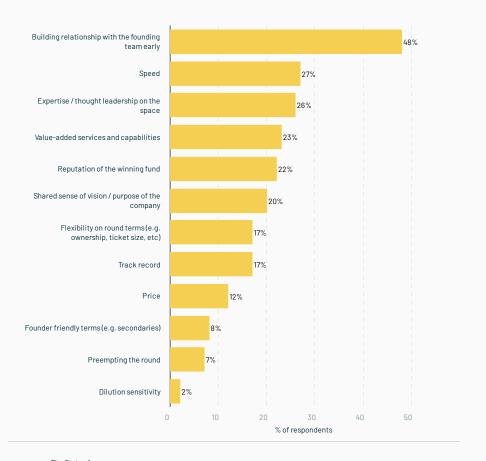




## Relationships matter

Building strong founders relationships early on is the most important success factor to winning in a competitive deal sitution, according to VC respondents. This is followed by speed and the ability to demonstrate relevant expertise. Interestingly, VCs were much less likely to cite price, terms or pre-emptive motions as decisive

Over the past 12 months, and thinking generally about the market, what in your opinion have been the most decisive factors to win a competitive deal situation?



VC respondents only. Numbers do not add to 100 as respondents could choose multiple options.

SOURCE The State of European Tech —— Survey











## VCs are adapting to the market dynamics in different ways

There are certain changes that all VCs are making in order to stay competitive, including focusing on building relationships with founders earlier and increasing the speed of their investment processes.

There are others that bigger funds have the luxury of , such as scaling the size of the investment team to give more capacity or building out a platform team to work with founders.













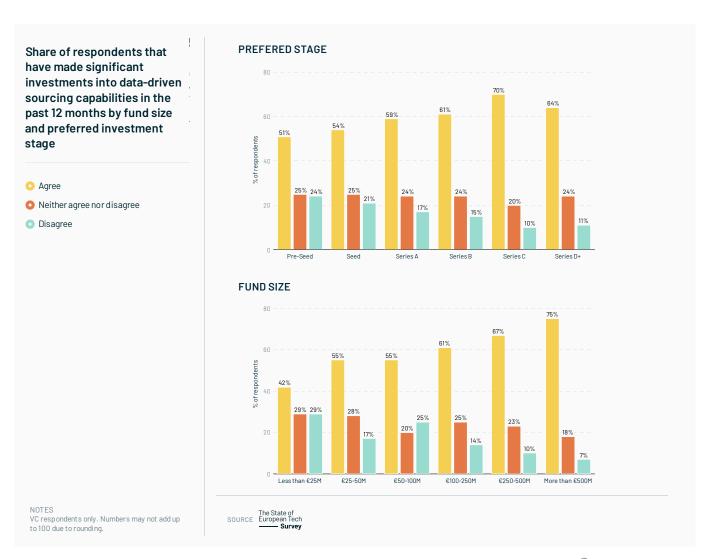
The idea of a linear development of a business is almost gone and increases compression of the investment landscape.

We are witnessing an increased squeezing of the VC landscape - top tier VCs are increasingly trying to play a role at seed and pre seed and companies like Hopin are skipping traditional funding stages. Valuations are also being highly inflated, and there are other signs we need to watch. In the UK, the impact of Brexit coupled with high inflation and low interest rates is quite a lot to absorb for the industry. We can't talk about a bubble yet however. Europe is still relatively underserved - France has typically been a difficult market to break into for VCs, but funds like Singular Ventures are now raising huge amounts there. The opportunity in Germany is still huge.

Rodney Appiah, Cornerstone Partners | Chairman and Co-Founder

# Data and machine learning becoming more common place in venture

The role of data and technology is becoming more important for VCs. More than 50% of all VC respondents shared that they have made 'significant investments' into data-driven sourcing capabilities in the past 12 months. Understandably, given the different level of resources of funds of different scale, VC respondents from larger funds (>€500M) are most likely to say they have been doubling down on this capability, though there is a strong level of agreement across respondents from all fund sizes.



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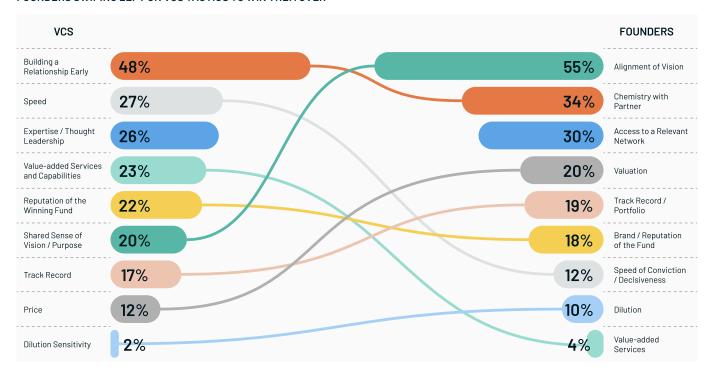






VC respondents have shared their views on what they believe it takes to win in a competitive deal situation as well as the strategies they are rolling out to stay on top of competition. On the other end, founders have also provided their opinion on what they look for in a partner so it is interesting to compare and contrast, even though they are not exactly like for like.

#### FOUNDERS SWIPING LEFT ON VCS TACTICS TO WIN THEM OVER













## Overall, VCs score well on attributes that founders care about the most

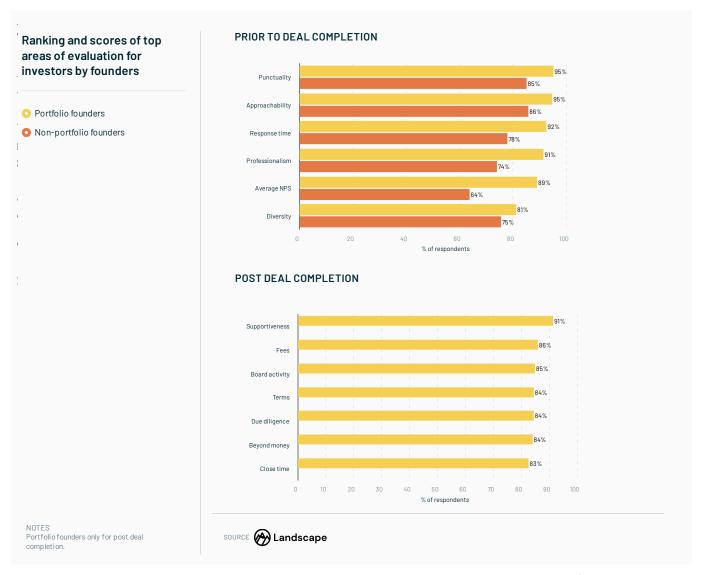
Landscape - a platform of anonymous VC and investor reviews - try to further understand areas where investors both impress and have room for improvement. This gives an interesting insight into how VCs might conduct themselves to make the strongest impression on the founders they meet.

VCs are most likely to be scored highly by founders for their punctuality, approachability and responsiveness. They are most likely to be scored down for diversity, due diligence time to close the round, and going 'beyond money' in their support for founders.

As may not be surprising, there are significant differences in how founders score their interactions with VCs, depending on whether they did or did not receive investment.

Punctuality and approachability ranked as most important for all founders. But it may not come as a surprise to see non-portfolio founders (i.e. founders who were not offered a termsheet) score VCs lower on all attributes pertaining to their experience with investors.

The two stand out pain points were (lack of) professionalism and (slow) response time, providing a call to action for VCs to ensure swift and constructive feedback is given to founders. For VCs looking to differentiate themselves, they can take action on the other low-scoring dimensions such as the support provided beyond capital or diversity.



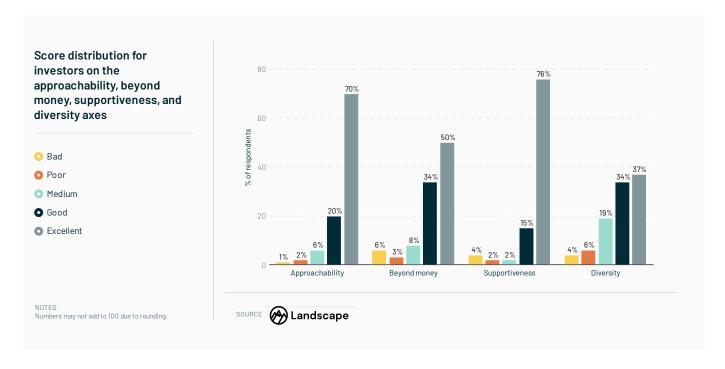






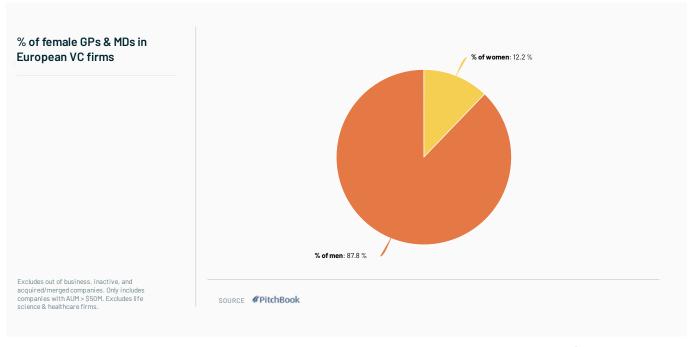
#### Founders are less likely to score VCs highly for diversity

The distribution of scores across each areas of evaluation from bad (=1) to excellent (=5), puts diversity into the spotlight. Only 37% of founders give investors an "excellent" grade on diversity compared to 76% for supportiveness. This goes to show that the continued lack of diversity amongst GPs doesn't go unnoticed by founders. Another key point: 1 in 5 founders rated VCs medium to low on "Beyond money".



## Diversity as a competitive advantage for VCs

Only 12% of GPs and MDs at European VCs are women. For VCs choosing to make diversity at GP level a priority, it could be a competitive advantage. Given chemistry and alignment of vision are so important to founders, having diverse GPs is just as important in winning deals than anything else.







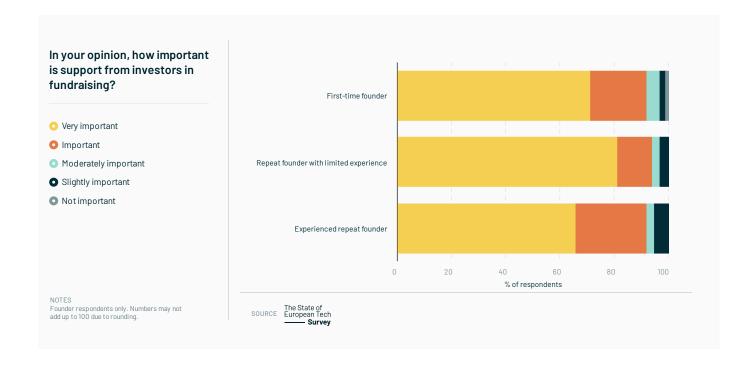




#### Founders rank support in fundraising as their number one request from VCs

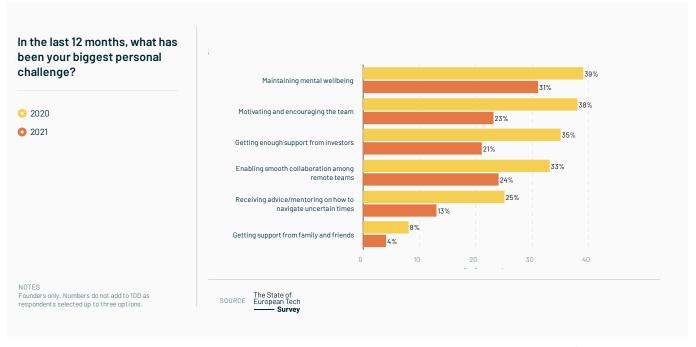
Founder respondents most frequently cited support in fundraising as either important or very important, when asked to give their opinion on various areas of support from their investors.

So what are founders most interested in post-investment? Fundraising support is by far the most important area investors can support in, with nearly three quarters (73%) of founders indicating it is very important. It is especially true for 82% of repeat founders with limited experience, while experienced repeat founders find it slightly less valuable with two-thirds (66%) ranking fundraising support as very important.



#### The challenge of remote work and mental wellbeing

Similar to 2020, maintaining mental wellbeing is the biggest personal challenge with 31% of founders reporting this, it is down year-on-year but remains by far the most selected option. It is also interesting to compare this to the need for more "community" support, one of the areas founders rated as important for VCs to provide support on.











# 05.3 Europe's evolving capital markets



#### **ARTICLE 05.3**

Across every metric, Europe's capital markets are maturing. There are more investors of every type, at every funding stage, and from international as well as domestic funds.

#### **INSIGHTS**

# More investors than ever - the pool is broadening as well as deepening

The count of unique institutions participating in rounds of \$100B+ increased nearly 7x in the past five years. Although 55% of rounds involve a venture fund, other types of investors are active in a meaningful share of deals such as corporate, private equity, but also LPs, corporate venture funds, angels and crossover funds.

#### The rise of the crossover investor

Crossover investors, who are typically public equity asset managers that also invest in privately backed companies and include the likes of Tiger Global and Coatue Management, have made a very visible and noteworthy foray into European tech in 2021. The top 12 most active crossover investors alone participated in 32% of rounds of \$100M+ in 2021 versus just 12% of rounds between 2017 to 2020.

# 2021: the year of megarounds

Megarounds over \$100M+ now count for a growing share of capital invested in European tech in 2021 while international investors are more active at later stages of funding.





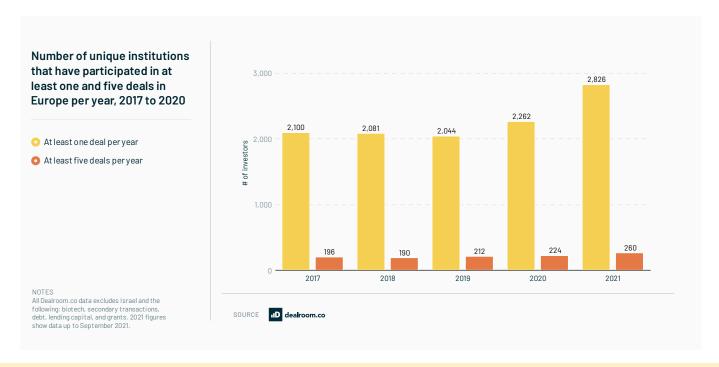




## More investors are venturing into European tech

The number of investors participating in the European tech scene has increased steadily, with close to 3,000 institutions investing in at least one deal in 2021. And we have continued to see the expansion of the depth and breadth of the investor base from angels and scouts to venture debt, private equity and crossover investors. Even public pools of capital are now coming into the private markets.

What this data does not show (but we will explore further in this article) is the increased "convergence of interests" amongst these different types of investors as their appetite to access European tech in the private markets grow.





The size of the European market is far more mature and larger than it was pre-pandemic, attracting a new set of investors as potential returns from VC backed businesses become more attractive than lower risk opportunities.

We're seeing greater inflows of capital coming from nontraditional investors and a more diverse range of capital sources. At the late stage, investors are willing to pay a premium to participate in pre-exit rounds which are boosting valuations. Beyond traditional equity capital, over \$11bn of venture debt has been raised across Europe in the year to date; almost \$4.5bn of that has been raised by innovation businesses in the UK alone, as European businesses embrace a hybrid approach to financing growth. Also, entrepreneurs who are on their second or third venture are more comfortable with using venture debt to reduce the cost of capital and ownership dilution, while the number of providers of debt has grown substantially. US investment entering the UK is also a factor as venture debt is used in nine out of ten rounds in the US. As US participation grows, levels in Europe will change.

Sonya Iovieno, SVB UK Branch | Head of Venture & Growth









## Venture debt continues to chart its own path

Venture debt is an important source of alternative funding in the European capital markets and plays a highly complementary role alongside equity-based venture capital.

The absolute value of total venture debt funding in 2021 has already set new records in just the first nine months of the year. On an annualised basis, total venture debt funding will approach the \$3B level, growing more than 2.5x over the past five years. On a relative basis compared to equity financing, the growth of venture debt has not kept pace and, as a consequence, has fallen as a share of total funds raised across equity and debt financing.

#### **VENTURE DEBT FUNDING IN 2021**

annualised debt funding invested in European tech companies

SOURCE



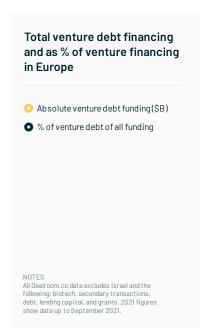
**5 YEARS GROWTH** 

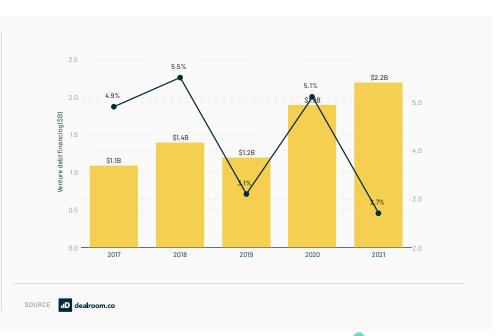
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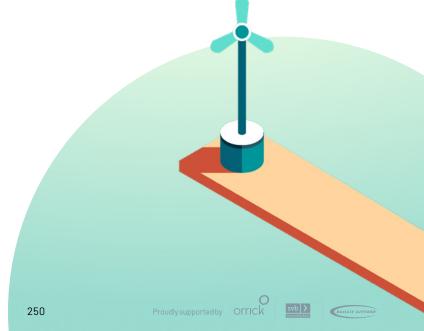
over the past 5 years

SOURCE

■D dealroom.co



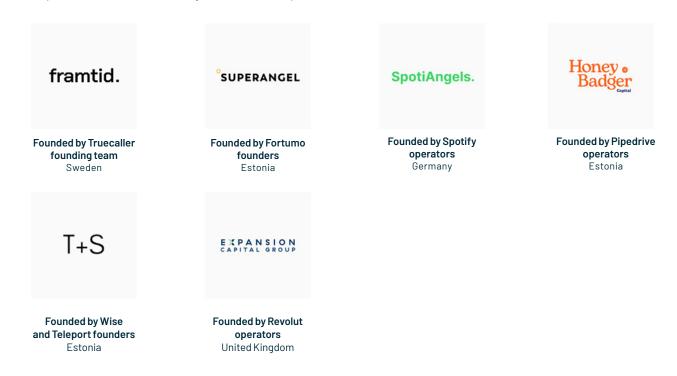






#### Select angel networks in Europe

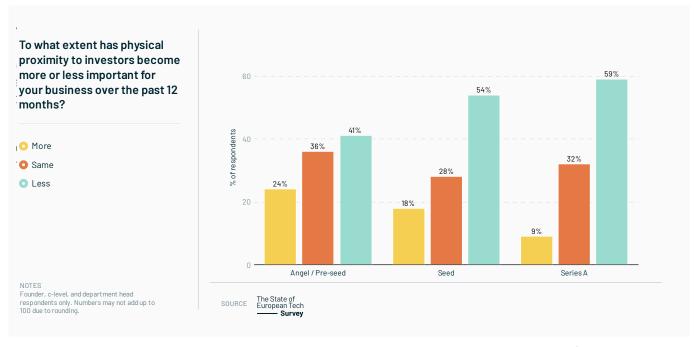
\$1B+ alumni angels joining forces to supercharge early stage private markets. This is an interesting trend that complement the VC led initiatives covered in the article: VC Disrupt or be Disrupted. Whether started by VC funds or by operators themselves, these programmes participate in building out the depth and breadth of the investor landscape to re-invest into the next generation of companies.



#### Founders care less about physical proximity to investors

Beyond the strengthening of the talent base and the quality of companies started in Europe, another factor that is broadening access to more investors is the decreasing importance of physical proximity to investors.

A large share of founders - in some cases the majority of founders - from Pre-seed to Series A said they now place less importance on physical proximity to investors compared to 12 months, building on a trend already highlighted as meaningful in last year's report.







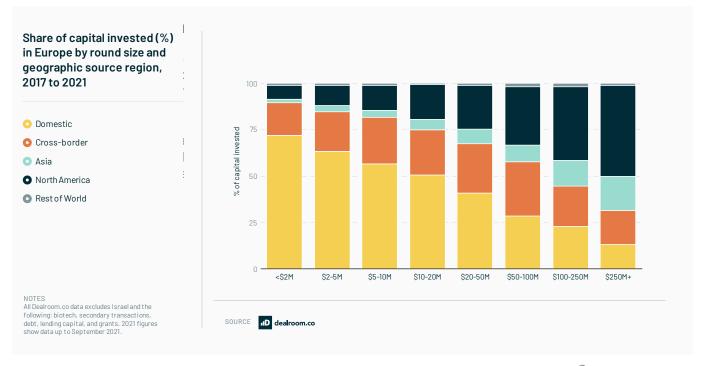




## International capital more important at later stage

As Europe's private capital markets supporting the tech ecosystem mature, they're have become more international, both in terms of cross-border flows of capital within Europe, as well in terms of the flow of overseas investment into the region from outside Europe, especially from the United States.

The importance of international capital from outside Europe is particularly prevalent in later-stage funding rounds of \$50M and above. International capital is more easily deployed at these stages, but this dynamic also speaks to the relative lack of depth and, arguably, perceived sophistication of the European investor base targeting those stages.



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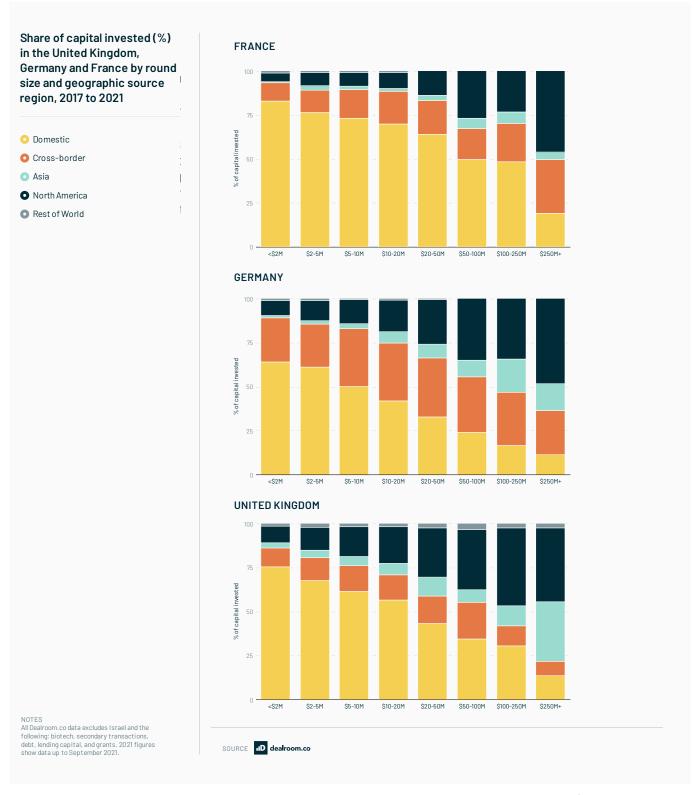




#### The geographic sources of capital invested vary significantly across countries

There are some similarities across markets: domestic funding is the main source of capital in the United Kingdom, Germany and France at the early stages and international capital plays a large role at late stages. But there are some nuances across these markets.

France, for example, remains the most 'domestic' amongst Europe's largest markets, including at the later stages. Multi-stage funds such as Eurazeo and Partech are very active local growth investors in France, and more are coming - like Revaia, a newly raised growth fund of 2021. But it's also clear that the dynamics in the French market are evolving thanks to a healthy appetite from international investors from inside and outside Europe to deploy capital in France.









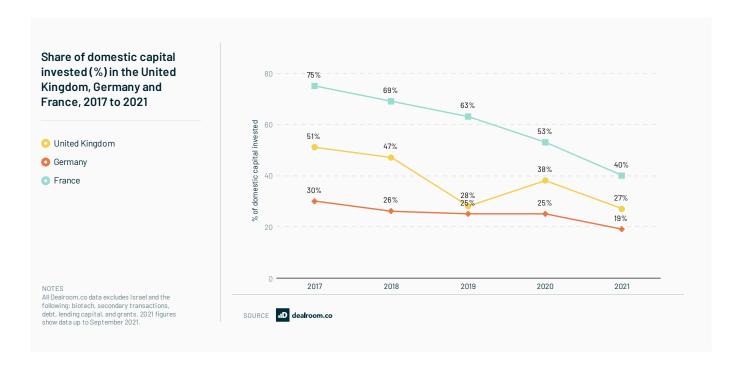




#### Internationalisation of European tech investment

The share of funding raised by European tech companies from domestic investors has changed rapidly - in the case of France and the UK it has halved over the past five years.

The capital markets for European tech companies have become more and more international over time. This is healthy for the overall ecosystem from the perspective of founders as it brings increased liquidity, optionality and sophistication to the capital markets. But different stakeholders, such as policymakers, might have different perspectives, depending on their objectives and incentives.











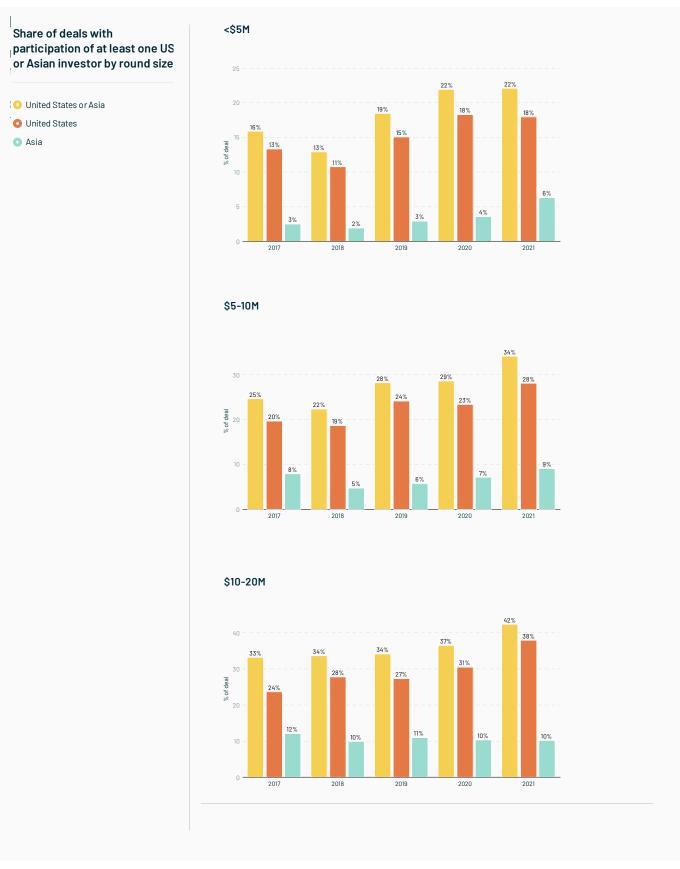




#### US and Asian investors are increasing their allocation to European tech

2021 saw a jump in involvement of US and Asian investors in European fundraising activities. While an increase has taken place across deal sizes, the step up is most profound in the largest valued.

For example, in 2020 73% of rounds of \$250M+ in Europe involved either a US or Asian investors, but the 2021 figure has now risen to 95% of all deals.



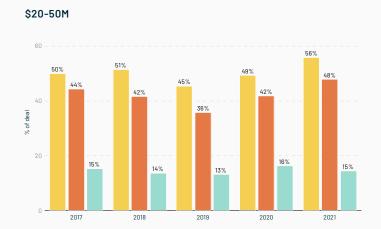




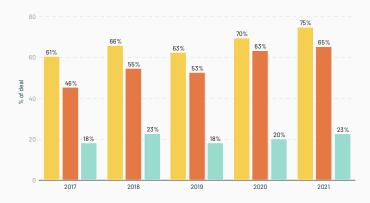


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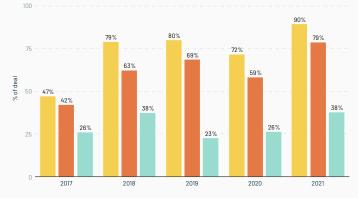




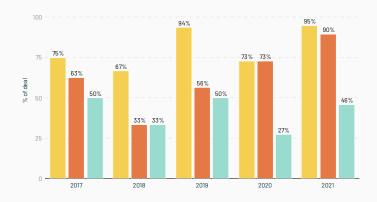
#### \$50-100M



#### \$100-250M



#### \$250M+



NOTES
All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021.









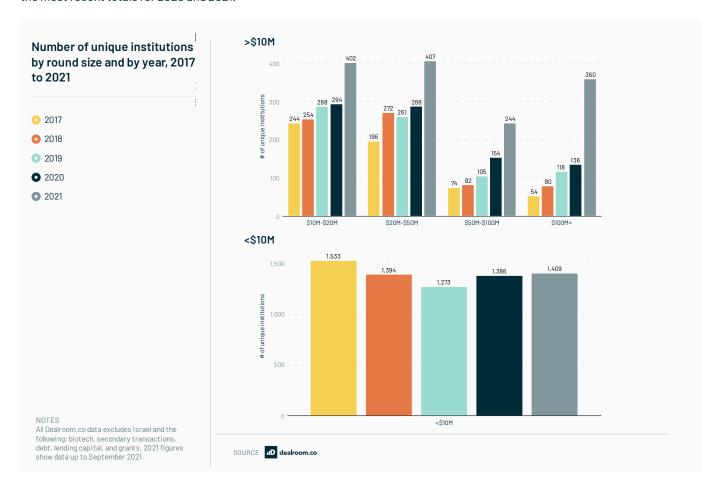


#### Better and bigger ideas attracting greater numbers of world-class investors

There has been a significant increase across the largest rounds (\$100M+) where now close to 400 unique institutions were involved in a deal this year versus just 50 in 2017, or a 7x step up over the past five years - a significant development for the ecosystem.

This expansion is in many ways the articulation of the virtuous cycle that is feeding the European tech flywheel: Europe now has a greater supply of high-quality companies with better and bigger ideas which in turn attracts world-class investors. Europe currently has the deepest pool of investors we have ever seen: there has never been a better time to try and raise capital as a founder; but this has led to competition intensifying.

Amongst the smaller round sizes of less than \$10M, the count of unique investors has grown from a drop in 2019, but remains lower than in 2017. It should be noted, however, that these numbers are likely still impacted by the reporting lag that means that not all activity in these earliest-stage rounds has been tracked and reported in the most recent totals for 2020 and 2021.





The European start-up ecosystem has arguably reached a level of maturity this year, but we are still barely passed the starting line.

Thanks to the rapid tech acceleration catalysed by Covid-19 there's never been a better time to build and scale a technology company. Whilst the supply of companies has grown exponentially as a result, the supply of capital, particularly into new and emerging managers hasn't grown anything like so quickly. There's enormous headroom for expansion; for example, there are still fewer than 50 European pre-seed funds and far fewer dedicated fund of funds or endowments investing in European Venture. I'm hopeful that in 2022 this will catch up and we will see many more new emerging and diverse funds with differentiated strategies successfully raise.

Check Warner, Ada Ventures | Partner









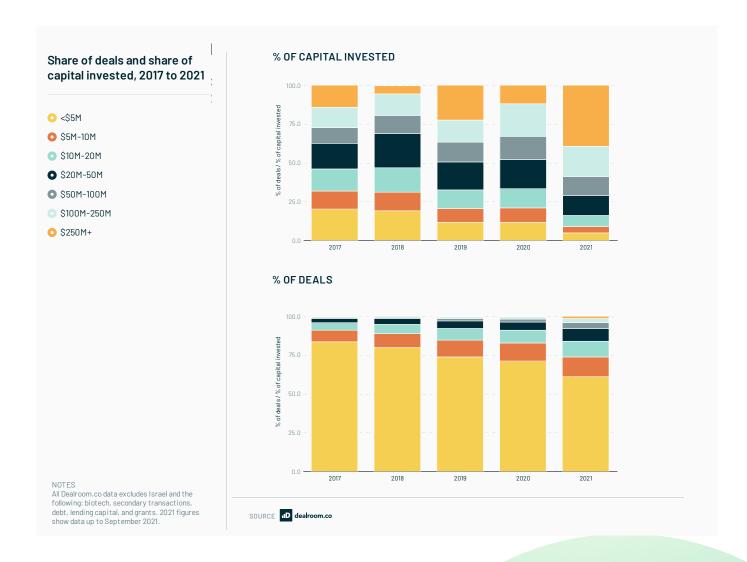
#### Megarounds account for a growing share of capital invested in 2021

Not surprisingly, the large growth in the volume of investors in megarounds is reflected in the increasing concentration of capital invested in these large-scale rounds.

In 2020, megarounds of \$100M or more accounted for 1.6% of all deal activity, while raising 33% of total capital invested.

This year, these numbers have risen to 4.2% of all deal activity and close to 60% of the total capital invested.

For additional context, it is noteworthy that the share of rounds raised that are sized between \$100-250M have doubled and those over \$250M have seen a sixfold increase in their share of total rounds.













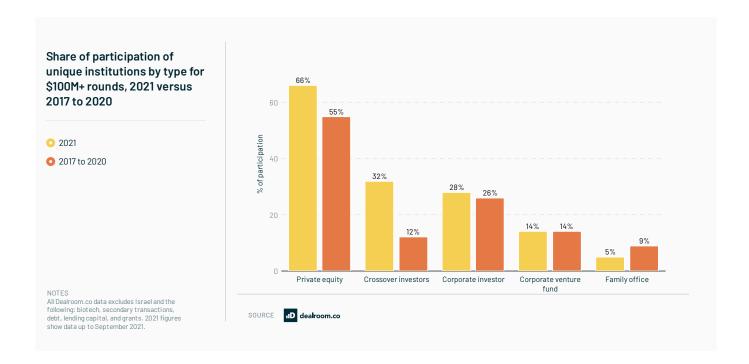
#### The rise of the crossover investor

To illustrate the breadth and depth of the investor pool, we looked at the list of active institutions participating in rounds of \$100M or more in 2021 and compared their activity to prior years.

Crossover investors, who are typically public equity asset managers that also invest in privately backed companies and include the likes of Tiger Global and Coatue Management, have made a very visible and noteworthy foray into European tech in 2021.

The top 12 most active crossover investors alone participated in 32% of rounds of 100M + in 2021 versus just 12% of rounds between 2017 to 2020.

Private equity investors, corporate investors, dedicated corporate venture funds, and family offices (5%) are also active at these stages in differing levels of participation.









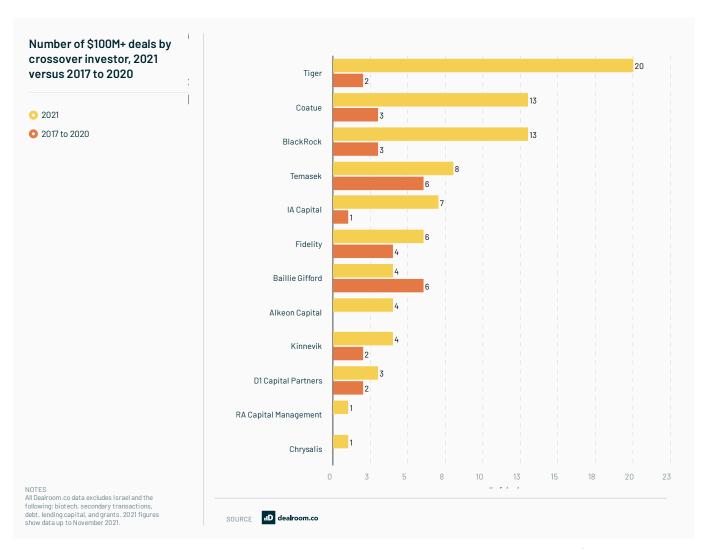




#### Disruptive new investors force incumbents to evolve their product

By now much ink has already been spilled on the foray of crossover investors into European tech, as we explored in the previous article. Tiger Global, in particular, has been the 'talk of the town' for much of 2021 with their disruptive approach to accessing and winning high profile opportunities.

The influence on the ecosystem goes beyond the immediately obvious. There are clear second-order effects that their presence brings to the market. The increased competition forces all investors to innovate on their core 'product' and to develop strategies to stay competitive. This should, in theory, benefit the founder community in terms of access to a greater pool of more sophisticated and evolved products.



















Just as has been the case for private tech, a deep and sophisticated investor pool is a necessary feature of a liquid and stable public tech market.

Many of this year's European listings were priced and traded at a discount to US peers with significant dispersion in public performance. While clearly some of this was idiosyncratic, in the main it was also a reflection of the currently more limited appetite and analyst coverage of European public markets for high growth technology listings. Nonetheless, the latest volley of IPOs also attracted some of the highest interest yet from international investors.

As with any dislocation, this capital demand and supply gap is a huge opportunity for the right investor base. This should increasingly include sophisticated private investors adding crossover vehicles to go full stack given their informational advantage on the public pipeline, as we have already seen, as well as global public technology investors expanding capital allocation in Europe.

Laura Connell, Marcho Partners | Investor







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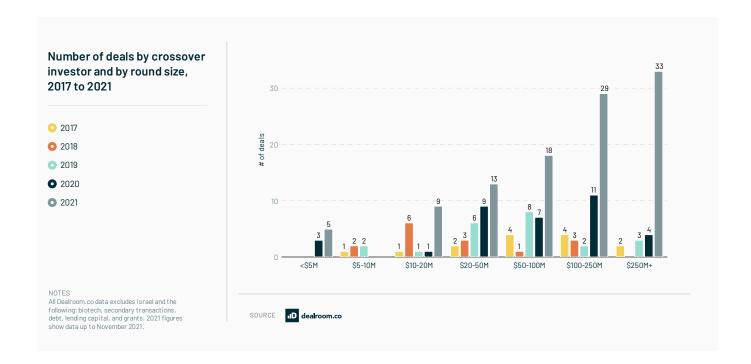


#### Crossover investment activity is one leading indicator for future exit activity

Crossover investors are now active at all stages and round sizes, including participating in a number of very early-stage rounds of <\$5M in 2021.

Their activity, however, is highly concentrated in larger, later rounds, where they can deploy large amounts of capital with a shorter expected horizon to liquidity, and the future potential to allocate further capital at IPO or in subsequent follow-on raises in the public markets.

As such, their participation can be an interesting forward-looking indicator of potential future candidates to make the "crossover" from the private to public markets.











**CHAPTER** 



# Extraordinary outcomes

Outcomes are exceeding projections in both public and private markets

### Extraordinary outcomes

Europe continues to produce more tech IPOs than the US, \$1B+ IPOs are becoming the norm, and exit value is now in excess of \$250B for 2021. Still, Europe is only in the first innings of its tech journey, with all indicators now pointing towards many trillions in value to be added over the next decade, even in a conservative scenario.

#### **ARTICLES**

#### 06.1 Private markets

European tech is on track for a record year - with over \$100B in total M&A exits, \$55B of which were VC-backed. Public US tech companies are most active in M&A, with 55% of deal value, the highest for the past three years. Private equity is more interested in VC-backed companies - seven out of 13 PE acquisitions in the past two years were VC-backed.

#### 06.2 Public markets

In public markets, Europe continues to produce more tech IPOs than the US (but they're much smaller on average). 2021 has seen 50 more unicorns join Europe's public herd - but a substantial share of Europe's largest \$1B+ companies are listing in the US.









### 06.1 **Private markets**





#### **ARTICLE 06.1**

European tech is on track for a record year - with over \$100B in total M&A exits, \$55B of which were VCbacked. Public US tech companies are most active in M&A, with 55% of deal value, the highest for the past three years. Private equity is more interested in VCbacked companies - seven out of 13 PE acquisitions in the past two years were VC-backed.

#### **INSIGHTS**

#### Over \$100B in M&A exits

European tech is on track for a record year - with over \$100B in total M&A exits. In the first nine months of 2021 alone, total M&A value involving VC-backed companies has reached \$55B, on par with the full year total for 2020 and eclipsing the \$46B in exit value of non-VC-backed tech companies.

#### Public US tech companies are most active in M&A

The share of deal value involving public US tech companies stands at 55%, the highest for the past three years. \$1B+ companies have been active in 11% of deal value with some notable acquisitions by Allegro (Czech Republic-based Mall Group) and Klarna (German-based Stocard, UK-based Hero Towers and UK-based PriceRunner). While European tech buyers are most active by deal count, they also tend to be involved in smaller size deals.

#### Private equity has acquired a taste for VC-backed European tech companies

In the past two years, there have been 13 \$1B+ acquisitions of European tech companies by private equity buyers, with seven involving a company that previously raised funding from VCs.







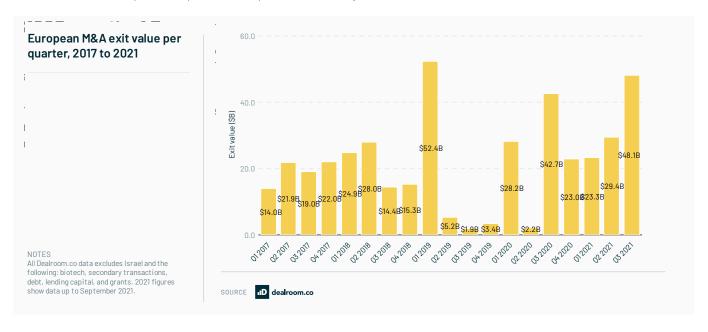


#### \$100B+ worth of European tech M&A

As of September 2021, exits of European tech companies via M&A had already exceeded \$100B in total value, thereby surpassing 2020 levels and placing 2021 firmly on track to be an all-time record year.

In the third quarter alone, the aggregated value of tech M&A activity exceeded \$45B, making it the largest Q3 on record. At time of publication, preliminary numbers for Q4 imply at least another \$50B in aggregate value.

So how did the landscape of European tech acquirers evolve this year? Let's dive in!

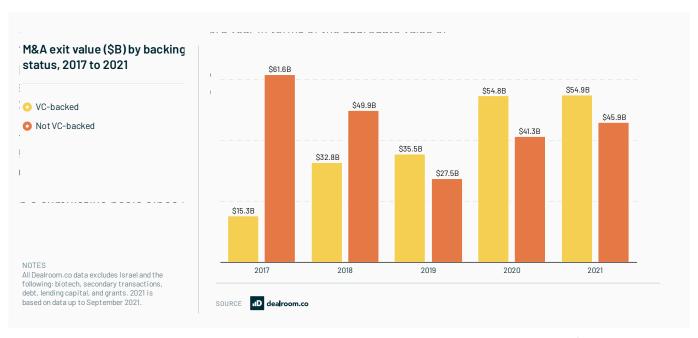


#### VC-backed exits have caught up

The momentum of the European tech flywheel is dependent on building a liquid marketplace to recycle talent and capital. European tech is on track to deliver a record year in terms of the aggregate value of exits via M&A.

In the first nine months of 2021 alone, total M&A value involving VC-backed companies has reached \$55B, on par with the full year total for 2020 and eclipsing the \$46B in exit value of non-VC-backed tech companies.

On a cumulative basis since 2017, VC-backed European tech companies have generated in excess of \$193B of exit value via M&A.













A sign of Europe's maturity is that we are now seeing highly liquid scale-up businesses make their own acquisitions, a trend not seen before in Europe. High growth scale-ups are purchasing companies to add IP, talent and consolidate their competition, boosting M&A and exit activity within the ecosystem.

While the outlook is broadly positive, Europe can do more to capitalise on its current leadership position in Europe. UK & EU policy makers can do more to create and foster a favourable listing environment to ensure that European public markets attract the best homegrown businesses to list domestically, rather than on the NASDAQ. Alongside this, open more opportunities for institutional investors in Europe to invest in European innovation. Currently, these investors are missing out on the value-creation that is happening in private markets.

The significant global demand to invest in European companies will only increase as the ecosystem matures and evolves - many of the investors in these businesses are establishing an on-the-ground presence in the region to help with deal-flow.

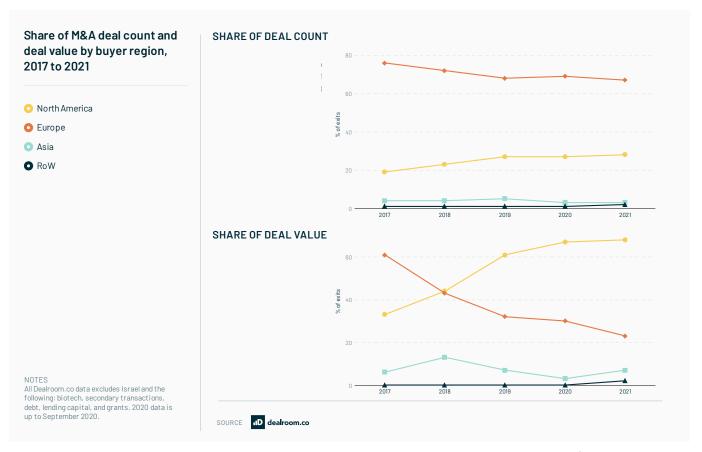
Stephen Lowery, SVB UK Branch | Managing Director, VC Relationship Management

#### North American buyers drive the largest share of M&A activity by value

European buyers remain accountable for the majority of tech M&A in the region, driving two thirds of transactions in 2021.

Over time, however, the number of European tech companies has grown in both quality and quantity, leading to European buyers' share decreasing at the expense of more active North American buyers. The share of M&A transactions involving North American buyers has increased from 19% in 2017 to 28% in 2021.

The deal values also provide an important insight into the boldness of different buyers by region. Though North American buyers were responsible for 28% of M&A deal count, their transactions accounted for 68% of value, up from 33% in 2017, driven by larger ticket acquisitions.













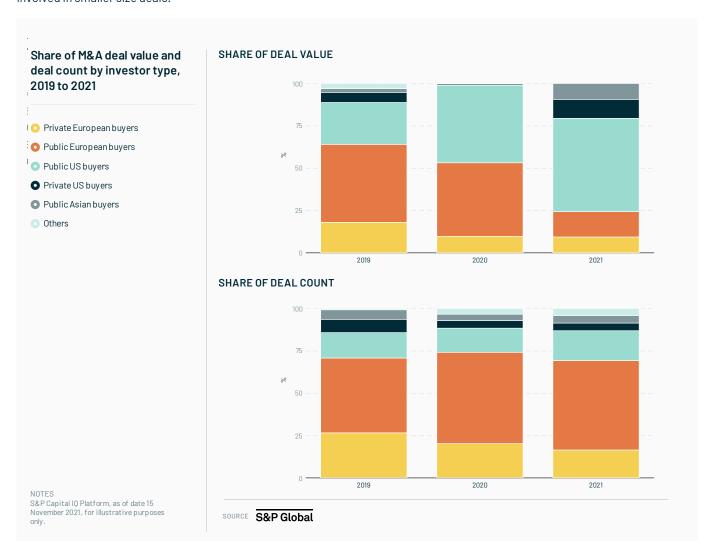
#### Public US tech companies are most active in M&A

The share of deal value involving public US tech companies stands at 55%, the highest for the past three years.

Norton acquired Prague-based Avast in an \$8.6B takeover this year, just 3 years after it went public. DoorDash recently announced its acquisition of Finnish-based Wolt for \$8.1B.

Elsewhere, \$1B+ companies have been active in 11% of deal value with some notable acquisitions by Allegro (Czech Republic-based Mall Group) and Klarna (German-based Stocard, UK-based Hero Towers and UK-based PriceRunner).

While European tech buyers are most active by deal count, they also tend to be involved in smaller size deals.





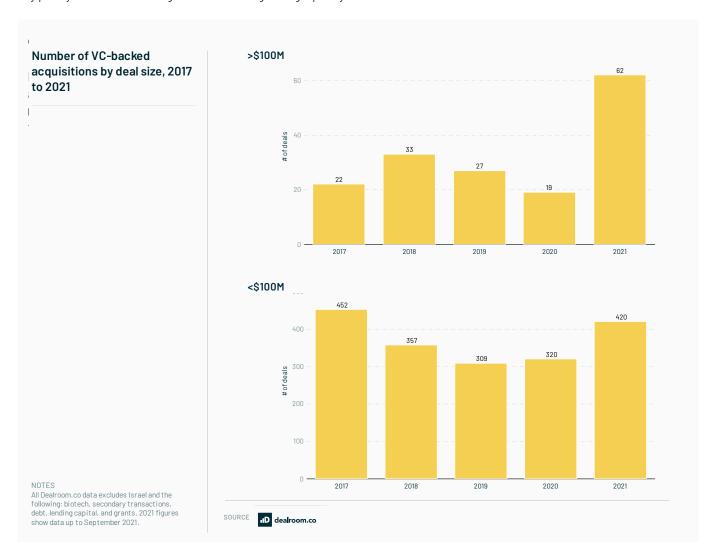






#### M&A exits over \$100M for VC-backed tech companies is growing

There is a clear acceleration in the number of M&A transactions of greater than \$100M involving VC-backed European tech companies. In the first nine months of 2021, there were 62 exits of this scale and above, at least 1.8x the number of such transactions in any prior year. This is a strong indicator of the growing liquidity in the market.





M&A is a feature not a bug of a healthy ecosystem. There's a tendency to think European tech companies are selling out too early, too often.

But the reality is that exits have always been core to what makes Silicon Valley the place it is. They already play a significant role here too to ensure that talent and capital can be recycled to help build new generations of companies. It's easy to forget that PayPal, YouTube, Instagram and many other iconic Silicon Valley companies all achieved greater than 95% of their value growth after having been acquired. The fact that we are seeing record value being captured today via M&A, IPOs, direct listings, PE buyouts and even SPACs is a great sign that Europe has succeeded in building a deeper and more liquid market for both capital and talent.

Irina Haivas, Atomico | Partner



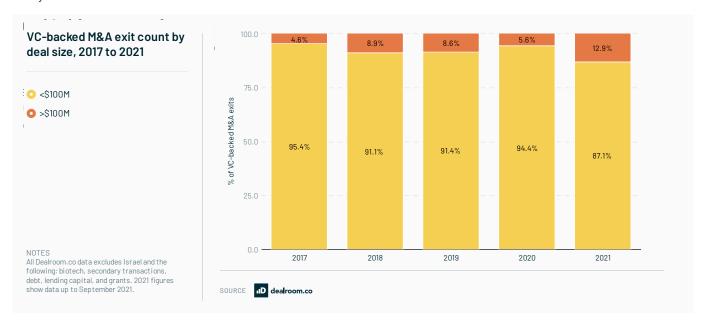






#### And taking a growing share of M&A activity in European tech

As a result, VC-backed exits over \$100M now represent 12.9% of total deal count, the highest on record. Although the vast majority of exits of VC-backed European tech companies are small in scale, the recycling impact on the tech ecosystem is material as experienced operators are enabled to go on to build their next venture. As we have said previously in this report, M&A is a feature, not a bug, of a healthy, mature tech ecosystem.



#### Rise of the billion-dollar acquisitions

The top 10 largest acquisitions of VC-backed European tech companies drove an aggregate enterprise value at exit of \$19B.

The list speaks to the broader trend of more active US public tech buyers, with DoorDash acquiring Finnish-based Wolt, Visa acquiring two European fintechs, Etsy acquiring Depop, and Workday acquiring Peakon.







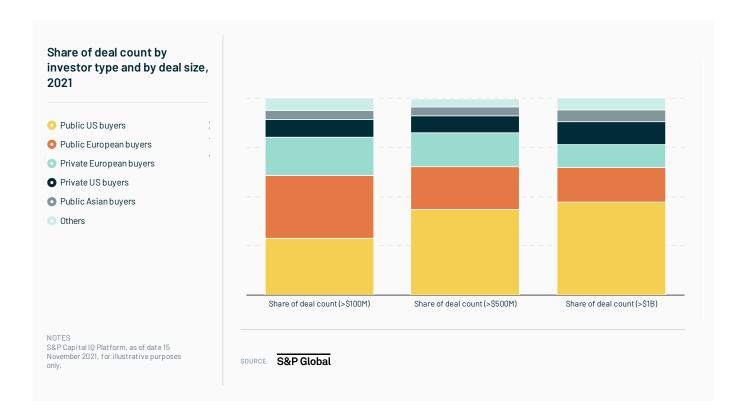




#### European corporates less present on deals over \$100M

Public US tech companies are driving most of the large dealmaking activity - they are involved in close to 50% of all deals over \$1B.

Meanwhile, the share of European tech companies is smaller for rounds over \$100M.But although European buyers are on average less likely to participate in larger deals, they play an important role in ensuring liquidity at every level of the market.







#### Selected M&A transactions involving corporate buyers of European tech companies in 2021

Beyond European tech companies, we are also seeing more convergence between legacy industries and tech. Whether it is via smaller, so-called aquihires or largerscale 'transformational' merger deals, these transactions participate in accelerating the growth and digital transformation of these legacy industries as they become more active participants in building the "next act" for Europe. Below are selected transactions from 2021 that highlight involving established corporate companies and tech startups.



Majority stake acquired by Deutsche Börse









Acquired by Abrdn

Acquired by ThreadUp

Acquired by Siemens

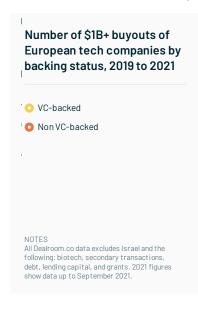
#### Acquired by Jungheinrich

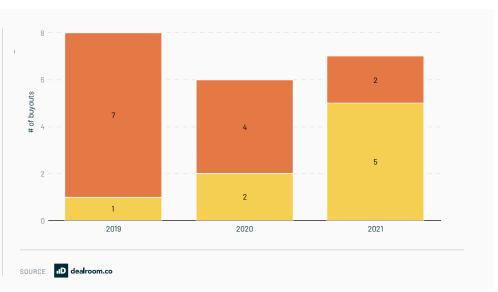
#### Private equity has acquired a taste for VC-backed **European tech companies**

Private equity (PE) is playing a growing role in European tech private markets, and since 2020, the VC and PE islands have started to move closer together.

In the past two years, there have been 13 \$1B+ acquisitions of European tech companies by private equity buyers, with seven involving a company that previously raised funding from VCs.

In 2021, more than half of tech acquisitions were of VC-backed tech companies.













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#### Seven \$1B+ European tech buyouts by PE firms

The seven PE acquisitions of European tech companies at valuations in excess of \$1B in 2021 to date totals more than \$17B in aggregate enterprise value and involves companies from a range of countries and technology sub-sectors.

\$1B+ EV acquisitions of European tech companies by PE/buyout firms since 1 Jan 2020

	EV(\$B)	Date	City	Country	VC-backed (at any time)
Visma	\$12.2B	Aug 2020	Oslo	Norway	
IQ	\$6.2B	Feb 2020	London	United Kingdom	
Groupe Circet	\$3.6B	Apr 2021	Paris	France	Yes
Zooplus	\$3.5B	Aug 2021	Munich	Germany	Yes
True Potential	\$3.3B	Sep 2021	Newcastle upon Tyne	United Kingdom	Yes
CarNext.com	\$2.8B	Jul 2021	Amsterdam	Netherlands	
The Telepass Group	\$2.2B	Oct 2020	Rome	Italy	
Garrett Motion	\$2.1B	Sep 2020	Rolle	Switzerland	
TalkTalk	\$1.5B	Dec 2020	London	United Kingdom	
Blue Prism	\$1.4B	Sep 2021	London	United Kingdom	Yes
Idealista	\$1.4B	Sep 2020	Madrid	Spain	Yes
Valtech	\$1.4B	Jul 2021	Paris	France	
Fenergo	\$1.2B	May 2021	Dublin	Ireland	Yes

NOTES
All Dealroom.co data excludes Israel and the following: biotech, secondary transactions, debt, lending capital, and grants. 2021 figures show data up to September 2021.

SOURCE 1D dealroom.co

















The significant increase in liquidity options for European companies (M&A, PE buyouts, IPOs, SPACs) are a sure sign of Europe's maturing capital markets.

Acquisition by a foreign company is no longer the only option for founders looking to exit or scale their business. Not only is funding from VCs and growth-stage-focused PEs higher than ever before, but exits from investments have resulted in high returns for investors, driven by mutually beneficial partnerships which has seen many European startups scale rapidly. I'm confident that this is just the beginning - with European capital markets rocketing into 2022, founders have more reasons to stay in Europe and grow their business.

Hiro Tamura, Atomico | Partner









## 06.2 **Public markets**







#### **ARTICLE 6.2**

In public markets, Europe continues to produce more tech IPOs than the US. 2021 has seen 50 more unicorns join Europe's public herd - but listing in the US is seen as more attractive, with over 1 in 3 companies founded after 2015 choosing the US over Europe.

#### **INSIGHTS**

#### \$750B of public tech market cap

Over the past 12 months, Europe has added more than \$750B of public tech market cap and has surpassed \$2T in combined value. As a result, the region has grown its share of global public tech market to 6.8%, up from 6.3% last year. The Netherlands has risen to fourth position globally and now stands at \$0.8T in aggregate market cap, thanks to the strong underlying performance of companies such as Adyen and ASML.

#### 49 unicorns join the public herd in 2021

The public herd of \$1B+ companies took a big leap forward this year, now standing at 139 - up from 90 in 2020. And we can now see is a credible path for Europe to see ten companies all valued at \$100B or more in the next few years - not far from President Macron's goal of ten companies valued at €100B.

#### Over 1 in 3 companies founded after 2015 choose the US over Europe to list

More recent cohorts of European tech companies have been inclined to list on US exchanges. While just 5% of public European tech companies valued over \$1B and founded pre-2000 are listed on US exchanges, this is up 7x to 36% for companies founded after 2015.











The fact that Lilium, a German electric vertical take off and landing company headquartered in Munich was able to go public in 2021 fills me with confidence.

We now have the capital and expertise to achieve our long-term ambition of building a regional electric air mobility network. At a European tech macro level, all the key indicators such as investment, the growth in the number of founders and new tech companies being spun out of existing tech companies and the growing numbers of engineering students at our top universities is testament to the growing strength of European tech. Last year's report made reference to the European tech flywheel. I suspect we have had another great year and we will see that flywheel spin even faster.

Daniel Wiegand, Lilium | CEO and Co-Founder

#### \$30T of aggregate market cap in global public tech companies

Global tech companies in the public markets now have a combined market cap of more than \$30T, following a stellar year for public tech companies across the US and Europe.

China, however, barely contributed to that growth in value, adding just \$20B of incremental market cap in the past year. By contrast, the total market cap of US public tech companies grew by \$6T from \$14T in November 2020 to \$20T in November 2021.

The weak Chinese public tech company performance can be mostly attributed Alibaba and Tencent, both of which have been significantly impacted by the Chinese government crackdown on tech companies.

Looking across the rest of the top 10 countries, all of them experienced strong growth in value over the past year. The Netherlands stands out, having risen to fourth position globally and now stands at \$0.8T in aggregate market cap, thanks to the strong underlying performance of companies such as Adyen and ASML.

**GLOBAL TECH VALUE** 

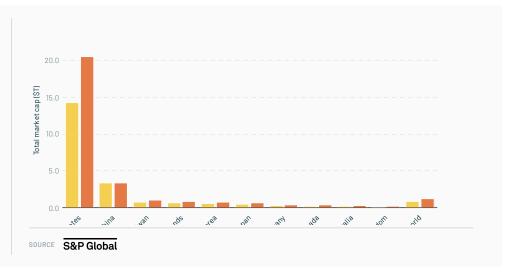
total market capitalisation for global tech companies

SOURCE

S&P Global

Total market cap (\$B) of global public tech companies for top 10 country by company HQ, 2021 versus 2020

S&P Capital IO Platform, as of date 15 November 2021, for illustrative purposes













#### Crossing the 1000 milestone

The accelerated pace of digital transformation has helped to pull the future forward and injected a huge boost to the relentless march of technology, driving unprecedented scale in the addressable markets for technology products and services.

Global public tech companies have made huge gains as a result of accelerated adoption and spend on tech and tech-enabled products and services. We are now firmly in the era of trillion-dollar tech companies.

Five companies have now scaled to this milestone and beyond, all founded in the United States. Behind the leading pack, there are now 32 public tech companies valued at more than \$100B.

This year also saw the global tech industry pass a significant milestone and now counts more than 1,000 public companies that have surpassed the \$1B+ milestone.

#### \$1B+ PUBLIC TECH COMPANIES

public tech companies are now valued at \$1B+

SOURCE

S&P Global

#### Total number of public tech companies and total market cap by market cap group

S&P Capital IQ Platform, as of date 15 November 2021, for illustrative purposes

	# of companies 2021
\$1T+	5
\$500B-\$1T	4
\$100-500B	28
\$50-100B	45
\$25-50B	50
\$10-25B	145
\$5-10B	168
\$1-5B	627
<\$1B	3,386

SOURCE S&P Global











#### Global public tech market cap remains concentrated

As a result of the contraction in the aggregate value of Chinese tech stocks, the share of total global value held by US public tech companies has grown from 65% in Oct 2020 to close to 70% this year, while China has fallen from 17% to 11%.

There are still no countries outside of these two that exceed a 5% market share. This year, Canada joined the '1%+ of global public tech market cap share' club, alongside seven other countries.













#### ∠Europe keeps growing its share of global public tech market cap

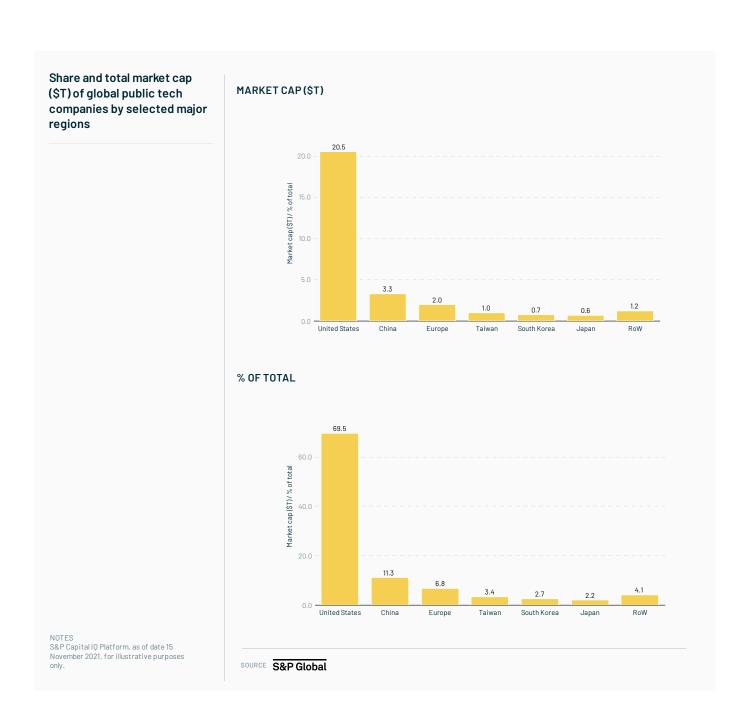
Over the past 12 months, Europe has added more than \$750B of public tech market cap, surpassing \$2T in combined value. As a result, the region has grown its share of global public tech market to 6.8%, up from 6.3% last year. A 500 basis points change in market share may appear small, but it actually represents its largest-ever one-year change in absolute market cap.

#### **EUROPEAN PUBLIC TECH VALUE**

of combined market cap value for public European tech companies

SOURCE

S&P Global











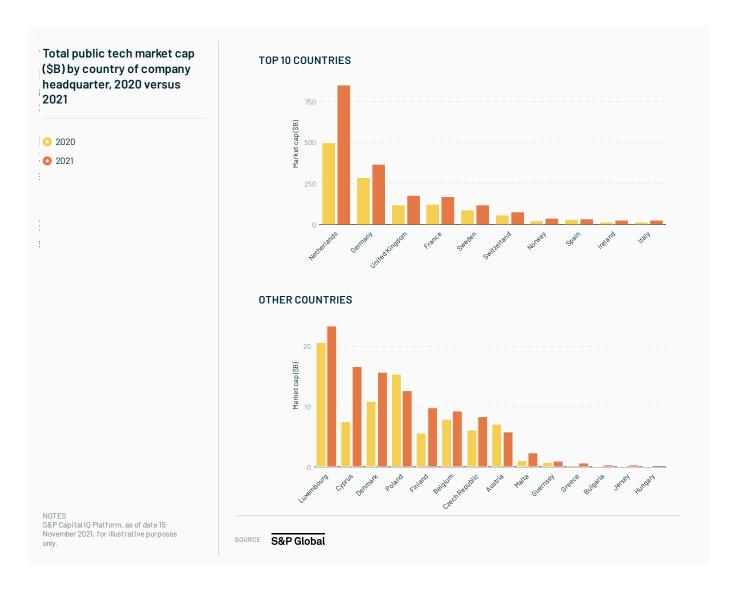


#### The Netherlands is home to European public tech giants

The Netherlands continues to lead as the home of the largest share of European public tech market cap, driven by material changes in the value of a handful of its leading companies, including Prosus, ASML and Adyen.

These companies contributed to a year-on-year increase of incremental market cap of more than \$350B. In fact, the value added by companies headquartered in the Netherlands in the last 12 months represents 47% of the total European gains.

Germany follows, driven by SAP, Infineon, Zalando and Delivery Hero. Norway (\$40B) overtook Spain (\$33B) to move into seventh place, while Italy entered the top 10, having seen a 83% gain year-on-year led by payments company Nexi.











#### 30+ year-old tech incumbents continue to rule public markets

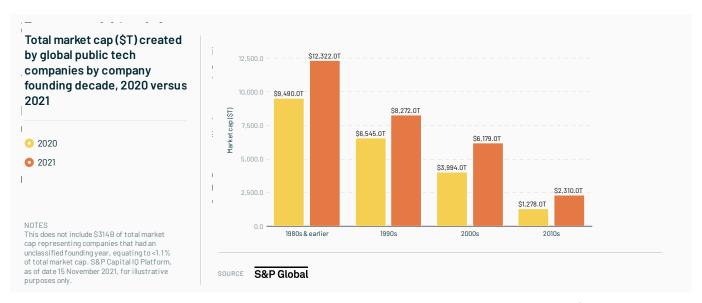
As highlighted in the first chapter, public market cap should be considered a lagging indicator as a measure of the state of global tech and its future direction of travel.

More than 42% of the total value of today's public tech companies, equivalent to \$12.3T, is held by companies founded in the 1980s or earlier.

Europe only has 11 companies that have crossed the \$1B+ milestone that are from the same generation and just four of those are publicly listed (Sinch, Amadeus, Avast and Auto Trader). Just because these companies are now decades old, however, does not mean that they aren't continuing to grow and add significant value.

In fact, global public tech companies founded in the 1980s and earlier added \$2.9T of market cap in the past 12 months, equivalent to a 30% increase and the largest absolute gain by any of the cohorts identified in this chart.

The fastest-growing cohort, however, is the youngest set of public tech companies (2010s), which increased in value by 81% between 2020 and 2021. The 2000s cohort is also notable for having added more than \$2T in incremental market cap, growing by 55% year-on-year.



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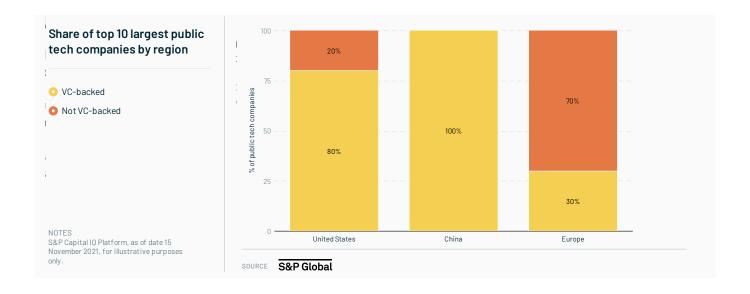


#### Nearly a third of the 10 most valuable public tech companies are VC-backed

Three of the top 10 most valuable public tech companies from Europe were VC-backed during the journey to scale, namely Adyen, Spotify and Delivery Hero.

Just outside the top 10 sit both Yandex and Zalando - both are in the top 15. As Europe's largest tech companies keep getting bigger, it becomes a tougher and tougher ask to break into its top ranks.

Last year, a market cap of \$47B was enough to secure a spot in the top 5, but this year it will mean barely scraping into the top 10. The bar for getting into the top 5 is now \$84B.

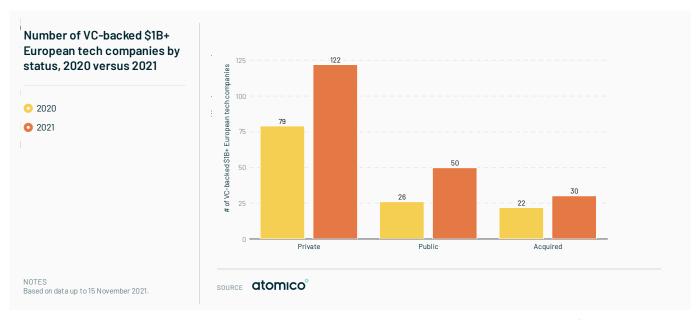


#### Number of VC-backed European tech companies finding liquidity small but steady

VC-backed companies are not yet strongly represented within Europe's largest public tech companies, but there is a healthy pipeline of VC-backed companies going public and creating value in the region.

The accelerated growth in the number of new European \$1B+ companies means that the count of private unicorns is outpacing the number of liquidity events.

At the time of publication, there are 122 private European unicorns, up from 79 in 2020. This should not, however, mask the remarkable statistic that 32 European VC-backed unicorns exited or found liquidity during the past 12 months: 24 via the public markets and another eight via M&A.







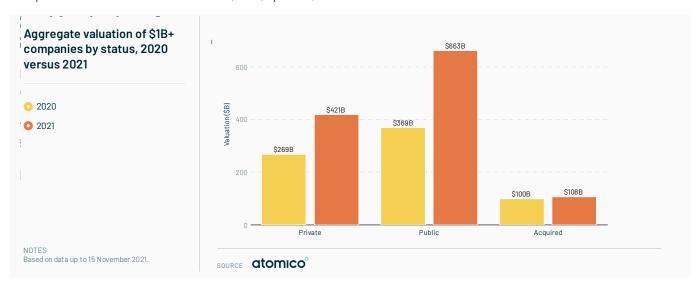


#### Combined value of realised \$1B+ VC-backed tech companies is closing in on \$1T

The combined value of realised VC-backed unicorns, that have either gone public or been acquired, has now grown to over \$770B in 2021, up from \$470B in 2020.

In aggregate, the total value of all European VC-backed unicorns is \$1.2T, of which the value of the region's exited VC-backed unicorns is well on the way to hitting \$1T in value.

The total value of private VC-backed European unicorns has grown by close to 60% in the space of 12 months and now stands at \$421B, up from \$269B in 2020.



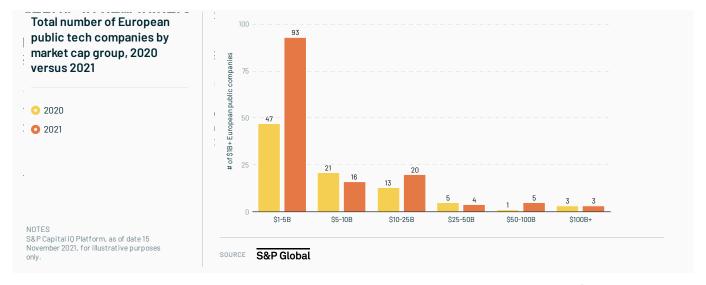
#### Nearly 50 new joiners to public \$1B+ companies herd

The public herd of \$1B+ companies took a big leap forward this year, now standing at 139 - up from 90 in 2020.

It is also exciting to see companies move through the funnel and create further value in the public markets. The three companies valued at over \$100B - namely ASML, Prosus and SAP - have added a combined \$306B of market capital over the past 12 months.

In August 2021, Adyen's market cap hit an all-time high of \$99B - it is well on the way to becoming the next \$100B+ company to emerge from Europe. When it gets to that milestone, it will also become the first ever VC-backed European tech company to scale to \$100B.

Dassault Systèmes is also on course to hit \$100B, having grown from \$47B in 2020 to \$83B at the time of publication. There is a credible path for Europe to see ten companies all valued at \$100B or more in the next few years - not far from President Macron's goal of ten companies valued at €100B.











#### Amsterdam ringing the bell for first place

As a result of the strong performance of constituents like Adyen and ASML, Euronext Amsterdam increased its aggregate total market cap from \$435B in 2020 to \$765B.

This represents 38% of overall European exchanges market cap and places it first by a wide margin.

Stockholm's OMX ranks 7th by aggregate market cap, but it was the number two exchange by year-on-year change in value in 2021, having welcomed a number of sizeable listings in 2021 including Truecaller, which is now valued at over \$4.5B.

Top 10 exchanges by total European tech public market cap based on primary listing venue of European tech companies
NOTES S&P Capital IQ Platform, as of date 15

		Exchange	Latest Market Cap (\$B)	% of total	YoY change(%)
	1	Euronext Amsterdam	\$765.0B	38.3%	76.0%
1	2	XETRA Trading Platform	\$363.2B	18.2%	28.2%
	3	Euronext Paris	\$219.1B	11.0%	40.2%
	4 Nasdaq Global Select		\$132.2B	6.6%	52.9%
	5	London Stock Exchange	\$120.6B	6.0%	42.6%
	6	New York Stock Exchange	\$87.7B	4.4%	30.7%
	7	OMX Nordic Exchange Stockholm	\$61.3B	3.1%	62.4%
	8	London Stock Exchange AIM Market	\$37.5B	1.9%	17.7%
	9	Bolsas y Mercados Espanoles	\$33.4B	1.7%	5.7%
	10	SIX Swiss Exchange	\$32.5B	1.6%	5.2%
	11	Other	\$146.3B	7.3%	47.3%

#### Over 1 in 3 companies founded after 2015 choose the US over **Europe to list**

But will these gains be sustained?

November 2021, for illustrative purposes

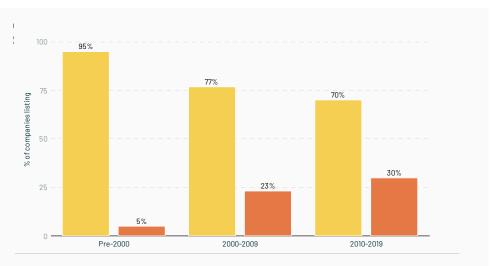
only.

More recent cohorts of European tech companies have been inclined to list on US exchanges. While just 5% of public European tech companies valued over \$1B and founded pre-2000 are listed on US exchanges, this is up 7x to 36% for companies founded after 2015.

This is across a relatively small sample of 11 companies, and is also in part influenced by a number of European tech companies that went public on US exchanges via SPACs.

But given that future decisions on where to list are likely to be influenced by recent comparables, this could further compound the trend, if the perceived and actual attractiveness of listing on European exchanges is not strengthened.









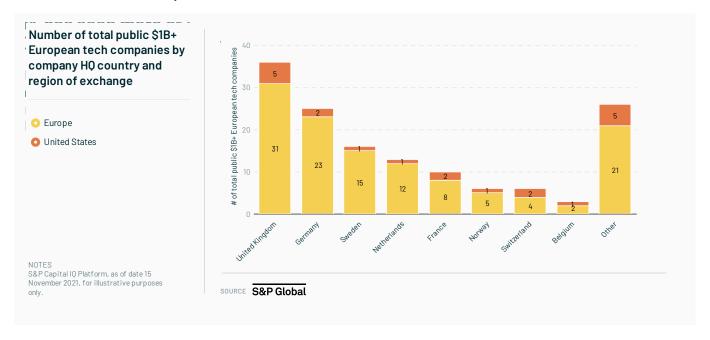




#### UK has seen more of its \$1B+ tech companies list on US exchanges than other European countries

The UK is home to the largest number of \$1B+ companies listed in Europe, but it also has seen the largest number (in absolute terms) of its \$1B+ companies list on US exchanges.

Sweden, on the other end of the spectrum, has only one company that is now valued at \$1B+ that elected to list away from home.



#### The majority of the European public tech market cap is listed on **European exchanges**

For now, the overwhelming share of value created by European public tech companies is held on European exchanges as measured by share of market cap by exchange venue.

There are notable differences across countries (based on the company headquarter location). For example, while just 2% of the total market cap of tech companies with French headquarters is listed on US exchanges, this same metric is at 50% for Sweden - solely driven by Spotify.











#### A record year for tech IPOs in Europe

Across a five-year timeline from 2017 to 2021, Europe has averaged just under five (4.8) tech IPOs per month. In 2021, this has already exceeded more than 10 tech IPOs per month, marking a record year for tech IPOs in Europe by volume.

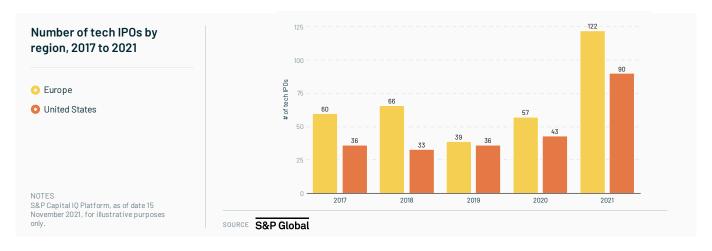
By comparison, the US averaged 3.3 tech IPOs per month over the same five-year period. However, the US also had a standout year for tech IPOs in 2021 with 90 at the time of publication.

#### **TECH IPOS PER MONTH**

tech IPOs per month in 2021 in Europe on average

SOURCE

S&P Global

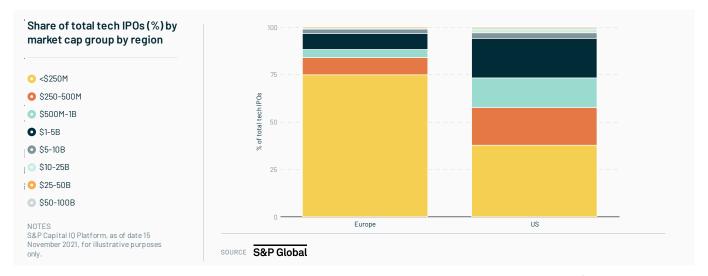


#### European tech IPOs are typically much smaller compared to the US

Over the course of the last five years, there have been 343 European tech IPOs. This compares to 238 from US tech companies.

However, as we have highlighted for many years now, the scale of the average European tech IPO is much smaller than the US. The majority (75%) of European tech IPOs are concentrated in the <\$250M market cap group.

Those in the US are more distributed: tech IPOs of <\$250M are also the largest grouping, but represent just 38% of US tech IPOs. For the initial \$1B+ market category of \$1-5B, 21% of US tech IPOs reach that value compared with just 9% of European tech IPOs at the same scale.









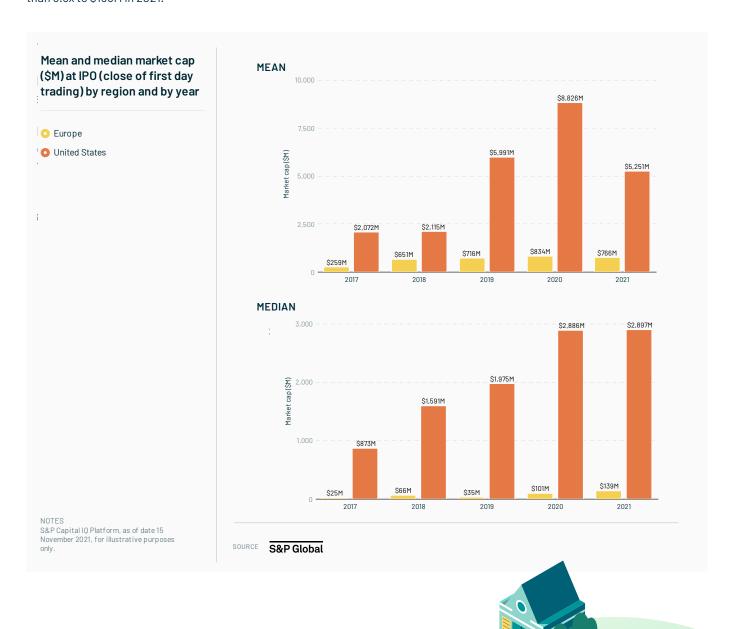


### The average tech IPO in Europe and the US is very different

These differences translate into very different mean and median market cap at IPO across the two regions.

The mean market cap of a European tech company is slightly above \$765M, with the median at \$139M, pointing to some impact on the mean from high-performance companies. Looking at the US, the mean market cap is \$5.3B and the median is also much higher at \$2.9B.

But the average European tech IPO is getting bigger every year. In 2017, the median first day market cap for European tech IPOs was just \$25M. This has now grown more than 5.5x to \$139M in 2021.









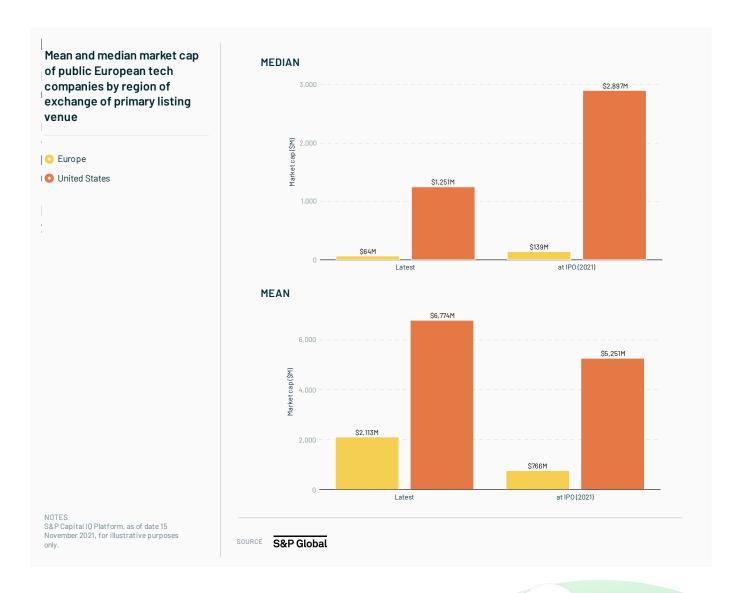


### US exchanges attract Europe's larger-scale tech companies

This year, new European tech companies that came to market via IPO on a European exchange were larger on average than those already listed on European exchanges.

The median market cap of those that listed on European exchanges in 2021 was \$139M, compared to the median company of \$64M. If we screen to look at the scale of those European tech companies that chose to list on US exchanges, however, it's clear that US exchanges attract bigger European tech companies on average.

The median first day market cap of a European tech company listing on a US exchange in 2021 was \$2.9B, almost 22x larger than the median company listing on a European exchange.





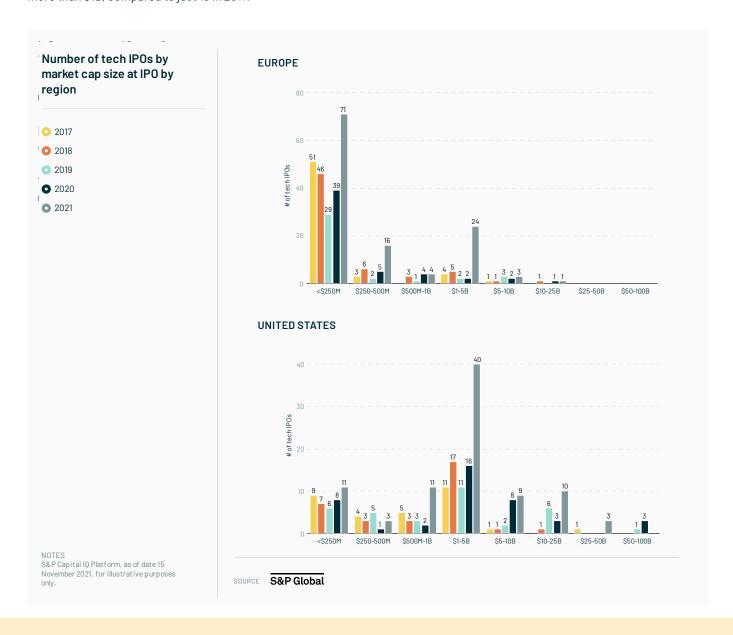


### 🚀 An exceptional year for European tech IPOs

Despite all this, it's clear that 2021 has been a phenomenal year for European tech IPOs. This year has seen 28 tech IPOs with an initial market cap in excess of \$1B.

This compares to an average of just five per year in the preceding four years - this is just another positive indication of the increased liquidity now present in the European tech ecosystem.

In the US, meanwhile, 62 tech companies went public with a first-day market cap of more than \$1B, compared to just 13 in 2017.



What are the biggest structural impediments for successful large-cap IPOs in Europe?

FRAGMENTATION

50%

of investment bankers, M&A advisors and consultants that responded to the survey view fragmentation of the European capital markets as the biggest structural impediment to large-cap IPOs in Europe

SOURCE The State of European Tech

APPEAL OF EUROPEAN EXCHANGES

**31**%

of respondents view the appeal of individual European exchanges as the biggest structural impediment

SOURCE The State of European Tech







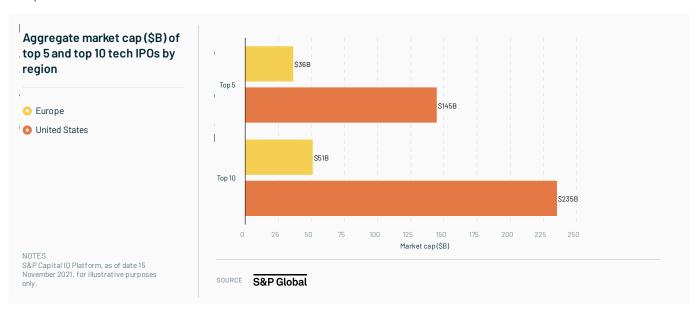


### Blockbuster US tech IPOs

In 2021, the top 5 tech IPOs of companies founded in the US had an combined first-day market cap of \$145B. This is 4x the combined value of Europe's five largest tech IPOs in 2021, with an aggregate first-day market cap of \$36B.

Looking at the top 10, the gap in value expands to 4.6x based on \$235B for the US versus \$51B for Europe.

It should be noted, however, that for the purpose of this analysis UiPath is not included in the data for Europe. Though it was founded and started out in Romania, it is now headquartered in the US and therefore counted as part of the US listings (given the methodology is based on company headquarter). UiPath went public with a first-day market cap of \$36B, just \$15M less than the value of all of this year's top 5 European tech IPOs combined.





While UiPath is today a multinational company, we are proud of our Romanian heritage and how the country has developed over the past two decades.

Romania is one of our most important talent pools and remains a key market for our developer teams, along with India and the United States. It's become a tech hub in its own right and produces some of the world's best tech talent. Culture is very important to me and to our leadership team at UiPath. That's as true in our Romania offices as anywhere. Traditionally, we've thought of culture in terms of interaction among colleagues in the workplace, but now with office closures due to the pandemic we've had to broaden how we think about it. One of our goals now is to ensure the UiPath culture isn't lost or diluted as the workforce transitions to work from home

Brandon Deer, UiPath | Vice President, Operations & Strategy

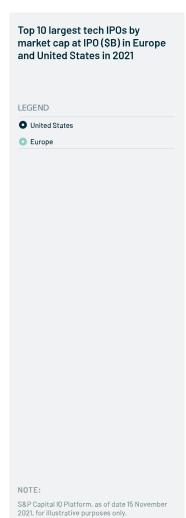


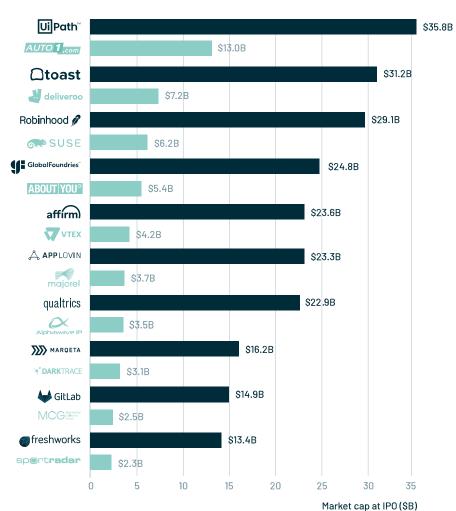




### But European IPOs are scaling up

European tech IPOs are steadily increasing in value. Every one of the top 10 largest tech IPOs from Europe in 2021 came in with a first day market cap of greater than \$2B. By comparison, just five of the top 10 in 2020 exceeded the \$1B milestone. To make the top 10 in the US, however, it requires a first day market cap of more than \$13B at time of publication.





S&P Global



In addition to traditional IPOs, SPAC listings became a notable alternative path to go public in 2021 - not only in the US, but also in Europe.

We saw numerous tech IPOs including Auto1, About You, Mister Spex and more this year in Germany. The increasing importance of tech companies is also reflected in the new composition of Germany's flagship DAX index. With Delivery Hero, Zalando and Hello Fresh, three Berlin-based and former VC-backed companies are now part of the 40 DAX constituents.

In addition to traditional IPOs, SPAC listings became a notable alternative path to go public in 2021 - not only in the US, but also in Europe. The business combination of Lakestar SPAC I and HomeToGo marked the first prominent example of this alternative route to capital markets in Germany.

The pipeline for further IPOs remains strong and - subject to prevailing market conditions - we're expecting continued growth in European IPO activity also in 2022.

Renata Bandov, Deutsche Börse AG | Head of Capital Markets









### SPAC attack

2021 marked the year that SPAC activity came to European tech in force. At the time of publication, a total of 15 European tech companies have completed de-SPAC processes and gone public on exchanges around the world.

These 15 companies have a combined enterprise value of \$62B and span a range of categories, including quantum computing, semiconductors, electric mobility, marketplaces and fintech.

Notable companies that completed de-SPAC processes in 2021 include Cazoo (\$8B), Babylon Health (\$4B) and Lilium (\$3B).

### AGGREGATE ENTERPRISE VALUE



of European tech companies that went public via SPACs in 2021

# Selected European SPAC list

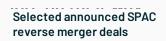
	Company	Country HQ	Acquisition corporation	VC backed	De-SPAC date	Exchange	EV(\$B)	Year founded	Industry
1	Wejo	United Kingdom	Virtuoso Acquisition Corp.	Yes	18-Nov-21	NASDAQ	\$1.1B	2014	Mobility
2	Gett	United Kingdom	Rosecliff Acquisition Corp. 1	Yes	10-Nov-21	NASDAQ	\$1.0B	2010	Mobility
3	Babylon Health	United Kingdom	Alkuri Global Acquisition Corp.	Yes	21-0ct-21	NYSE	\$4.0B	2013	Digital health
4	Navitas Semiconductor	Ireland	Live Oak Acquisition Corp.	Yes	19-Oct-21	NASDAQ	\$1.0B	2013	Semiconductors
5	Wallbox	Spain	Kensington Capital Acquisition II	Yes	04-0ct-21	NYSE	\$1.5B	2015	Electric mobility
6	Polestar	Sweden	Gores Guggenheim	No	27-Sep-21	NASDAQ	\$20.0B	1996	Electric mobility
7	HomeToGo	Germany	Lakestar SPAC I SE	Yes	21-Sep-21	Deutsche Börse	\$1.4B	2014	Marketplace
8	Lilium	Germany	Qell Acquisition Corp	Yes	14-Sep-21	NASDAQ	\$3.3B	2015	Electric mobility
9	ArQit	United Kingdom	Centricus Acquisition Corp.	Yes	03-Sep-21	NASDAQ	\$1.0B	2017	Quantum computing
10	Cazoo	United Kingdom	Ajax I	Yes	26-Aug-21	NYSE	\$8.0B	2018	Marketplace
11	Nexters	Cyprus	Kismet Acquisition One Corp	Yes	26-Aug-21	NASDAQ	\$1.9B	2009	Games
12	Rockley Photonics	United Kingdom	SC Health Corporation	Yes	11-Aug-21	NYSE	\$1.2B	2013	Semiconductors
13	Genius Sports	United Kingdom	dMY Technology Group, Inc. II	Yes	20-Apr-21	NYSE	\$1.5B	2015	Sports data
14	Paysafe	United Kingdom	Foley Trasimene Acquisition Corp II	No	31-Mar-21	NYSE	\$9.0B	1996	Fintech
15	Arrival	United Kingdom	CIIG Merger Corp	Yes	24-Mar-21	NYSE	\$5.7B	2015	Electric mobility

NOTES S&P Capital IQ Platform, as of date 29 November 2021, for illustrative purposes

### More on their way

There are at least a further three proposed transactions involving European tech companies (for a combined EV of \$6.6B) that have been announced, but have not yet completed the de-SPAC process. These include Vertical Aerospace from the UK and Boxine and Signa Sports from Germany.

SOURCE S&P Global



S&P Capital IO Platform, as of date 29 November 2021, for illustrative purposes

	Company	Country (HQ)	Acquisition corporation	VC backed	Announcement date	Exchange	Implied EV at de-SPAC (\$B)	Year founded
1	Vertical Aerospace	United Kingdom	Broadstone Acquisition Corp.	Yes	10-Jun-21	NYSE	\$2.2B	2016
2	Boxine	Germany	468 SPACI	No	30-Aug-21	Deutsche Börse	\$1.2B	2014
3	Signa Sports	Germany	Yucaipa Acquisition Corp	No	18-Oct-21	NYSE	\$3.2B	1999

SOURCE S&P Global







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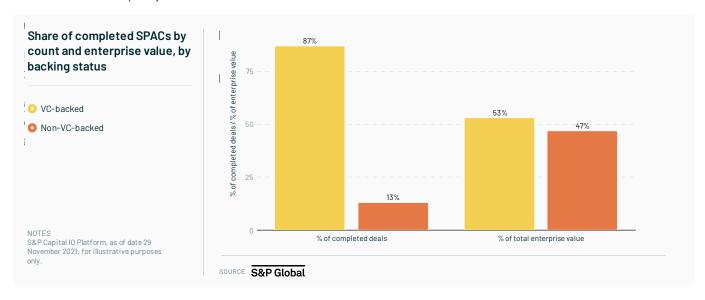


### An alternative path to liquidity and/or growth financing

The arrival of SPACs on the scene in the European tech ecosystem has created an important new path to the public markets for the region's VC-backed companies.

13 of the 15 completed de-SPAC transactions in Europe this year involved VC-backed companies (87%) with a total aggregate enterprise value in excess of \$32B, equivalent to 53% of the total enterprise value across all companies.

In many cases, these companies are still early in their lifecycle (the VC-backed companies have a median founding year of 2014) and so for many of the companies the move into the public markets may be viewed by their shareholders as a financing event, rather than a liquidity event.



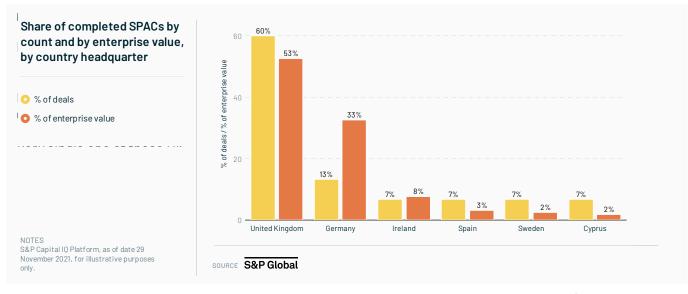
### UK tech companies have led the way

There have been 15 completed de-SPAC transactions for European tech companies originating from six different countries in 2021.

The UK is by far the largest contributor to the cohort. Nine out of 15 of the companies are UK-based, accounting for 60% of the total cohort by count and 53% by enterprise

Every single one of these UK tech companies went public in the US, either on the New York Stock Exchange (6) or on the NASDAQ (3). These companies had a combined enterprise value of more than \$32B.

The other countries to have seen local tech companies go public via a SPAC are Germany (2) and Cyprus (1), Ireland (1), Spain (1) and Sweden (1). The recent changes to the rules for SPACs to list on UK stock exchanges are very timely in this context.









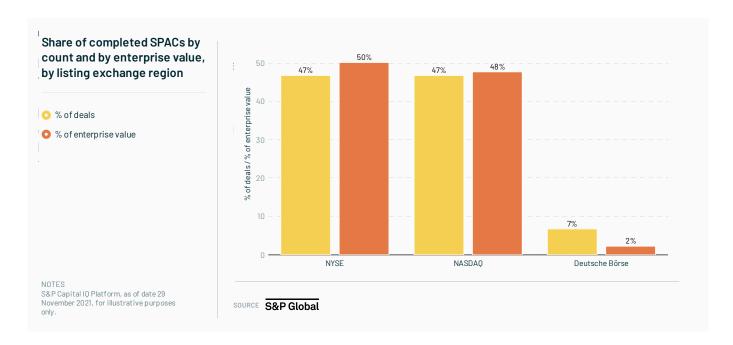


### SPACs are taking European tech companies public in the US

The SPAC phenomenon that swept through the global public markets in 2020 was driven by sponsors from the US raising vehicles on US stock exchanges.

These acquisition vehicles have not hesitated to look beyond the US to find compelling targets. It's notable that 14 of the 15 European tech companies that went public via SPAC in 2021 listed in the US. This is equivalent to \$60.1B of enterprise value, or 98% of the total value of this cohort of European tech companies.

To date, only one European tech company has listed on a European exchange in 2021; HomeToGo was taken public by Lakestar SPAC I on the Deutsche Börse in a transaction that valued the company at \$1.4B.













### The European SPACs have arrived

2022 is likely to see further SPAC activity. Beyond a large number of US-listed SPACs that have European tech in their sights, 2021 saw European sponsors respond to the

There are at least 13 SPACs that have successfully completed listings on European stock exchanges, including in Amsterdam (6), Paris (4), Germany (2) and Finland (1).

Together they have raised a combined \$3.9B to target European tech companies across a range of different sectors, including climate, fintech, SaaS and more. These SPACs have been sponsored by high profile European tech leaders, as well as European VCs.

### AGGREGATE CAPITAL RAISED

by European-listed, tech-focused SPACs with no current target

### SPAC list with no acquisition targets

	Acquisition corporation	Listing country	Date listed	Raised (\$M)	Target focus	Sponsor details
1	Crystal Peak	Amsterdam	22- Nov-21	\$150M	European technology	Michael Tobin, Rupert Robson, Seth Schelin
2	SPEAR Investments	Amsterdam	11- Nov-21	\$198M	European technology	Jorge Lucaya, (AZ Capital CEO), John St. John
3	Lifeline	Helsinki	15- Oct-21	\$113M	Euro pean technology	Lifeline Ventures (Tuomo Vähäpassi, Mikko Vesterinen)
4	TRANSITION	Paris	22- Jul-21	\$243M	Energy technology	Xavier Caitucoli, Erik Maris
5	I2P0	Paris	20- Jul-21	\$310M	Technology within entertainment and leisure sectors	Francois Pinault, Matthieu Pigasse
6	DEE TECH	Paris	25- Jun-21	\$186M	European technology	Marc Menase, Michael Benabou, Charles- Hubert de Chaudenay
7	ACCOR ACQUISITION COMPANY	Paris	01- Jun-21	\$339M	Technology within leisure, lifestyle and food sectors	Accor
8	Hedosophia European Growth	Amsterdam	14- May-21	\$483M	European technology	Hedosophia(Ian Osborne)
9	OboTech	Frankfurt	04- May-21	\$226M	European proptech and climatech	Rolf Elgeti, Ben Barnett
10	Pegasus Europe	Amsterdam	29- Apr-21	\$606M	Financial services, including fintech	Bernard Amault, Jean Pierre Mustier (ex- UniCredit CEO)
11	EFIC1	Amsterdam	26- Mar-21	\$468M	Financial services, including fintech	Martin Blessing(ex-Commerzbank CEO)
12	Tio Tech	Berlin	22- Feb-21	\$300M	Consumer tech, Fintech, SaaS, or media companies	Dominik Richter (HelloFresh co-founder), Roman Kirsch
13	ESG CORE INVESTMENTS	Amsterdam	12- Feb-21	\$282M	European technology with a sustainability focus	Infestos

S&P Capital IQ Platform, as of date 29 November 2021, for illustrative purposes

SOURCE S&P Global

Looking ahead to the next 12 months, what do you think best describes the role that SPACs will play for European target companies?

### ALTERNATIVE ROUTE TO PUBLIC MARKETS

of investment bankers, M&A advisors and consultants believe SPACs will be an alternative versus only 11% for whom it will be a preferred route

297

### AN ALTERNATIVE FINANCING MECHANISM

of investment bankers, M&A advisors and consultants believe SPACs will be viewed as an alternative financing mechanism





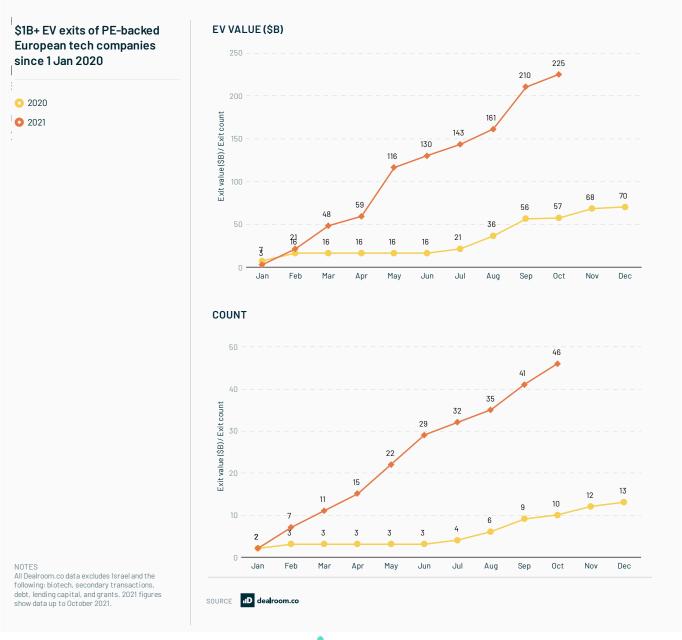




### 4x growth in \$1B+ PE-backed exits

Another interesting development is the growth of PE-backed exits of European tech companies. The speed of dealmaking had already accelerated at the end of 2020,  $\,$ with nearly 60% of all transactions taking place in the final four months.

2021 has been a record year so far, with a total of 46 \$1B+ PE-backed exits recorded with a total of \$225B+ in aggregate enterprise value - almost 4x as much as in the whole of 2020. This is across all types of acquisitions, SPACs and IPOs.













Over the last decade, private capital has rapidly expanded to fuel its best entrepreneurs - but public risk capital has lagged. At the same time, the race for tech IPO volumes continues to intensify across global exchanges.

The main considerations in Europe for founders considering a public listing today remain: liquidity such that they can reliably access a deep long term investor base, a valuation that is not a discount to an alternative exchange, depth and quality of research coverage, a regulatory framework that provides maximum flexibility (alternative listing structures, founder control, minimum float and capitalisation requirements) vs. the US. Clearly there is some way to go yet but key European exchanges and policy makers, not least the LSE and the FCA earlier this year, have demonstrated the willingness to compete globally while continuing to provide an adequate level of investor protection. This is not a race to the regulatory bottom but instead recognises that technology is a unique long duration asset, which needs a discerning capital base and regulatory environment to support innovators over the long run.

Laura Connell, Marcho Partners | Investor









**CHAPTER** 



# How can the flywheel spin faster?

Shaping the future of the tech sector

### How can the flywheel spin faster?

European tech is on a strong trajectory, with venture capital delivering consistently benchmark-beating returns. However, funding, talent and policy are all critical components we must continue to fine tune. With more collaboration across private and public sectors, we can supercharge the next decade for tech. And with better accountability from founders and investors, we can deliver more on inclusivity and sustainability.

### **ARTICLES**

### 07.1 Smart policy

This year there is reason to be optimistic about the role policy can play in supporting, and potentially accelerating, the growth of the European tech ecosystem - with many cautiously optimistic about the Digital Markets Act and the possibility of (finally) addressing Europe's fragmentation problem.

### 07.2 From stumbling blocks to building blocks

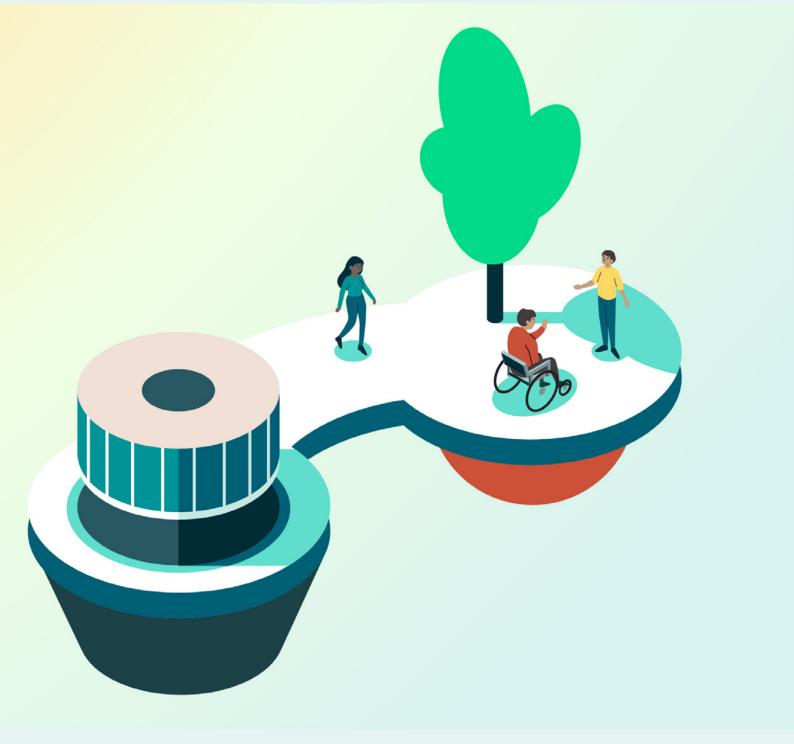
Companies are coming out of the blocks faster than ever and scaling at pace. But there are still many structural challenges that are putting a break on better business connectivity across Europe such as the friction associated with talent mobility or the ability to expand quickly across the region.







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## 07.1 **Smart policy**







### **ARTICLE 07.1**

This year there is reason to be optimistic about the role that policy can play in supporting, and potentially accelerating, the growth of the European tech ecosystem - with many cautiously optimistic about the Digital Markets Act and the possibility of maybe (finally) making more progress on addressing some of Europe's fragmentation problems.

### **INSIGHTS**

### Is the regulatory environment improving?

26% of founders and leaders feel the regulatory environment has changed for the better, and 20% for the worse. 21% of founders believe regulation is the biggest challenge facing European tech in the next 12 months.

### Regulatory fragmentation remains a key obstacle

48% of investors and 43% of LPs see regulatory fragmentation in the EU as the key regulatory challenge for future tech growth. LPs also cite a lack of pension fund allocation to venture, while founders worry most about funding limitations.

### Concerns about the Digital Markets Act relate to over-regulation

Of those who think the Digital Markets Act will be ineffective, 42% cite 'over-regulation' bad regulation'; followed by 'circumvention by Big Tech' at 31%.



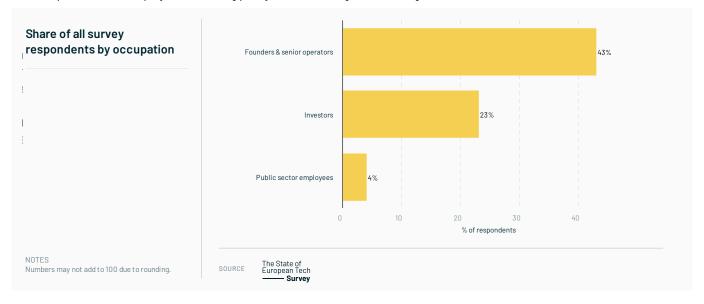






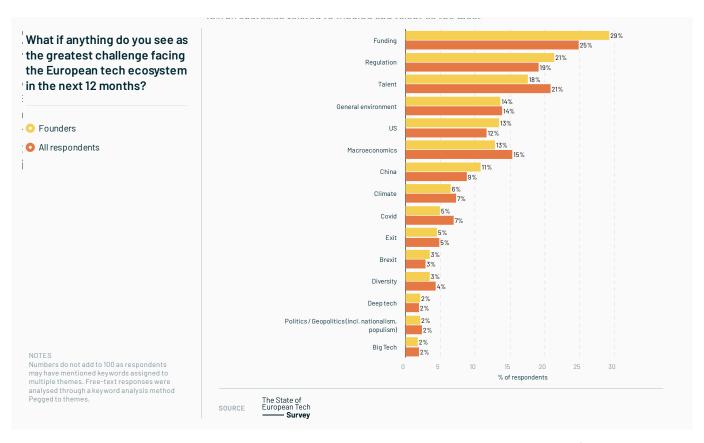
### The state of European tech policy, according to 5,000 industry voices

For the past seven years, this report has led an annual survey to gather insights from participants into the European tech ecosystem. This is one of the largest regular surveys of European tech industry leaders, with insights from: more than 2,000 founders, C-level executives and department heads of European tech companies; more than 1,000 investors, including VCs, institutional capital allocators and angel investors; and over 100 public sector employees, including policymakers dealing with tech regulation.



### Regulation is perceived as one of the greatest challenges facing the European tech ecosystem

We asked survey respondents what they perceive to be the greatest challenge facing the European tech ecosystem in the next 12 months, and mapped the free text responses using keywords to identify common themes. Regulation was outranked only by obstacles related to funding and talent as the most frequently-cited, mentioned by 19% of respondents. Just 2% of respondents shared concerns related to Big Tech. Founders placed regulation second only to funding in terms of challenges - regulation was cited by 21% of founder respondents.



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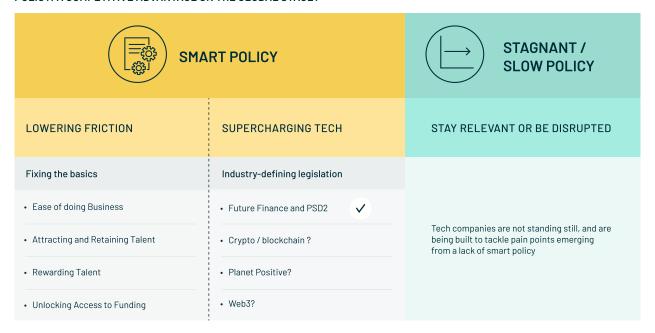






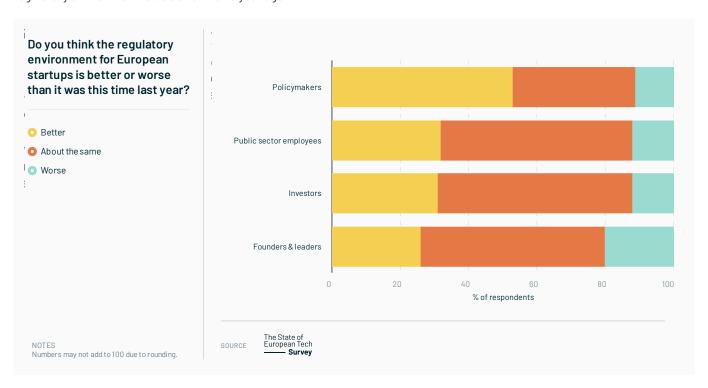
How can policymakers embrace the flywheel that is underpinning European tech growth and help to make it spin faster? Is there scope to increase the upside potential for European tech through smart policy, removing some of the unnecessary friction for European tech companies?

### POLICY: A COMPETITIVE ADVANTAGE ON THE GLOBAL STAGE?



### Signs of progress in the regulatory environment

Once again, we asked survey respondents to reflect on the state of the regulatory environment for European startups - whether things are better or worse than they were this time last year. We found mixed views. 26% of founders and leaders felt the regulatory environment had changed for the better, while 20% felt it had worsened; the majority (54%) perceived things to have stayed about the same. Policymakers are more optimistic with 37% indicating improvement in the regulatory environment over the past 12 months and only 12% that felt things changed for the worse. The investor community landed between these two groups with 31% perceiving the regulatory environment to be better than a year ago.











### A window into European policy initiatives: our methodology

In addition to collecting our own data, we have partnered with POLITICO Europe to obtain further insights into European tech policy initiatives - this table sets out the structure of the data used throughout this article. 'Activities and press releases' provide a sense of what is being talked about by elected legislators and the responses to those discussions that are communicated back to the public. 'Legislative documents' reveal what makes it into draft policies - they are a proxy for the outcomes of activities. Taken together, they provide a useful insight of the changing policy agenda. This analysis is also focused thematically: POLITICO Europe created a mapping of the most common keywords, which are included in the table below.



### Keywords mapping

Topics and corres	ponding
search terms	

1	Artificial Intelligence	artificial intelligence
2	Al (facial recognition)	biometric surveillance, facial recognition
3	Autonomous vehicles / mobility	autonomous vehicles, autonomous vehicle, self driving cars, driverless, autonomous driving
4	Blockchain / Crypto	cryptocurrency, crypto-currency, block chain, bit coin, ether eum, NFT, non fungible token
5	Capital gains taxation	capital gains
6	Content & copyright	copyright, intellectual property
7	Covid-19	covid-19, covid19, pandemic, coronavirus, health crisis
8	Covid-19 repurcussion on future of work	lockdown, future of work, hybrid working, work from home
9	Cybersecurity	cybersecurity, data breach, ransomware
10	Data privacy/ GDPR	data privacy, gdpr, general data privacy regulation, data protection
11	Digital health	ehealth, e-health, digital health, digital healthcare, telehealth
12	Digital markets act	digital markets act, dma
13	Digital Services Act	digital services act, dsa
14	Digital Single Market	digital single market, digital sovereignty, european cloud, gaia-x, gaia x
15	Digital tax	$\label{thm:commerce} digital tax, digital taxation, digital services tax, digital sales tax, e-commerce levy, global corporation tax, corporate taxation$
16	Digital transformation	digital transformation, digital age
17	Disinformation/ deepfakes	disinformation, deepfakes, deepfake
18	Drones	drones, uav, unmanned aerial vehicle, electric vehicles, electric cars, hybrid cars
19	European Startups	european startup, startup, scaleup, scale-up, european scaleup, european scale-up
20	Fintech	fintech, financial technology
21	Green Deal	climate  tech,  biotech,  green  tech,  renewable  energy,  carbon  cap  ture  and   sequestration,  ccs
22	Platform workers/ gig economy	platform workers, gig economy, zero hours contract
23	Quantum computing	quantum computing, quantum computer
24	Research and innovation framework	horizon 2020, research and innovation framework
25	Stockoptions	stock options, employee ownership, share options
26	US Big Tech	google, youtube, a mazon, facebook, instagram, what sapp, apple, twitter, netflix, airbnb, ebay, microsoft
27	Electric vehicles	electric vehicles, electric cars, hybrid cars



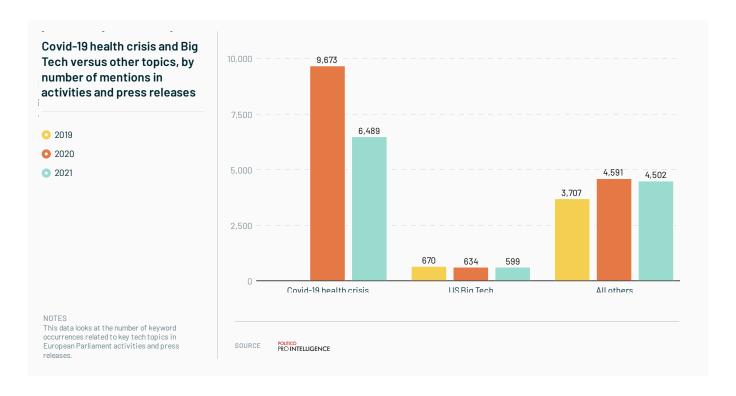






### The pandemic outweighs all other discussion around tech

It's no surprise that the pandemic has been the dominant theme in European Parliament activities once again in 2021. Looking beyond discussion related to Covid-19, the focus is still very much on issues related to 'US Big Tech', which has remained the single most frequently discussed tech-related theme receiving attention from European policymakers, as measured by the frequency of mentions in European Parliament activities and press releases.





### We need to give individuals the incentive to regulate for innovation and reward them when they get this right

Regulation can be critical to unlocking new business models where the technology has moved quicker than the market structure, for example by providing necessary "rules of the road". Take the EU Regulation on Markets in Crypto Assets (MiCA) - in some senses the law provides clarity where there has been uncertainty, but it is also heavy-handed in places such as its ban on interest-bearing crypto assets.

The EU could have leveraged the significant work being done on models of regulation that instead of being reactive and blunt such as banning or limiting activity - are anticipatory, inclusive, experimental and proportionate. The challenge is that very few policymakers, whether in national governments or at an EU level, have the personal incentive to be creative and take a "risk on" approach to policy, particularly when it comes to new and potentially disruptive technology.

Leo Ringer, Form Ventures | Founding Partner



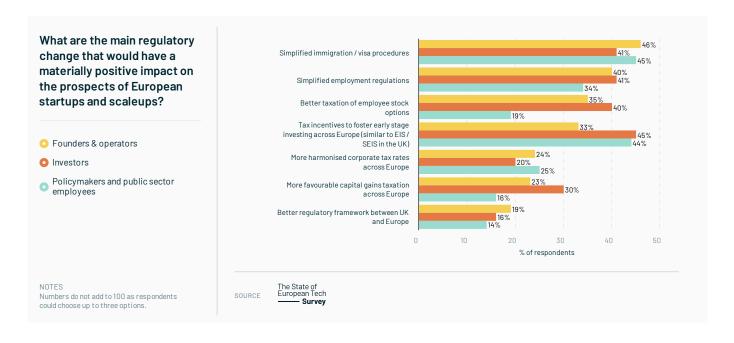






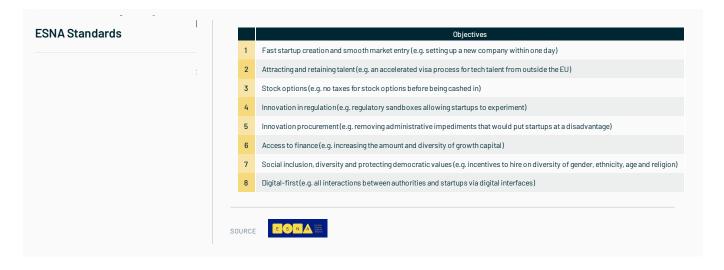
### ESNA: aligning with founders' priorities

The policy issues that are top of mind for Europe's founders, operators and investors are simplified immigration/visa procedures, simplified employment regulations and better taxation policy for employee stock options. So it's great to see that the European Startup Nations Alliance (ESNA), which launched in early November 2021, aims to help countries to become 'startup nations' - its focus on attracting and retaining talent and stock options has potential to improve outcomes for each of these. Investors also frequently cite tax incentives to foster early-stage investment - but this isn't currently a focus for ESNA.



### 'Startup nations' standards

ESNA is working closely with the 27 European countries that have signed up to the EU Startup Nations Standard declaration in March 2021 to implement the following eight underpinning standards.





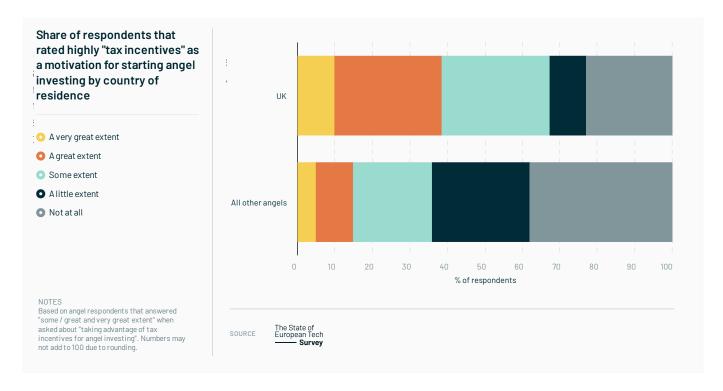






### Tax incentives incentivise

Access to funding remains the greatest challenge across the European tech ecosystem - but particularly for founders. Policy can play a role to create incentives aligned to economic growth and job creation - but these are often at the national level. For example, the UK policy approach to angel investment (so-called EIS/SEIS) means that a greater share of UK angel investors cite 'tax incentives' as a factor in their decision to start angel investing. In the UK,  $\,68\%$  of angel investors said it played a role to some extent or greater, much higher than angel investor respondents from any other country. It's important that campaigns which spread best practice in effective regulation continue, eg #notoptional - these promote policies which encourage growth.





Regulatory convergence is at the core of the European project, and remains a necessity to bolster the efficiency of the single market.

A number of the recommendations put forward in the report of the Scale-Up Europe community aim at working towards more harmonization in legislations and regulation across Europe. This is a key element to enable our startups to scale up outside of their home country and master that process from 1 to 100 that is crucial to compete on the global stage. This will allow us to unleash innovation brought about by EU startups and reach the indispensable goals of the future of Europe.

Innovation is the first most important driver of future growth and jobs, provides solutions for a sustainable economic model aligned with our climate, and is the cornerstone of our technological sovereignty. I have no doubt that we will collectively overcome the obstacles and seize the opportunities ahead.

Philippe Huberdeau, Scale-Up Europe | Secretary General





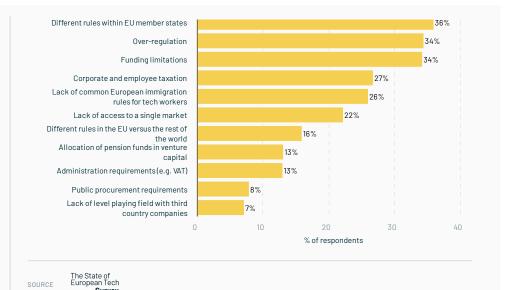




### Removing barriers to scale

In comparison to the US and China, the main regulatory hurdle limiting startup and scaleup growth in Europe remains the fragmented regulatory regime, pointing to a need for harmonisation measures to support companies scaling across the region. However, 'over-regulation' was also cited regularly - while vague, this carries an implicit warning about the need for smart, considered policy.

To date, what are the main regulatory hurdles limiting the growth of startups and scaleups in Europe compared to other large markets like the US and China?



Numbers do not add to 100 as respondents could choose multiple options



It is tempting to always seek harmonisation at an EU level, to standardise things for startups operating across borders, but that is really hard to achieve in practice and risks alienating member states.

There are two priorities here. The first is to show clarity and conviction of leadership at an EU level - to identify the levers that policymakers have available, including funding but also well beyond it, and to ensure they are all focused on the same objective of promoting innovation. The fact that startup policy is divided between several Commissioners is not helpful here, but isn't going to change.

The second is to recognise that key startup policies such as employment law, company law and taxation will always be largely national competencies, not EU level ones. Instead, campaigns like #notoptional are spotlighting key issues and showing member states what best in class looks like - encouraging them to reform and reap the rewards of doing so.

Leo Ringer, Form Ventures | Founding Partner







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### All groups stakeholders cite regulatory fragmentation as a key obstacle

All stakeholder groups highlight European regulatory fragmentation as a significant challenge for future tech growth. 48% of VCs cited this; LPs also placed this issue high on their list of perceived challenges, and also frequently cited the issues around the (lack of) allocation of pension funds to Europe's venture asset class; whereas founders also highlighted the need to address funding challenges.

To date, what are the main **VENTURE CAPITAL INVESTORS** regulatory hurdles limiting the growth of startups and Different rules within FII member states 48% scaleups in Europe compared 31% Over-regulation to other large markets like the 31% Lack of access to a single market **US and China?** Allocation of pension funds in venture 30% Corporate and employee taxation 28% Lack of common European immigration 28% rules for tech workers Funding limitations Different rules in the EU versus the rest of 11% the world Administration requirements (e.g. VAT) 9% Lack of level playing field with third 4% country companies Public procurement requirements 30 % of respondents LIMITED PARTNERS (LPS) INVESTING IN PRIVATE EQUITY & VENTURE CAPITAL FUNDS WITH FOCUS ON TECH Different rules within EU member states 43% 39% Over-regulation Lack of access to a single market 20% Allocation of pension funds in venture 39% capital 18% Corporate and employee taxation Lack of common European immigration 18% rules for tech workers Funding limitations Different rules in the EU versus the rest of 14% Administration requirements (e.g. VAT) 15% Lack of level playing field with third country companies Public procurement requirements 5% 10 40 % of respondents **FOUNDERS** Different rules within EU member states Over-regulation 35% 19% Lack of access to a single market Allocation of pension funds in venture Corporate and employee taxation 28% Lack of common European immigration 21% rules for tech workers Funding limitations Different rules in the EU versus the rest of 14% NOTES the world



30

% of respondents





and LPs only.

The State of European Tech ——— Survey

SOURCE

Numbers do not add to 100 as respondents

could choose multiple options. Founders, VCs

18%

8%

9%

10

Administration requirements (e.g. VAT)

Lack of level playing field with third

Public procurement requirements

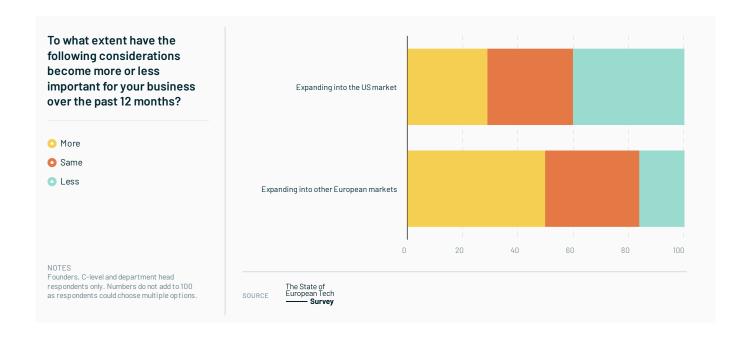
country companies



### Scaling across Europe is becoming more important to founders

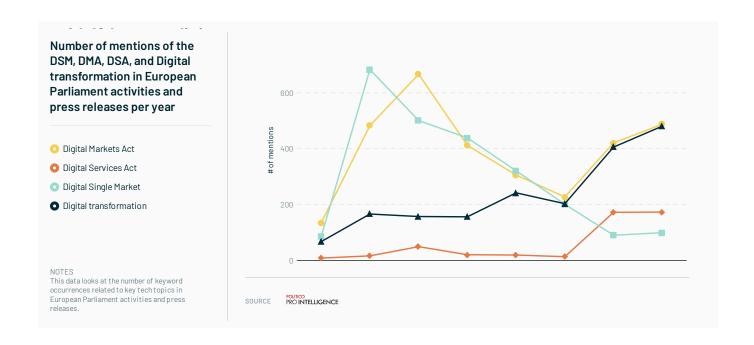
Half of founders and leaders of tech companies shared that expanding into other European countries has become more important for their business over the past 12 months, while expanding to the US has become less important for 40% of respondents.

The more that scaling across the region becomes an important priority for founders, the more acute the need to address the hurdles to European expansion becomes.



### Covid-19 has put digital transformation in the spotlight

The shifting areas of focus of discussions in the European Parliament are clear to see. The conversation has shifted away from the Digital Single Market (DSM) to the Digital Markets Act (DMA) and the Digital Services Act (DSA). Digital transformation has also become a frequently mentioned theme as Covid-19 restrictions on movement have accelerated the need to operate digitally.













If European governments are serious about digital sovereignty, it would be important that they actually open their procurement process to European start-ups and scale-ups.

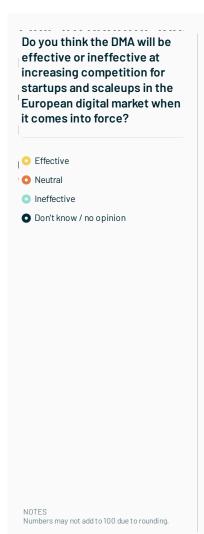
There are three elements that need to be present to make Europe a strong player in technology: capital, talent, and a supportive business environment. We're making good progress on all of those, but there's always more that can be done. In the past year, we've seen governments across the continent publish Al and hi-tech strategies which reflect these needs and, broadly, make the right suggestions. The challenge now is delivering on those promises.

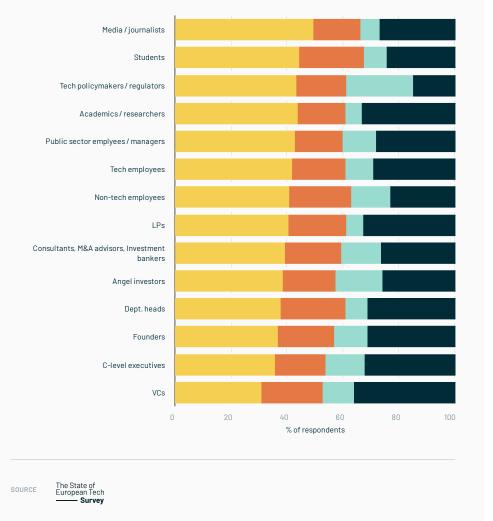
Nigel Toon, Graphcore | Co-Founder and CEO

### Many are hopeful about the DMA - but gaps remain in awareness

The Digital Markets Act aims to increase competition by creating a fairer business environment. Encouragingly, there were 4x as many respondents think the DMA will be effective at increasing competition for startups and scaleups, as those who think it will be ineffective.

This optimistic stance was shared across all the different respondent types, including founders and VCs. But a large share of respondents (31%) either did not have an opinion or did not know how to answer. This suggests there remains a huge need to build awareness and educate the market about the DMA.









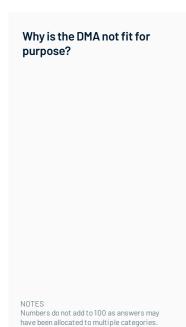


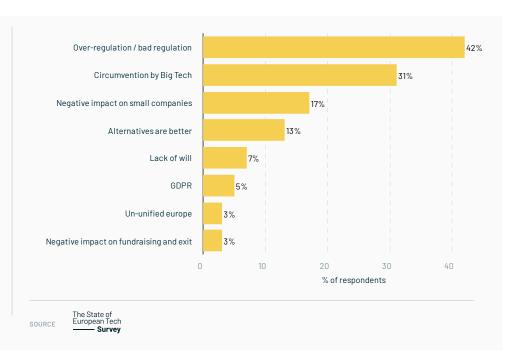


### Concerns around ineffectiveness of DMA relate to over-regulation

A structured analysis to explore core themes in free text responses of those most sceptical about the expected efficacy of the DMA, revealed that many are concerned about the DMA being an example of overregulation, as well as that it would be circumvented by Big Tech.

Respondents also shared concerns about potential unintended negative consequences, such as a disproportionate harmful impact on smaller companies or a negative impact on the liquidity of capital markets by adding friction to fundraising or exits.







I would argue for the introduction of activity-based regulation, using the principle of 'same risk, same regulation'. This would protect both consumers and ensure that regulation keeps pace with fintech innovation.

The banking sector is heavily regulated and rightly so. We are in charge of people's money. This is a big responsibility. But there are firms coming into the market who are also in charge of people's money that are not regulated to the same standards because they are not banks.

Take, e-money firms or stablecoins that might be introduced. These are not regulated to the same standards as banks currently, yet consumers are not always aware of this. A consumer may not realise, for example, that the Financial Services Compensation Scheme does not apply to these firms. Similarly, firms that extend credit should be regulated to the same standards whether their product is called a credit card or buy-now-pay-later.

Anne Boden, Starling Bank, Founder and CEO









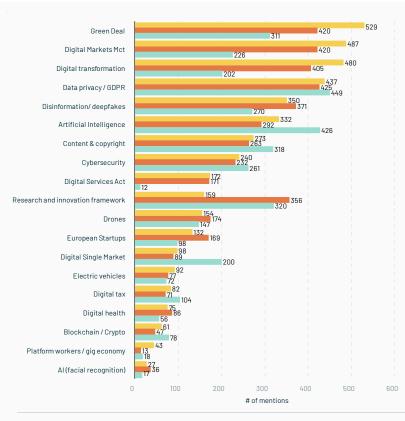
### After PSD2, could Planet Positive be next?

The second pillar of our 'smart policy' framework is focused on the potential to use well-executed, industry-defining legislation as a powerful catalyst for innovation.

PSD2 remains the touchstone example in the European context - but there is an opportunity to create a similarly supportive and empowering environment for innovation and entrepreneurial activity focused on climate.

It's clear that Planet Positive is already a huge focus in Europe - for both tech and policy - at a time when legacy regulation still represents a barrier to innovation in many Planet Positive areas, such as carbon removal, decentralised energy communities, or fusion energy, there is potential for policymakers to set the stage for Europe's 'next act' (as outlined in article 2.2 of this report).







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We are at a pivotal moment where the countries and companies that choose to embrace these developments will have a material competitive advantage over those who don't.

Fintech in Europe benefits from both great regulators like the FCA who are willing to foster innovation in a constructive way through things like the regulatory sandbox, and a brilliant diverse talent pool supported by proximity to traditional financial centres like London. Europe is the perfect storm of complex regulation, fragmented markets and lots of legacy technology. This is combined with demanding customers who expect more from their financial services providers.

There is also a healthy approach from consumers, businesses and regulators towards digital currency. This is an industry that's rapidly converging with traditional fintech. I really believe that digital currency, particularly stablecoins and Central Bank Digital Currencies (CBDCs), is part of the evolution of our monetary systems. We can expect to see the continued convergence of finance and fintech with digital currency—which will unlock new business models that we're only just beginning to imagine.

Guillaume Pousaz, Checkout.com | Founder & CEO





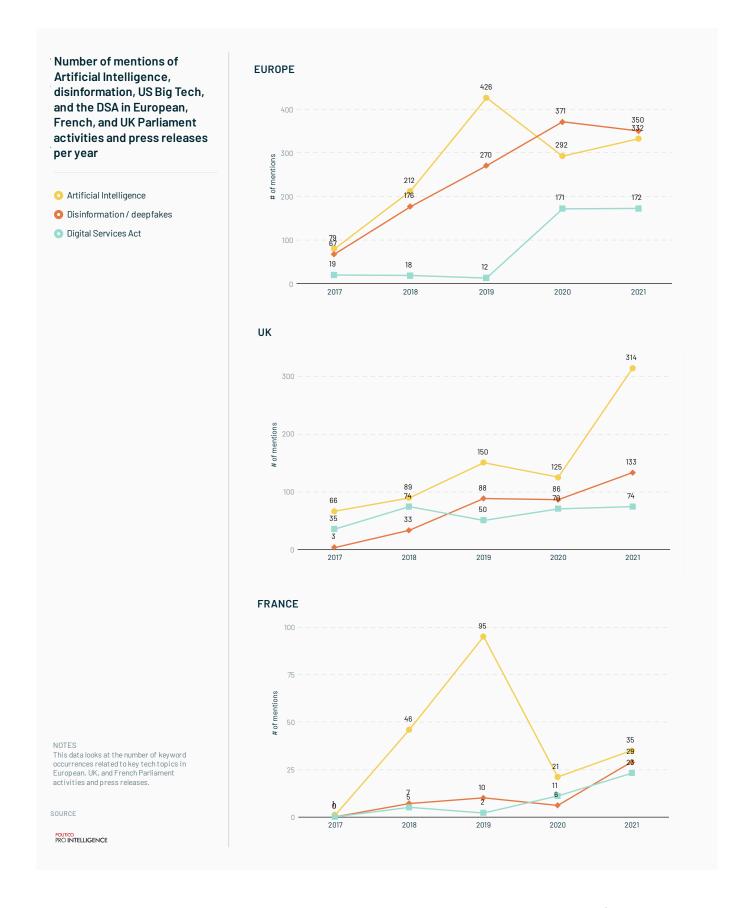




### interpretation remains a hot topic

Although tech brings enormous benefits, it can also have negative impacts. Disinformation, including deepfakes, is growing as a threat as technology becomes more ubiquitous.

This is registering at the European level, where there is increased discussion on these topics including as part of the Digital Services Act.





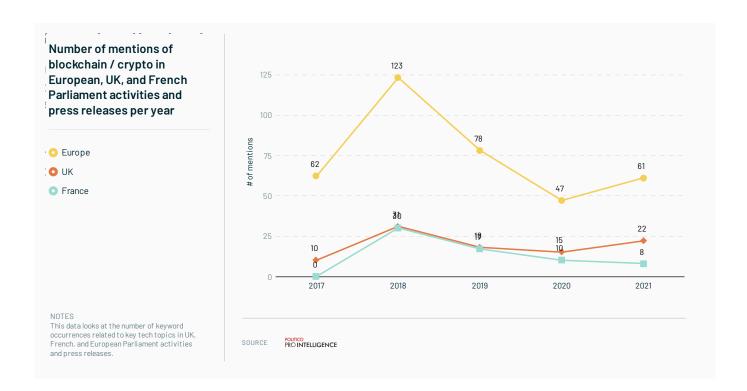


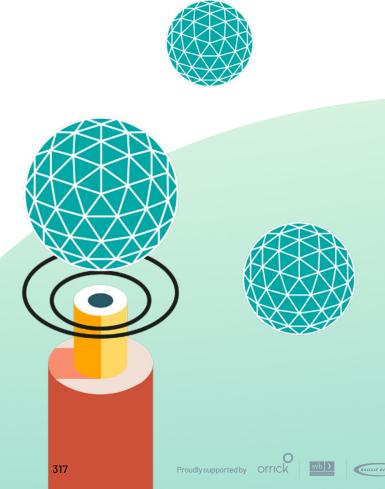




### Supporting the development of Web3/crypto/DeFi with smart policy

2021 has been a landmark year for crypto, blockchain and the Web3 movement. Discussions on this topic at the European level have mirrored the broader retail interest in crypto, but remain at muted levels compared to other themes. Given the scale of the potential opportunity of being a leader in this space and also the potential transformative impact of a transition to Web3, it surely warrants greater discussion at the policy level to understand how best to realise its full potential?











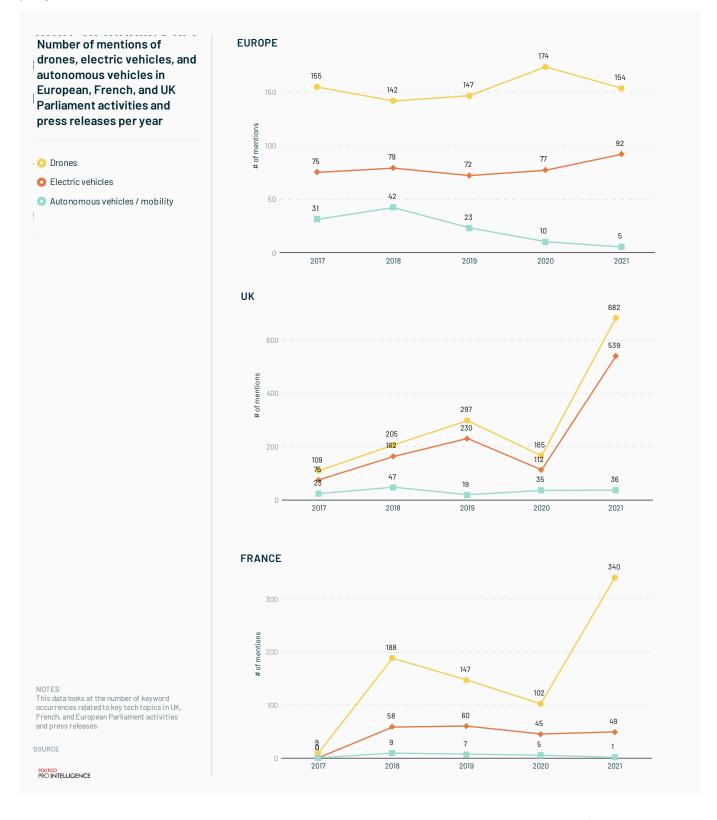
### Future of mobility needs policymaker collaboration

Mobility is another key sector of innovation for Europe. 2021 was a milestone year for a number of electric vertical takeoff and landing (eVTOL) companies in Europe: Munich-based Lilium listed on the NASDAQ; Volocopter, another German-based startup, raised a \$241M series D round earlier this year; and Vertical Aerospace, UK-based, announced the intention to list on the NYSE via a SPAC.

There have also been huge funding rounds for companies looking to support the transition to electric mobility, such as Sweden's Northvolt or the UK's Britishvolt.

There remains a steady level of discussion of these topics at the European level, with higher levels in the UK and France. But the regulatory discussion surrounding autonomous vehicles seems to have slowed down.

From eVTOL to autonomous driving, European companies stand to benefit from close collaboration with policymakers as innovations move towards commercial launch.







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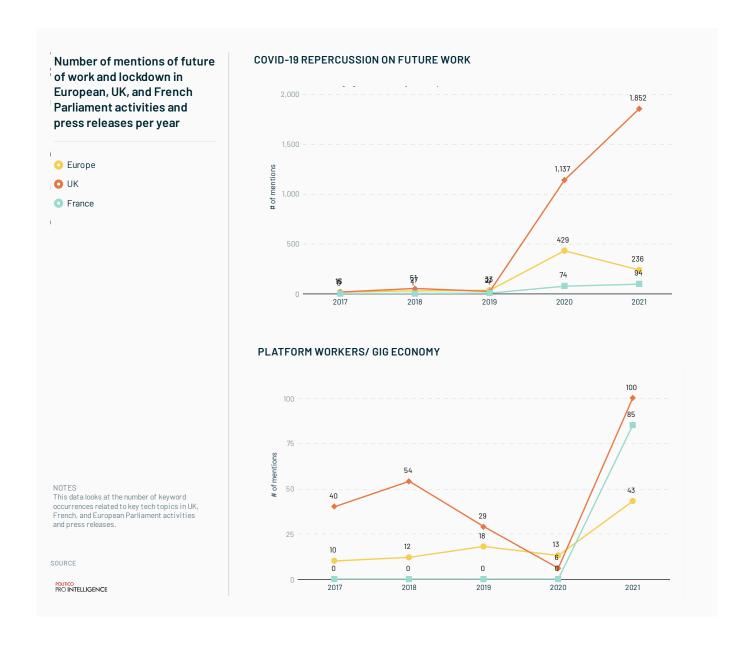




### A European future of work agenda could help startups overcome key challenges

Our analysis separated discussions around the effects of Covid-19 on the future of work from the broader discussion of the health crisis.

While legislation is not in the remit of the European Commission, the topic should be part of the discussion and on the agenda: founders mention fragmentation of European regulation and the talent squeeze as particular challenges. A unified European agenda could help companies to adapt their policies to leverage the changes in working behaviour. Discussions around gig economy and platform workers remain on the agenda - though not on the same scale.



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### What's talked about vs. what shows up in legislation

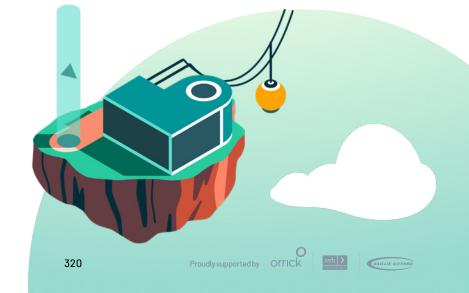
The most mentioned themes in activities and press releases do not totally align to the most mentioned in legislation. US Big Tech regulation ranks low on legislative documents, even if it still ranks as the second most talked about topic in the European Parliament. Similarly the Green Deal has also moved down the list to eighth place. Data privacy and GDPR continue to hold a leading spot.

Top 20 key topics in European Parliament by number of mentions in legislative documents

	Key topics	2019	2020	2021
1	Covid-19	19	181	125
2	Data privacy/ GDPR	158	127	103
3	Digital Markets Act	96	88	84
4	Digital transformation	36	73	48
5	Cybersecurity	49	51	42
6	Artificial intelligence	28	50	39
7	Content & copyright	57	50	38
8	Green Deal	81	73	34
9	Digital Single Market	43	38	28
10	Research and Innovation Framework	36	34	27
11	Digital Health	11	25	17
12	Covid-19 repurcussion on future of work	2	43	16
13	European startups	19	26	16
14	Drones	19	17	14
15	Blockchain / crypto	10	18	12
16	Disinformation/ deepfakes	12	26	11
17	Digital Services Act	5	16	11
18	Electric vehicles	8	5	5
19	Digital tax	9	2	3
20	US Big Tech	21	9	2

This data looks at the number of keyword occurrences related to key tech topics in European Parliament activities and press releases.

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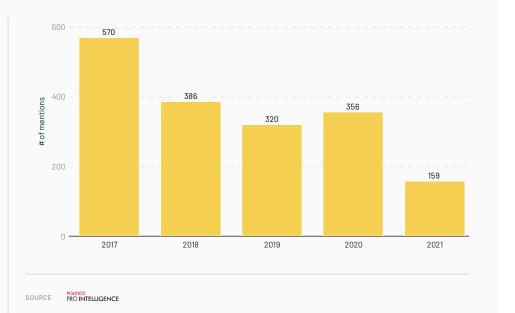




### Regulation on research and innovation is losing steam

Mentions of keywords around the theme of research and innovation have steadily fallen since 2015 in the European Union. But there is still a lot more to do to ensure researchers and universities are set up for success and can contribute effectively to the European tech flywheel.

Number of mentions of research and innovation in **European Parliament** activities and press releases per year



NOTES This data looks at the number of keyword occurrences related to key tech topics in European Parliament activities and press releases.



The more we will trust digital technologies, including Al, the more we will use them. And the more we will attract innovative, creative newcomers.

That's why all regulations that we proposed are there to increase the trust that users put in technology. A large part of these rules are also about limiting the power of the largest platforms specifically to give smaller players a chance to make it. That's what we do for instance when we ask large marketplaces to share their data with the small sellers that they host. And last but not least, we've seen it in many other areas: what helps companies to grow is to have one clear set of "Dos and Don'ts" that lasts in time, instead of 27 different sets of rules. Because that makes it much more difficult to grow.

Margrethe Vestager, European Union | Executive Vice President of the European Commission for A Europe Fit for the Digital Age; European **Commissioner for Competition** 









### Companies emerge to lower friction for others

A growing list of European tech companies have emerged to address the problems facing startups, scaleups and other companies as they look to scale and expand across Europe. Below is a curated selection of companies representative of this trend. These companies help to reduce complexity for startups and scaleups, as well as consumers - each in their own way. In some cases, these companies have already grown to become large, highly-valued companies, such as Taxfix and Remote, which are now valued at greater than \$1B. This is a reminder of the scale of the opportunity to address problems or compliance headaches associated with a complex and fragmented regulatory landscape.



### Estonia Immigration management software designed to help clients relocate their new international employees



Estonia Intelligent cross-border compliance platform intended to deliver critical services for logistics providers



Germany Relocation software designed to facilitate global mobility for companies and their international employees



Germany Online tax assistance platform designed to simplify tax declarations



Germany Marketplace and platform for patented technologies that connects pioneering research organisations with innovative companies across industries



Remote Recruiting platform intended to help companies of all sizes to hire top talent from all over the world



Switzerland Energy software designed to empower energy providers



United Kingdom A platform intended to connect small businesses and large to tender and contract opportunities from aovernments



**United Kingdom** Online knowledge base technology intended to help businesses to work with government data



**United Kingdom** B2B healthcare marketplace designed to transform the healthcare supply chain

### **TaxScouts**

### **United Kingdom**

Tax preparation services intended to make tax planning easier and stress-













### 07.2 From stumbling blocks to building blocks





### **ARTICLE 07.2**

With recycled tech talent and capital creating a virtuous cycle, new companies are coming out of the blocks faster than ever and scaling at pace. But there are still many structural challenges to overcome to build a better future for tech: institutional investors must allocate funds for the future; and founders and investors must prioritise diversity and inclusion to ensure continued growth.

### **INSIGHTS**

### Employment growth defying the law of large numbers

While European employment as a whole has grown by 0.4%over the past 24 months, startup employment has grown by 19.4%, adding ~400K new roles in that period. YOY growth hit a record 10.9% in 2021, even as the absolute numbers soared.

### Are institutional investors betting on the future?

Institutional investors - with the exception of government agencies and corporate investors - index massively towards buyout allocations over venture capital: pension funds are allocating 19x more capital to European buyout funds than to VC; sovereign wealth funds allocate \$49 to buyout funds for every \$1 to VC. Are they placing a right-sized, risk-adjusted bet on the future?

### Founders and investors must prioritise diversity

Tech's diversity problem will only compound if founders and investors don't raise it to the top of their agenda. When asked for which group of people the European tech ecosystem is failing to provide equal opportunity, 42% said women and 36% said people of colour.











When we refer to the technology flywheel, we 're talking about the compounding effect entrepreneurial activity has. In other words: success breeds success. This is what we're seeing happening in Europe. At lightning speed, the bar is being raised for quality of ideas, ambition levels and execution capability.

As we look forward to Europe's next act, we explore the additional factors which - if we get them right - can ensure Europe unlocks its full potential on the tech stage and beyond. By aligning the entire ecosystem around this shared goal, and recycling talent and capital at scale, we can turn stumbling blocks into the building blocks of the future.

# **6**Charting progress

When asked what poses the greatest challenge to European tech, the key challenges highlighted by respondents all related to slowing down Europe's ability to reach its full potential. But with the level of ingenuity and grit demonstrated by the talent building European tech, we are confident of making progress against each of them. Let's dive in!

What if anything do you see as the greatest challenge facing the European tech ecosystem in the next 12 months?

NOTES Based on all respondents. Numbers may not add up to 100 as respondents could select multiple choices. Answers were mapped to themes based on a keyword search.

	Share of respondents	Initiatives and solutions
Funding	25%	$Practically \ untapped \ pool \ of \ capital \ should \ be \ invested \ into \ venture, to \ in turn \ support \ more entrepreneurs$
Talent	21%	NotOptional (Stockoptions)andEuropeanNationalStartupAlliance(talentvisa),acceleratorprogrammes(EntrepreneurFirst,Zinc)
Regulation	19%	Smart policy
Macroeconomics	15%	
General environment and mindset	14%	Establishing role models, supporting founders to succeed
Climate	7%	Climate tech companies are capturing a large share of funding
Covid	7%	Remote and distributed work
Exits	5%	Levelling up the investor base and the active participants in Europe
Diversity	4%	Initiatives are breaking down barriers but investors and founding teams need to double down efforts to restore the balance
Deep tech	2%	Improving the commercialisation of research through spinouts (Spinout.fyi)













This is no time to get complacent. Two-thirds of businesses told us they would grow much faster if Europe's market were more harmonized.

Providing better access to funding and talent, redefining software engineering and facilitating instant payments are just a few examples of how Europe could build on its current momentum. As an EU citizen, I feel proud of how far we've come already, and know that we will do even better soon.

John Collison, Stripe | Co-founder & President

# Startup employment growth is defying the law of large numbers

Startups are a consistent motor for growth, and a driver of innovation and change. Employment in the tech sector is soaring thanks to the vibrancy and strong growth of Europe's startup community.

The year-on-year growth of startup employment reached record levels in 2021 to hit 10.9%, accelerating once again even as the absolute numbers get bigger. The tech sector in Europe looks like it's defying the law of large numbers.

Employment in the overall economy in Europe also rebounded strongly in 2021, helping to make up for a historic fall in 2020 as a result of the pandemic. The overall two-year change is perhaps easier to understand: While European employment as a whole has grown by 0.4% over the past 24 months, European startup employment has grown by 19.4%, having added around 400,000 new roles over that period. This leads to an interesting question: how can this level of growth be sustained or even further accelerated?

## STARTUP EMPLOYMENT

change in startup employment over the past two years

#### **EU EMPLOYMENT**

change in EU employment over the past two

eurostat

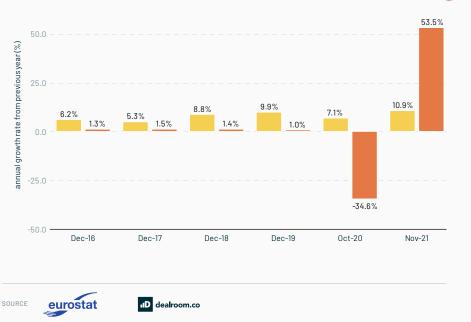


# Start-up jobs year on year growth rate (%) across Europe

Startups employment YoY growth

EU employment YoY growth(%)

Europe employment growth rate sourced from EuroStat. Start-up employment data sourced from Dealroom.











Number of startup jobs in Europe are on the rise

LATEST (2021)

tech startup jobs in Europe, according to Dealroom estimates

SOURCE 1D dealroom.co

PROJECTED (2026)

tech startup jobs in Europe, according to Dealroom projections



SOURCE 1D dealroom.co



# Ambitious individuals are choosing tech

European tech benefits from a deep and experienced talent pool. The growing number of tech hubs distributed across all corners of the region have their own strengths and sets of attributes that make them unique, and knowledge and experience are flowing through an ever better-connected Europe. But talent acquisition continues to be a bottleneck, and lack of diversity risks being compounded over time.



What are the most important skills acquired by Europe's multi-generational leaders?

**EXECUTION CAPABILITY** 

of founders with experience at companies of several different sizes (from early-stage to established companies) said execution ability was the most valuable skill they acquired

CROSS-FUNCTIONAL COLLABORATION

of leaders with experience at companies of several different sizes (from early-stage to established companies) said cross-functional collaboration was one of the most valuable skills of leaders with experience at companies of several different sizes (from early-stage to established companies) said cross-functional collaboration was one of the most valuable skills







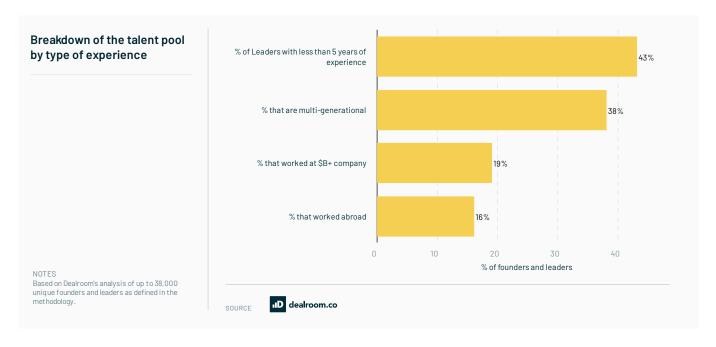
atomico in partnership with 51.115H



# Europe's best and brightest talent are making a bet on tech

Europe's tech talent pool has been transformed over the past two decades, and the current crop is without question the strongest cohort European tech has ever had.

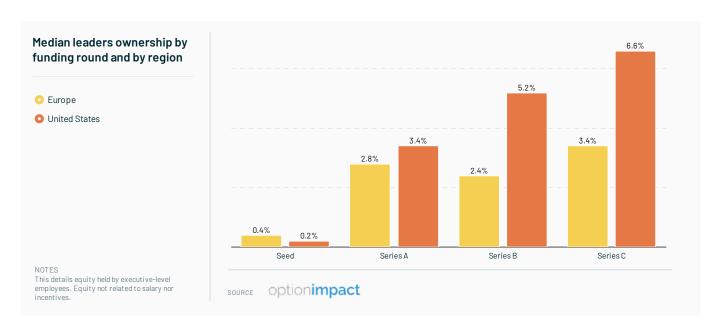
Europe's young talent is increasingly making a bet on the tech world. And in return, those same people are being empowered by new tech companies to become leaders early on in their career. In these roles, they are now often being surrounded by experienced founders and leaders, many of whom have worked at other tech companies - some successful, some not - and who actively apply the lessons learned to help set this new generation of talent up for success. The execution capabilities of the talent pool has never been better.



# Is tech making a big enough bet on talent?

Europe's tech success stories would not exist were it not for the vision, ambition, and grit of the founders behind these companies. But success is also dependent on the employees that build these companies along

The ability to take part in the success of a company through employee stock options is critical to attracting, retaining, incentivising and rewarding talent. It's also a foundational feature of the whole ecosystem, enabling talent recycling and unlocking the capital to pay it forward. On this front, Europe is still lagging behind. By the time they reach Series C stage, European leadership teams own on average less than half the stock options of their counterparts in the US. As the #notoptional campaign led by Index Ventures has argued for years, fixing this must be a top priority for European tech.













During the past 20 months, it's been inspiring to see young technology companies weather the storm and continue to be exceptional drivers of economic growth and job creation.

To sustain this path of growth, it's important that the government continue to provide encouraging conditions for high-growth entrepreneurship. First of all, entrepreneurs need favourable, clear regulation. On this front, I am pleased that, at the start of 2021, we passed into law a set of provisions that provide more options for extensive employee ownership in private companies Secondly, the government continues to be an important source of funding for startups. In this realm, I am proud of our choice to prepare ourselves to commit €250M of equity financing to Finnish startups in the spring of 2020 on the back of Covid-19 outbreak . Luckily, only part of the capital was needed to support the ecosystem, while the signalling effect to the market was strong. In due course, I hope it will also allow all Finnish taxpayers to reap the benefits of the exceptional potential of young technology companies.

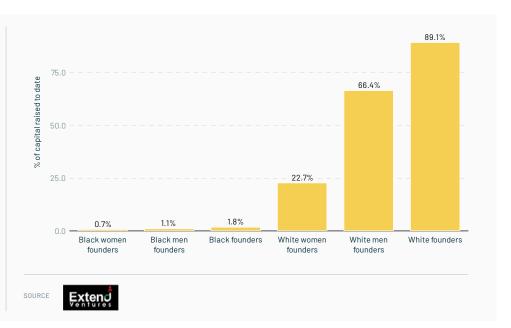
Mika Lintilä, Government of Finland | Minister of Economic Affairs

# Expanding the total addressable talent market

Tech still has a diversity problem, and it is only going to get worse unless industry leaders - whether on the building or investing side of the table - make a conscious decision to set this as a priority. The numbers speak for themselves. In addition to simply being the right thing to do, fixing this issue represents a huge opportunity to expand the total addressable market for talent and ideas in Europe. It's exactly the type of asymmetric upside opportunity that defines the industry.













# European diversity initiatives are growing

There are a number of organisations that are actively working to improve diversity and inclusion in the European tech ecosystem, such as the top 26 organisations and initiatives identified by Sifted. There is also an increasing number of networks that are growing to try to bridge the knowledge gap and unlock access for women, ethnic minorities, and people from other underrepresented groups.



10x10 United Kingdom



23 Code Street United Kingdom



50inTech France



Ada's List United Kingdom



Alma Angels United Kingdom



**Blooming Founders** United Kingdom



Colorintech United Kingdom



Czechitas Czech Republic



Female Founders Austria



Femstreet Online



Foundervine United Kingdom



Fundright The Netherlands



Girls in Tech Switzerland



Google for Startups Europe



Inklusiiv Finland



La French Tech Tremplin France



One Tech United Kingdom



Portuguese Women in Tech Portugal



Rails Girls Finland



SheTech Italy























Station F Fighters Program

Willa France

Women in Al Online

Women in Tech DK Denmark

YSYS United Kingdom



#BcnTech4Women Spain





# Hiring remains a challenge, especially for technical roles

HIRING CHALLENGES

of founders said it was harder to acquire new talent today compared to 12 months ago

The State of European Tech

SOFTWARE DEVELOPERS

of founders identified software developers are the hardest roles to fill

# Paying it forward

Talent recycling enables new companies to learn from others' experiences and avoid mistakes. But it also has other virtuous implications for the European tech ecosystem. For example, one of the ways in which the tech community "pays it forward" is by setting up tuition-free coding schools across Europe. The curriculums are mostly project-based, with collaborative peer-to-peer learning. Some schools go even further, and partner with the local tech community to provide their students with targeted employment opportunities. Whatever the model, they are helping to transfer knowledge from one generation to the next, and enabling more technically skilled workers to enter the job market. European tech's "pay it forward" mentality is kicking into the next gear.



kood/Jõhvi set up by founders of Wise and Bolt in Estonia



School 42 set up by Xavier Niel in France



01 Founders set up by Made.com founder in United Kingdom

331



Hive set up by Supercell founders in Finland



Codam set up by the founder of TomTom in the Netherlands













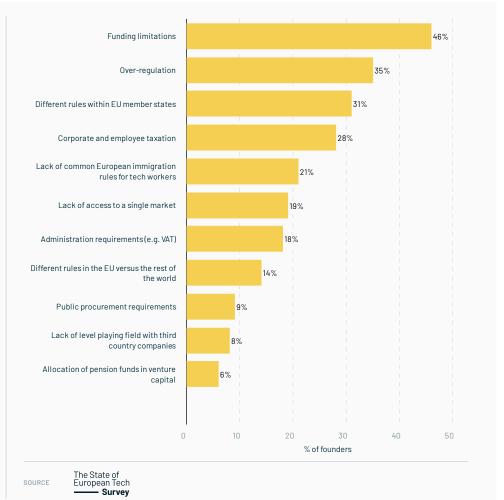
# **Building better companies**

European Tech has become a breeding ground for companies across all sectors. From eVTOL jets and quantum computing to B2B marketplaces and SaaS, Europe is proving it can do it all. Today's generation of European tech startups are coming out of the blocks faster than ever and scaling at an accelerated pace compared to prior generations. But there are still many structural challenges holding back better business connectivity across Europe, such as the friction associated with talent mobility and the ability to expand quickly across the region.

# Are regulatory hurdles slowing down progress?

Founders are still faced with a series of structural impediments when operating in Europe. A key impediment is continued funding limitations, with close to half of founders still finding access to capital a challenge that limits growth prospects. Another key limitation is the continued fragmentation of rules across European Union member states, especially as 50% of founders also mention that expanding into other European markets has gained importance this year.





Founders respondents only. Numbers do not add to 100 as respondents could choose up









It is crucial for founders to have a seat at the table when it comes to policy and as new regulations are being discussed. Without founder representation, these changes may have unexpected consequences.

Like everyone, entrepreneurs have faced enormous challenges and barriers as a result of the pandemic. But they've also proven an incredible resilience and even unique growth. Startups are a key engine of economic growth for our region and a key agent of digitalization. They are the innovators in crucial industries such as health, education and cybersecurity. The only way for governments and legislators to support startups is to take the time to understand them and for regulation to keep pace with innovation.

Sofia Benjumea, Google for Startups | Head of EMEA

# Companies emerge to lower friction for others

A growing list of European tech companies have emerged to address the problems facing startups, scaleups and other companies as they look to scale and expand across Europe. Below is a curated selection of companies representative of this trend. These companies help to reduce complexity for startups and scaleups, as well as consumers - each in their own way. In some cases, these companies have already grown to become large, highly-valued companies, such as Taxfix and Remote, which are now valued at greater than \$1B. This is a reminder of the scale of the opportunity to address problems or compliance headaches associated with a complex and fragmented regulatory landscape.



#### Estonia

Immigration management software designed to help clients relocate their new international employees



## Estonia

Intelligent cross-border compliance platform intended to deliver critical services for logistics providers



# Germany

Relocation software designed to facilitate global mobility for companies and their international employees



# Germany

Online tax assistance platform designed to simplify tax declarations



# Germany

Marketplace and platform for patented technologies that connects pioneering research organisations with innovative companies across industries



# Remote

Recruiting platform intended to help companies of all sizes to hire top talent from all over the world



#### Switzerland

Energy software designed to empower energy providers



# United Kingdom

A platform intended to connect small businesses and large to tender and contract opportunities from governments

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# **United Kingdom**

Online knowledge base technology intended to help businesses to work with government data



# **United Kingdom**

B2B healthcare marketplace designed to transform the healthcare supply chain

# **TaxScouts**

#### **United Kinadom**

Tax preparation services intended to make tax planning easier and stressfree



















# Empowering world-class investors to fuel the flywheel

The European tech opportunity is huge, and has the potential to support a substantially larger level of capital investment as it continues its growth trajectory. This represents an opportunity to maximise the value captured by Europe itself, whether in the form of innovation, growth, employment or otherwise.

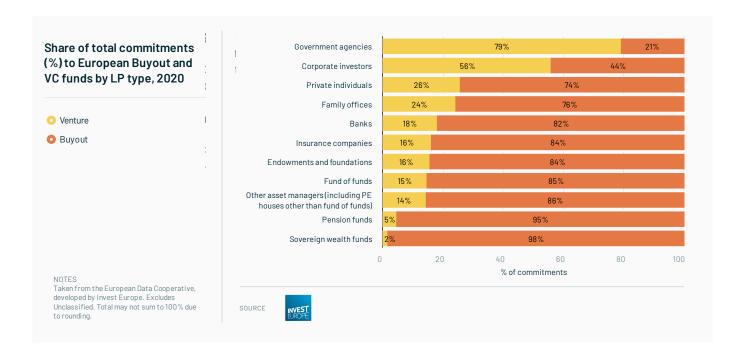
There is also still a largely untapped opportunity to match the hard-earned experiences, networks and capital of Europe's most successful founders and operators to more recent cohorts of talent. The alumni of more recent European tech success stories, such as Spotify, Pipedrive, Revolut, Wise and others are already actively investing in the next generation in increasingly systematic ways - but the more that others do this, the faster Europe's tech flywheel will spin. This is also an opportunity to catalyse a new generation of investors with more diverse backgrounds to fund more diverse ideas.

# Are institutional investors betting on the future?

The share of capital deployed by different LP types into European venture capital and buyout funds varies significantly.

The majority of government agency and corporate investor capital commitments are allocated to venture capital, but every other institutional investor type indexes massively towards buyout allocations over venture capital. Pension funds, for example, are allocating 19x more capital to European buyout funds than to venture capital.

The weighting towards buyouts is even more extreme for sovereign wealth funds. For every dollar allocation to venture capital by a sovereign wealth fund, \$49 is allocated to buyout funds. Are they placing a rightsized, risk-adjusted bet on the future?









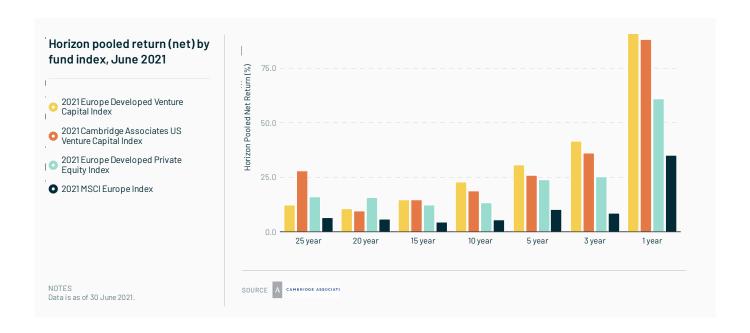




# European VC is delivering world-class returns

European venture capital is delivering stellar, benchmark-beating returns - and has been doing so consistently over an extended period. The Cambridge Associates index for European VC outperforms the US equivalent across 1, 3, 5, 10, 15 and 20-year horizons. This is the most widely-cited benchmark of venture capital performance globally.

In the context of previously discussed institutional investor allocations to European venture capital and buyout funds, it's also noteworthy that European VC has outperformed the European Private Equity index across pooled horizons of one, three, five, ten and 15 years.



# Fostering a new generation of investors

As Europe seeks to build a deeper and more diverse investor base, a number of programmes have emerged across Europe. Some seek to open venture capital up to young and diverse talent that has lacked historic access, while others give new generations the tools to start angel investing. These initiatives are leading the way to create more depth and diversity in the investor talent pool.









# Facilitating liquidity and recycling to supercharge

With over \$180B of combined exit value across European tech companies this year, there are clear signs that Europe's leading tech companies are finding paths to liquidity. This benefits European builders and investors, but it is also important for the role it can play to inspire the next generation of entrepreneurs and raise their ambition levels. Celebrating successes and establishing European tech entrepreneurs role models is an important contribution to building the mindset that anything is possible for tomorrow's generation of European entrepreneurs.



European companies still face occasional additional obstacles, for example in how different European countries treat income and stock package taxation compared to the US.

There are also a number of processes that can limit tech talent mobility - e.g. the three month notice period that's common here, versus the two weeks that's standard in the US. Of course, social security programs and overall wellbeing are generally better in Europe, so things balance out.

Ott Kaukver, Checkout.com | CTO



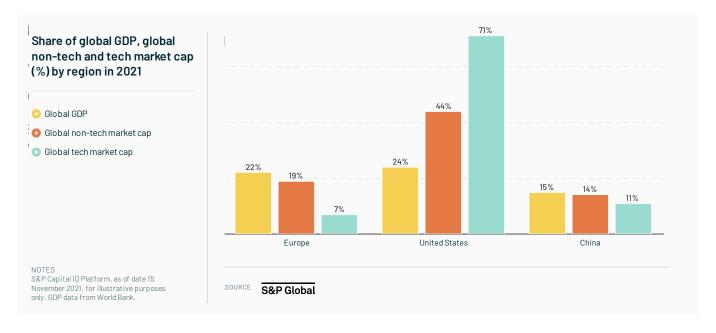






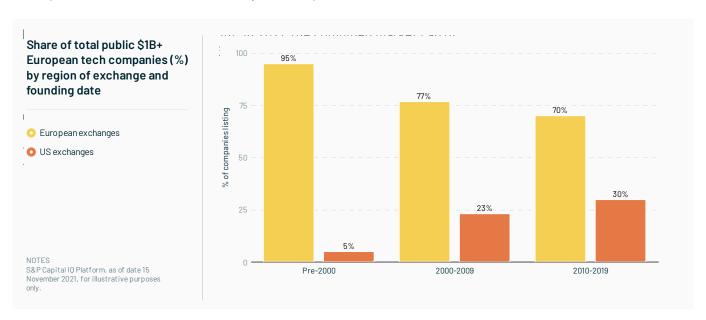
# Unlocking Europe's massive upside

We think this chart is a great way to anchor the potential for Europe in the years to come as it focuses its efforts on becoming a deeper and more liquid marketplace for ideas, capital and talent. Focusing solely on global tech public equity value, the region's technology companies represent just 7% of total global public tech market cap. This is massively underweight compared to Europe's share of global GDP (22%) or its share of total global non-tech market cap across all equities (19%). To punch at its true weight, Europe's share of global tech market cap should be approaching these levels. In other words, its share needs to triple at least.



# But do public markets investors get tech in Europe?

Over the years, European exchanges have been losing out to the NASDAQ and the New York Stock Exchange (NYSE). An increasing share of sizeable European tech companies are choosing to list in the US rather than in their home country, which can in turn shift the future centre of gravity as companies sometimes move their headquarters to be closer to their investors in the public capital markets. UiPath is one notable example that serves to highlight this point. In 2021, the combined market cap of the top 5 largest tech IPOs in Europe did not match UiPath's \$36B first day market cap after its IPO on the NYSE.









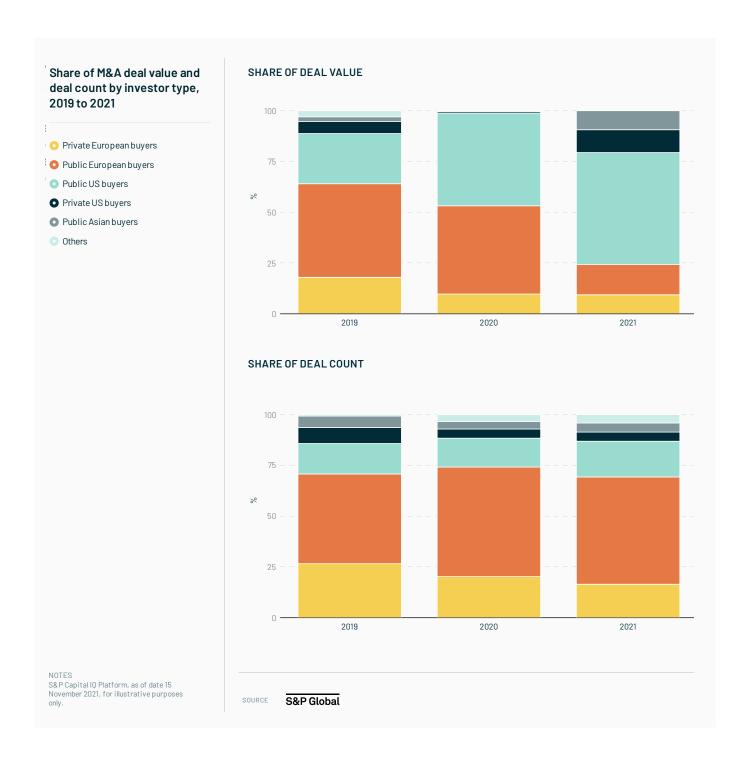


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# Europe is missing M&A firepower

Europe is also lacking a more active pool of domestic buyers that are prepared to place large ticket bets on European tech companies. It's not that there aren't buyers, but rather that European buyers tend to make much smaller acquisitions. By contrast, US public tech companies are becoming more active than ever in European tech and are leveraging their strong balance sheets to acquire European tech companies at large valuations. The share of M&A deal value involving at least one public US tech company buyer is at 55% - the highest it has been over the past 5 years.







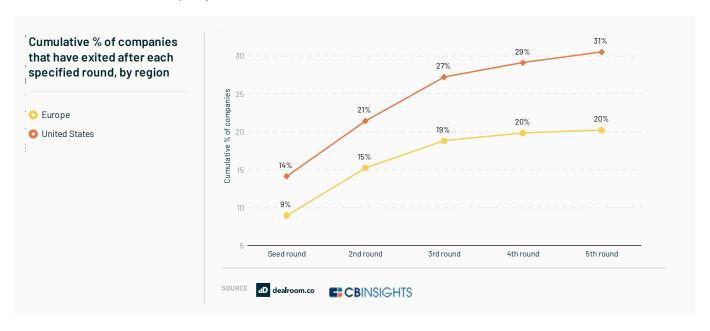






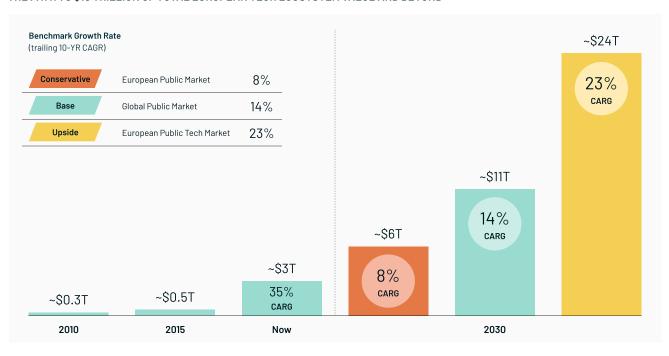
# Exits are a feature, not a bug

We analysed the rate of exit following each successive funding round for a standardised cohort of 1,064 companies that raised a qualifying Seed round between 2010 and 2013. We compared the exit likelihood of US and European tech companies, and found a meaningfully large gap from the outset, which grows increasingly larger over time. European tech companies are often thought to be selling too early, but this disproves that assumption. In fact, European tech companies should be exiting at a much faster rate given the benefits that come with recycling.



So let's end with our predictions for where tech is going in Europe. Whichever way you model it, whether you go highly conservative or not, we're going to see trillions of dollars of value created by technology over the next decade in Europe. Maybe it's another three trillion dollars, maybe it's five trillion dollars, but whichever scenario plays out, the upside is huge.

## THE PATH TO \$10 TRILLION OF TOTAL EUROPEAN TECH ECOSYSTEM VALUE AND BEYOND



SOURCE

ı1D dealroom.co

S&P Global







We struggled to pick one chart or quote to close the report. In the end, we went back to the very first State of European Tech from 2015 and the closing remarks to our original report. It's a quote from Supercell co-founder and CEO, Ilkka Paanenen, who shared his views when we asked him then to look ahead to how European tech might evolve over the coming years. His insights could not have been more prescient and also remind us beautifully of the critical role that role models can play to inspire a new generation of founders and continuously raise the bar on ambition. We can't wait to see what is next for European tech.





Over the next ten years there will be a lot more successful companies out of Europe. And I think that people will have stopped wondering about this rise of European tech, as it has become something of a norm. We won't have the debates on European versus American technology entrepreneurship, and people will definitely have stopped questioning Europe's role in global tech. I think people will take it for granted that all technology entrepreneurship is global by nature, including entrepreneurship in Europe

Extract from the "State of European Tech report 2015"

Ilkka Paananen, Supercell | Co-founder & CEO



































































CHAPTER



# SoET community

Who is behind the report?



# **CHAPTER 8**

This report was produced in partnership with Slush and Orrick. Over 70 people and over 20 companies and organizations came together to provide insights and data. This is who they are.

# **ARTICLES**

08.1 SoET champions

**08.2 About Atomico** 

**08.3 About GoodLove** 

08.4 Partners

08.5 Survey respondents









# 08.1 SoET champions





# The best report yet

The report wouldn't be possible without the help and generosity of a countless number of individuals who have helped us put together the report. Thank you for feeding us with enough data to create over 400 powerful charts to tell the story of this groundbreaking year for European tech. But also for making the website more beautiful than ever as well as creating the many other assets floating in the SoET metaverse. A huge thank you to all of the following in particular:

# **Acknowledgements**



**Dev Bahra** Milltown Partners



Adam Barlow Landscape



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Anna Brchisky Slush



Jon Brewer Orrick



Erika Brodnock **Extend Ventures** 



Orla Browne Dealroom



Hannah van Bruggen GoodLove



Suzie Bullivant Atomico



Seb Butt Craft



Daniel Cavallari Dealroom



**George Clayton** GoodLove



Lewis Dean Indeed



**Ahmed Deyab** Atomico



Ivan Draganov Dealroom













**Paul Dupuis** Milltown Partners



Emma Eichenberger GoodLove



**Harriet Forte** Atomico



Florine Forster Milltown Partners



**Mat Gazeley** Sillicon Valley Bank



Louis Geoffroy-Terryn Dealroom



Sofian Giuroiu Invest Europe



Adi Goodsell  ${\sf GoodLove}$ 



Linda Griffin Kry



Sarah Guemouri Atomico



Ilja Hauerhof S&P Global Market Intelligence



Melissa Hinkley Milltown Partners



Miika Huttunen Slush



Ben Jakob  ${\sf GoodLove}$ 



**Bryce Keane** Atomico



Julien Krantz Invest Europe



**Glenroy Learmond** Extend Ventures



Liina Lopp Landscape



Joe Lovelock  ${\sf GoodLove}$ 



Stephen Lowery Sillicon Valley Bank



Mikko Mäntylä Slush



**Amir Mizroch** Milltown Partners



Raffaele Nolli Extend Ventures



Rita Nicolau  ${\sf GoodLove}$ 













Ben Novick Milltown Partners



Angelina Panagiotopoulou  ${\sf GoodLove}$ 



Marcus Pegg Slush



Joe Perkins Landscape



Roger Perry S&P Global Market Intelligence



**Erin Platts** Sillicon Valley Bank



Julien Puls Dealroom



Arabella Reeves Atomico



Matteo Renoldi Dealroom



Kasit Rochanakorn Atomico



Laura Rodriguez Dealroom



Karl Laurentius Roos POLITICO Europe



**Maxine Smith** Atomico



Hanna-Stina Sonts Atomico



Peter Thompson Extend Ventures



Thea Thorsen Milltown Partners



Naph Torrance GoodLove



**Anneliese Turton** Atomico



**Eleanor Warnock** Sifted



Tom Wehmeier Atomico



Yoram Wijngaarde Dealroom



Henna Zamurd-Butt Engage Inclusivity



Mitch Zuklie Orrick



 $The \, purpose-driven \, porpoise$ Working remotely somewhere















# Spreading the survey far and wide

The analysis is only made possible with the support of many SoET champions who help us spread the word about the survey. Thanks to you, each year we are able to measure the sentiment of the industry with a large scale dataset reaching founders, investors, policymakers, tech employees and so many more. A big thank you goes out to all of you and the many more that have kindly referred the survey this year. You are the best!

# With gratitude



**Ashleigh Ainsley** Colorintech



Allied for Startups (AFS)



**Rodney Appiah** Cornerstone



**Bethnal Green** Ventures



Zane Bojāre Startup Wise Guys



Kat Borlongan La French Tech



Ophelia Brown Blossom Ventures



**Matt Clifford** Entrepreneur First



Ben Constantini Startup Sesame



**Shope Delano** Forward Partners



Erik Engellau-Nilsson Norrsken Foundation



Hebba Hitti Serena



Harri Ilsakka Wave Ventures



K Fund



Nikos Kalliagkopoulos Prime Ventures



Jacob Key Luminar Ventures









Marta Krupinska Google for Startups



**Armand Lapotre** Grapedata



Natasha Lytton Seed Camp



Joanna Nagadowska Google for Startups



lida Nalli Inklusiiv



Ariadna Nieto Grapedata



**Dragos Novac** Sunday CET



Pale Blue Dot



Henry Philipson Beringea



Alex Prescot Eight Roads



Caroline Ramade 50inTech



Agnė Randytė Startup Lithuania



Scott Sage Crane



Niccolò Sanarico Barcamper Ventures



Rohan Silva Second Home



StartupDelta



Tiny VC



**Vincent Touati Tomas** Northzone



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Unternehmer TUM



Roxanne Varza Station F



Mari Wachelke

Oslo Business Region

**Robin Wauters** 

Tech.eu



Female Founders



# 08.2 **About Atomico**

Atomico invests in ambitious tech founders at Series A and beyond with a particular focus on Europe, leveraging deep operational experience to supercharge their growth.

Founded in 2006, Atomico has partnered with over 100 ambitious teams - including those at Klarna, Supercell, Graphcore, Compass, MessageBird, Masterclass, Attentive Mobile, Pipedrive and Hinge Health. Atomico's team of founders, investors and operational leaders have been responsible for global expansion, hiring and marketing at companies from Skype and Google to Twitter and Uber. The firm currently has \$5B in assets under management.





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# 08.3 GoodLove

 ${\sf GoodLove}\ is\ a\ creative\ brand\ consultancy\ based\ in\ London.\ GoodLove\ helps\ tech$ businesses to scale belief in what they're doing through ideas, narratives and visual storytelling. Our consultancy proposition combines strategic rigour with creative flair and has been designed from the ground up to serve fast-growth companies who want to have an impact.

Find out more at goodlove.co





# 08.4 **Partners**

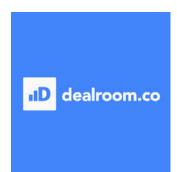


## Craft



Craft is building the 'Source of Truth' on companies, mapping the global economy, and delivering unique intelligence on companies to corporate decision-makers globally. Craft collects, aggregates and curates financial, operating and human capital data to provide the deepest picture of private and public companies to assist decisionmakers to manage their supply chain, maximize their investments, mitigate risks, grow their sales, leverage their talent and enhance their competitive position.

# **Dealroom**



Dealroom is a global company information database & research firm. Its software, database and bespoke research enable its clients to stay at the forefront of innovation, discover promising companies and identify strategic opportunities. Among its clients are world-leading strategy consulting firms, investment banks, multinationals, technology firms, venture capital & buyout firms and governments. For more information, please visit: dealroom.co

# ESG\_VC



ESG\_VC is a response by the venture capital industry to the urgent social, environmental and economic challenges that are increasingly impacting early-stage businesses. The initiative, bringing together over 125 leading VC firms in the UK and Europe, provides entrepreneurs the tools to understand and improve their ESG performance. It does this in three ways: a measurement framework for companies to benchmark their ESG performance; an annual programme of events and training; and a bank of insights and resources to learn more about ESG.





# **Extend Ventures**



Extend Ventures is a team of business, research and financial experts using the power of big data and machine learning to diversify access to funding for entrepreneurship and innovation. Through research to highlight and quantify the structural challenges that prevent Black and ethnic founders from gaining equal access to venture finance, Extend Ventures hopes to bring about positive change. www.extend.vc

# **Google for Startups**



Startups are solving the world's important challenges with agility, innovative technology, and determination. Google is proud to help. Google for Startups is on a mission to support thriving, diverse, and inclusive startup communities around the world. So whether you're starting out, building your startup, or scaling up to meet the needs of consumers, business, and society, we connect you with the right people, products, and best practices to help you thrive and grow. Because if startups succeed, our communities and economies succeed. And Google does too.

# Grapedata



Serving a multitude of clients globally, primarily PEs, HFs, Management Consultancies and Corporates, Grapedata is a tech enabled, and the go to provider for fast high quality targeted survey with a global coverage













## Indeed



More people find jobs on Indeed than anywhere else. Indeed is the #1 job site in the world and allows jobseekers to search millions of jobs on the web or mobile in over 60 countries and 28 languages. More than 250 million people each month search for jobs, post resumes, and research companies on Indeed. For more information, visit indeed.com.

# **Invest Europe**



Invest Europe is the association representing Europe's private equity, venture capital and infrastructure sectors, as well as their investors. Our members take a long-term approach to investing in privately held companies, from start-ups to established firms. They inject not only capital but dynamism, innovation and expertise. This commitment helps deliver strong and sustainable growth, resulting in healthy returns for Europe's leading pension funds and insurers, to the benefit of the millions of European citizens who depend on them. Invest Europe aims to make a constructive contribution to policy affecting private capital investment in Europe. We provide information to the public on our members' role in the economy. Our research provides the most authoritative source of data on trends and developments in our industry. Invest Europe is the guardian of the industry's professional standards, demanding accountability, good governance and transparency from our members. Invest Europe is a non-profit organization with 25 employees in Brussels, Belgium.

For more information please visit: www.investeurope.eu

Twitter: @InvestEuropeEU

Linkedin: https://www.linkedin.com/company/invest-europe

# Landscape



Landscape is building the European startup ecosystem's most helpful platform. We curate and publish a database of founder-investor interactions covering a variety of metrics made up from thousands of reviews left by real founders. Landscape also runs a successful anonymous founders community for hundreds of founders and is continuously building an extensive suite of tools and products to help founders and investors solve a variety of challenges such as fundraising, deal flow and company building - simply put, we want to make fundraising better for everyone.







# **Mapverse**



Mapverse supports movements towards equity and sustainability by furthering our knowledge on the challenges faced by different communities, regions and industries. From organisational demographics to global legal frameworks, we design rigorous research methodologies to gather macro and granular, qualitative and quantitative data making it available to those looking to enable positive change.

# **Option Impact by Shareworks**



Option Impact by Shareworks is the leading provider of pre-IPO compensation data. We partner with over 250 top-tier investors and over 4000 private companies to produce the world's largest corporate-sourced compensation database specific to private, venture-backed companies. Option Impact is a rolling cash and equity survey providing relevant market data across all levels and job families for \$0 in exchange for maintaining current information in the system. To learn more, please email us at compensation@shareworks.com.

# **Pitch Book**



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 in-depth reports.







# **POLITICO Europe**



POLITICO, a global nonpartisan politics and policy news organization, launched in Europe in April 2015 and is a subsidiary of Axel Springer SE.

POLITICO Pro is the exclusive subscription service for organizations seeking forwardlooking granular policy insights, breaking news scoops and in-depth analyses - all within the ultimate policy intelligence platform - with access to an unparalleled public affairs network.

With operations based in Brussels and additional offices in London, Berlin and Paris, POLITICO connects the dots between global power centers. Its journalism lives online at politico.eu; in POLITICO Pro, the real-time policy intelligence service for professionals; in daily and weekly newsletters, such as Brussels Playbook, London Playbook and Playbook Paris; in print via a weekly newspaper; and through live events.

# **S&P Global**



At S&P Global Market Intelligence, we understand the importance of accurate, deep and insightful information. We integrate financial and industry data, research and news into tools that help track performance, generate alpha, identify investment ideas, perform valuations and assess credit risk. Investment professionals, government agencies, corporations and universities around the world use this essential intelligence to make business and financial decisions with conviction.

S&P Global Market Intelligence is a division of S&P Global (NYSE: SPGI), the world's foremost provider of credit ratings, benchmarks and analytics in the global capital and commodity markets, offering ESG solutions, deep data and insights on critical business factors. S&P Global has been providing essential intelligence that unlocks opportunity, fosters growth and accelerates progress for more than 160 years. For more information, visit www.spglobal.com/marketintelligence.

## Sifted



Sifted is the Financial Times backed media platform for European entrepreneurs, innovators and investors. It is an essential, trusted and independent resource for the startup and tech world: a source of news, information and analysis and also a channel for discovery.







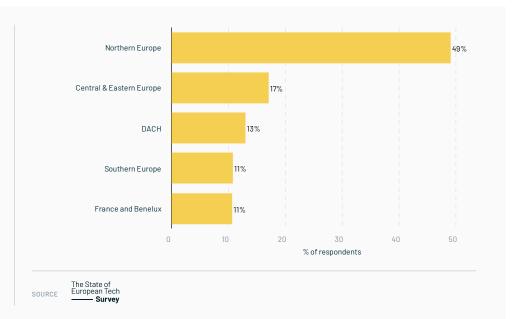


# 08.5 Survey respondents



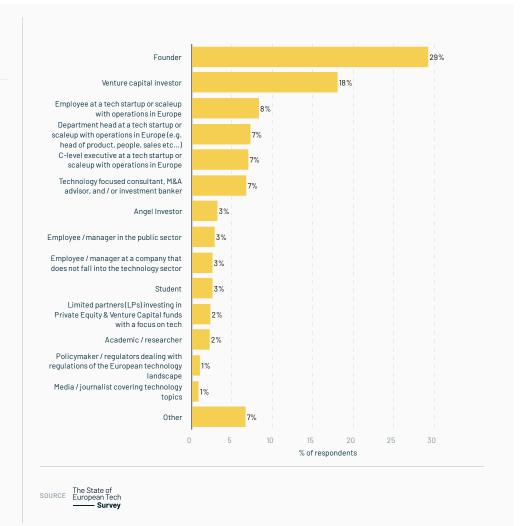


# What is your primary country of residence?



NOTES  $\label{eq:local_Notation} \mbox{All respondents included. Numbers may not add to 100 due to rounding.}$ 

# What best describes your primary occupation?

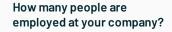


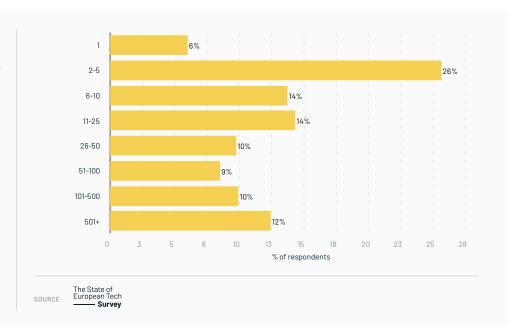
Europe-based respondents only. Numbers may not add to 100 due to rounding.





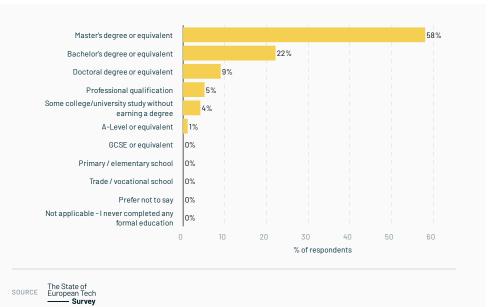






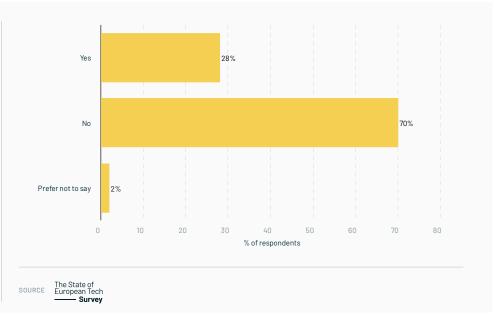
Europe-based respondents only. Numbers may not add to 100 due to rounding.

# What is your latest formal educational attainment or current level if you are still a student?



Europe-based respondents only. Numbers may not add to 100 due to rounding.

Are you the first person (or part of the first generation) in your immediate family to go to university?



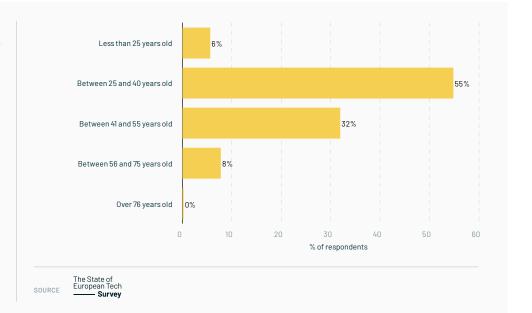
NOTES Europe-based respondents only. Numbers may not add to 100 due to rounding.





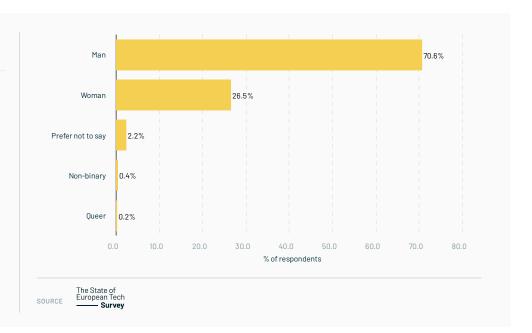


# What is your age?



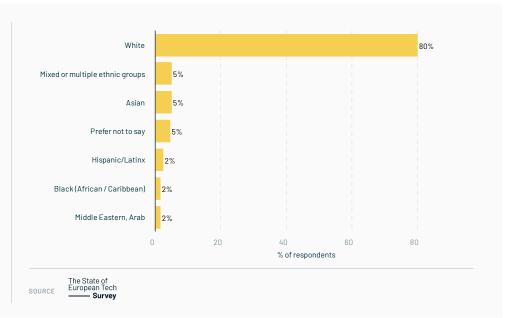
NOTES Europe-based respondents only. Numbers may not add to 100 due to rounding.

# What gender do you identify with?



NOTES Europe-based respondents only. Numbers may not add to 100 due to rounding.

# Which best describes your ethnicity?



NOTES Europe-based respondents only. Numbers may not add to 100 due to rounding.







# STATE OF EUROPEAN TECH 21

The definitive take on European tech

stateofeuropeantech.com