



# Growth Equity Update

December 2023 – Edition 21

- **Markets continue to rally:** The Fed held rates in December at a 22 year high but anticipated a possible 75bps fall in 2024 and 100bps in 2025 causing a renewed surge in indices taking NASDAQ and the S&P500 up to their 2023 highs
- **Recent IPOs do better:** The debate remains about the extent to which IPO markets will re-open in H1 2024. Interesting though to note that Arm is now up 29% since IPO, strongly outperforming the NASDAQ. Klaviyo is now flat since IPO – though underperforming NASDAQ by 10%. Birkenstock is back in positive territory, up 5% since IPO, just behind the 7.5% rise in the S&P 500. Instacart is the laggard, down 17%
- **‘The future is already here – it’s just not evenly distributed.’ (William Gibson).** We undertake the hazardous path of making predictions for the VC market in 2024. It may be that: AI and ClimateTech continue to gather pace; there is more stress on due diligence and corporate governance; that funding rounds remain slow, there are more down rounds and more corporate casualties; venture capital firm funding may focus on the big firms with strong track records; the IPO and M&A environments improve, loosening the funds flow around VC; and that we go into 2025 anticipating another 100bps fall in US rates after 75bps in 2024, accelerating global GDP, a stack of profitable, cash positive late stage VC companies looking to get new growth funding and the prospect of a new (or confirmed) US President
- **The biggest VC rounds of 2023:** We look at the companies with the biggest VC raises in 2023 – those above \$200m in the US and above \$100m in Europe.

## The rally continues

The Stock Markets have had a decent end to 2023 as they exuberantly anticipate the beginning of a decline in interest rates and the avoidance of recession. From its recent low on the 27th October until December 14<sup>th</sup>, the NASDAQ index rose by 17%. **YTD the NASDAQ is up 42%**, finishing the year on its highs.

The tech focused **NASDAQ 100** is up 17% since October 27 and is now up 52% ytd, again at its annual highs.

The **S&P 500** is bouncing along at its highs, up 23% ytd and up 14% since the late October lows.

The **STOXX 600 Europe** is now above its late July highs, is up 12% since late October and up 12% ytd.

The **FTSE 100** remains the laggard, up 5% since late October and up 2% on the year.

The **Refinitiv Venture Capital Index**, which seeks to monitor the real time performance of the venture capital industry and whose performance is partly driven by the moves in public markets, and particularly tech heavy indices like NASDAQ, was up 29% at the end of H1. It has risen 19% in the second half and is up 54% ytd.

Indeed November was the strongest month for equities for three years and for 15 years for US Treasuries, responding to the combination of falling inflation and economic resilience.

The key news from **the US** was not that the Fed held rates at its December 14<sup>th</sup> meeting. This was expected and rates are maintained at 5.25%-5.5%. The key news was the accompanying commentary by the Fed which indicated both that it does not intend to increase rates further, as some had feared, and instead anticipates it may reduce interest rates by c75bps in 2024. The Fed published a 'dot plot' indicating that its officials expect rates to close 2024 at 4.5%-4.75% and 2025 another 100bps lower at 3.5% to 3.75%.

Fed chair Jay Powell commented on the risk to the economy of holding on to high rates for too long.

*"We're aware of the risk that we would hang on too long..... and we're very focused on not making that mistake."*

He observed the Fed would be ready to cut interest rates before inflation reaches its target of 2% commenting *"you'd want to be reducing restriction on the economy well before [then] so you don't overshoot"*.

The US economy remains robust, with November non-farm payrolls rising unexpectedly sharply by 199,000 after 150,000 in October. The unemployment rate fell to 3.7%. US inflation in September was higher than expected at 3.7% but October saw a fall to 3.2%, helped by a 2.5% decline in energy prices. Core inflation, which strips out the volatile food and energy components, was 0.2% higher in October after rising 0.3% in September. Year-on-year the October core inflation rate fell from 4.1% to 4.0%.

US GDP growth though is slowing tracking at 2% in Q4 after 5% in Q3. The expectation remains that the first interest rate cuts will likely be in May 2024.

**In Europe** the EU held rates unchanged at 4% at its December meeting, the second successive meeting at which it has held rates. The commentary was that interest rates would be kept at *'sufficiently restrictive levels for as long as necessary'* in pursuit of the 2% inflation target.

The EU inflation rate dropped to just 2.4% in November, the lowest rate since July 2021, down from 2.9% a month earlier and better than consensus expectations of 2.7%. Five countries in the EU's Eurozone now have inflation below 2% including Italy, the Netherlands and Belgium, which had a negative 0.7% inflation rate in November.

Despite being close to the 2% target inflation figure the ECB President Christine Lagarde insisted that it was *'not the time to start declaring victory'* in the fight against inflation. Indeed higher seasonal energy prices are expected to push the rate back up to 3% in December.

Nevertheless the ECB lowered its inflation expectations saying that it expected headline inflation to average 5.4% in 2023, 2.7 % in 2024, 2.1 % in 2025 and 1.9% in 2026, a downward revision for 2023 and especially for 2024 versus the September prediction.

Buoyed also by the Fed's decision the market now anticipates the first rate cuts in the EU to occur as early as March-April 2024.

**In the UK** inflation dropped sharply in October after a stubbornly high 6.7% in August and September. October's inflation rate was expected to fall and it did, and more sharply than expected, reaching 4.6% on the back of lower energy prices. The core CPI rate, excluding energy and food, was 5.7% down from 6.1% in September.

In its December meeting the Bank of England held rates at 5.25% with the BoE's Governor, Andrew Bailey repeating that,

*"There is still some way to go. We'll continue to watch the data closely, and take the decisions necessary to get inflation all the way back to 2%."*

There are signs of slowdown in the UK economy. The BoE expects UK GDP growth to be flat in Q4 whereas it had previously forecast marginal growth in November.

Again the futures market is pricing in the first rate cut in June 2024 and in total three rate cuts – of 0.25% each – in 2024.

The major takeaway is that the market thinks that interest rates have peaked, the central banks are warning that the job on inflation is not yet done, but the markets have moved on to assume that if the next rate move is not to be up, it must be down. Meanwhile corporate earnings are holding up and fears of economic recession have receded.







The rally in markets has made the share price performance of the four big recent US IPOs look more respectable. Three of the four had a 'pop' on the first day with Birkenstock the exception. As of November 10 though only Arm was trading above its IPO price (and that only marginally) while the other three were down 12-16% each.

The market rally has seen a substantial redressment. To December 14, Arm is up 29% since IPO, strongly outperforming the NASDAQ, up 6% in that period. Klaviyo is at least flat since IPO – though underperforming NASDAQ by 10%. Birkenstock is now in positive territory, up 5% just behind the 7.5% rise in the S&P 500. Instacart remains the underperformer, down 17% since IPO.

#### Price performance of the 'Big Four' US Autumn IPOs

	Symbol	Offer date	Shares (m)	Offer price \$	Amount sold (\$m)	First day Close \$	Change %	Price \$ Nov 10 \$	Change %	Price Dec 14 \$	Change %
Arm Holdings	ARM	14-Sep-23	95.5	51	4,870.5	63.6	25	52.3	3	65.6	29
Instacart	CART	19-Sep-23	22.0	30	660.0	33.7	12	25.2	(16)	24.9	(17)
Klaviyo	KVYO	20-Sep-23	19.2	30	576.0	32.7	9	25.3	(16)	30.1	0
Birkenstock	BIRK	11-Oct-23	32.3	46	1,485.8	40.2	(13)	40.6	(12)	48.5	5

Rothschild & Co strategist Kevin Gardiner summarises the current key drivers of the market in this graphic:

	<b>GROWTH</b> Neutral	<b>Economic resilience continues</b> The two biggest economies in the world grew at an annualised rate of around 5% in Q3, and output has been resilient even in Europe. The soft business surveys appear to be stabilising, but we are still not out of the cyclical woods: monetary policy may not have had its full impact yet, and oil prices might spike anew (see below). However, with real wages currently growing again on both sides of the Atlantic, we continue to think that a major downturn is neither necessary nor likely
	<b>INFLATION</b> Positive	<b>Disinflation becomes more visible</b> It looks increasingly as if the corner has been turned on headline and even core inflation, in both the US and Europe. Nominal wage growth remains more restrained than could have been the case – perhaps because pay is rebounding in real terms, as noted – and European energy prices remain far below last year's highs. Wage settlements struck today may reflect last year's inflation: we continue to think wages are a consequence – and not yet a cause – of inflation
	<b>POLICY</b> Neutral	<b>Interest rates: some easing next year?</b> Central banks realised in 2022 that their credibility was at stake, and eventually acted decisively to raise nominal interest rates. However, inflation has since fallen meaningfully on both sides of the Atlantic. Central banks remain vigilant – the recent shifts lower in money market expectations look a little overdone – but modest rate cuts next year seem plausible to us
	<b>GEOPOLITICS</b> Negative	<b>Geopolitical risk surges anew</b> The grim events in the Middle East have suddenly rekindled global tensions, even as the trauma in Ukraine seemed to be contained. Amidst the emotion it is easy to imagine the worst, but as yet, safe haven assets and currencies, and – importantly – oil prices, have not moved outside recent ranges. China-US tensions still matter most, and the temperature around Taiwan remains a little cooler: both sides seem to recognise the importance of stepping back from the brink of mutually assured economic destruction (or worse). However, domestic US politics looks even more dysfunctional than usual
	<b>VALUATIONS</b> Neutral	<b>Valuations remain balanced</b> Following November's rebound, global stocks are close to their 2023 high. Valuations are inexpensive and earnings expectations continue to stabilise around the prospect of resumed growth in 2024. But in the meantime, despite the rally in bond markets, plausible real yields are still firmly positive, and presenting stiffer competition to stocks – and more credible diversification – than for many years
	<b>CANARIES / RISKS</b> Neutral	<b>Low volatility may not last</b> Banking risk faded quickly after March's drama, but the risk of financial accidents surely remains elevated after such a sharp normalisation of interest rates. Economies are not out of the cyclical woods just yet. But traded options are not especially expensive, even though the free 'Fed put' has been withdrawn, and bonds increasingly offer more cost-effective diversification, as noted. We remain unconvinced that cryptocurrencies offer anything here

Source: Rothschild & Co

## How the venture capital market might look in 2024

### Navigating the new normal

The year end tends to be a time for predictions. Here we outline a few thoughts that are part prediction and part a reflection of recent trends.

As we look forward to 2024 the overarching theme might be that the difficult VC funding environment will persist but that gradually there will be the emergence of a new normal, disassociated from the heady period for valuations and fundraising of late 2020, 2021 and early 2022. Venture capital still has appetite for vision and growth, as the interest in generative AI demonstrates. There remains an awkward adjustment to be made around those companies that raised at high valuations in 2020-2022, valuations that are unlikely to be repeated in the current interest rate environment.

For companies the new model of prioritising profitability and FCF over the out-and-out pursuit of revenue growth will offer continuing challenges. Will they still be able to resuscitate growth sufficiently within these parameters to attract additional funding to fulfil the original vision?

For VC investors the challenge is in fundraising, particular for smaller firms with a limited track record. The exit market both via M&A and IPOs has been impacted by the higher interest rate environment. The difficulty in recycling money back to LPs means that they in turn face challenges of how much to invest further into the VC firms that they support.

Nevertheless conditions rarely remain static and by the end of 2024 it may be a very different environment with short term interest rates falling – maybe by 75bps in the US, the IPO market opening with a wave of companies preparing to go the market in 2025, probably slow GDP growth but no recession in the major economies and a venture capital world that has had another year to adapt itself to the ‘new normal’ and which is finding ways to invest and flourish through it.

**Artificial intelligence gathers pace:** The early big investments in AI have been into the LLM providers and the scale of funding for these means the big players have moved out of reach for some VC funds. There is though likely to be a focus on new businesses using applications of AI. Virtually every tech related start up website references the use of AI to power its applications. 2024 may be the year when the wheat is sorted from the chaff and a wave of investment reaches the next tier of AI companies.

**Strategic investors and ClimateTech projects:** There is momentum still behind the wave of investment in ClimateTech projects. Indeed the top four VC deals in Europe in 2023 were all for ClimateTech businesses, headed by the fundraising at H2 Green Steel. What is surprising is that these deals typically mean breaking the ‘new rules’ of VC investing. These are sometimes pre-revenue and certainly pre-profit businesses and there is heavy capital investment required to scale projects like battery gigafactories or EV charging station networks. The capital is there though for this type of project, whether from strategic green funds, major pension funds or sovereign wealth.

**Focus on corporate governance:** As the venture capital market has normalised some of the excesses seen in the system have dropped out. The year has seen crypto under scrutiny post the fallout from FTX. That raised issues over control and corporate governance structures in start-ups, a factor which the market was again reminded of in the events at Open AI towards the end of the year. Some large investors have turned the scrutiny on themselves, slowing down their investment processes and raising the safeguards. The demise of Silicon Valley Bank marked a watershed in attitudes from the heady times of 2020-22 to a more circumspect investment environment.

**Funding rounds are slower:** The corollary of the fall away of the ‘hot’ market conditions of 2020-22 is that the environment to invest is less pressured. There are still areas, notably in AI, of rapid and substantial decision-making - French AI business Mistral raised a €100m round within four weeks of its creation and another €400m round six months later. More typically VC investors are taking their time to do substantial due diligence working with their investee companies. It means that funding rounds are more onerous and take much longer than they did in the recent past.

**Company casualties mount:** The venture capital model assumes a relatively high failure rate of companies along the way, with the effect hopefully more than offset by some good, and some spectacular, successes. The shift in the interest rate environment and the ensuing change in the ease of accessing capital is though, a pivot moment and it is likely that the number of venture capital backed projects that shut down will climb in 2024 as some companies run out of financing road or the motivation to continue in straitened circumstances. A recent Pitchbook report cited that in 2023 3,200 US venture capital backed companies, that had raised a total of \$27.2bn, went out of business.

**More down rounds:** In 2023 the number of down rounds increased but it wasn’t a flood. The same trends though should persist into 2024. Companies have tightened their belts, focusing on cash and profits, often at the expense of top line growth. As the cash raised in 2020-22 runs out and as there is often still a gap before self-support can be reached, companies must go back to the market – or more probably their existing investors – to raise. The less attractive growth dynamics combined with the lower public valuations since the last raise (the market peaked in

November 2021) and the lower availability of capital combined with a higher investment hurdle, means that there should certainly be more down rounds.

**Venture capital firms under pressure as well:** Our last Growth Equity Update observed that VC funds globally had raised just \$76.3bn after nine months of 2023 versus \$171bn for the whole of 2022. Fund raising is tougher, in part because with weak M&A and IPO markets the flow of capital around the system and in particular back to LPs, has been disrupted. In this environment we may see consolidation of funding around the bigger VC firms with the strongest track records. Even for such funds the scale of new fundraising may diminish. Some smaller funds may find it more difficult to raise and some casualties may become apparent here as well – whether via M&A and consolidation into bigger units or by closing funds and returning money to investors.

**The IPO environment to improve:** The oddity of 2023 is that it has been a very tough year for the venture capital market (*“the most difficult year for start-ups in at least a decade”* Peter Walker, Carta’s head of insight quoted in the New York Times) while the public markets have done well - NASDAQ is up over 40% and the S&P 500 over 20% this year. Clearly part of that was rebound from the fall away from the peak in November 2021 while VC investment must look at the long term interest rate curve rather than focusing on short term rates, the driver of the market’s year-end rally.

Yet buoyant public markets must offer hope for an improved exit environment in 2024 and 2025. There is a queue of companies waiting to IPO and if we look at the four big US autumn IPOs that failed to spark an IPO revival in late 2023 we find that Arm is now up 29% and has substantially outperformed NASDAQ. Birkenstock, which started so poorly is up and only just behind the move in the S&P500 since IPO, Klaviyo is back in positive territory with only Instacart still beneath its IPO price. With the first US interest rates slated for May, and cuts in the EU even earlier, the prospect of an IPO revival should be growing.

**And M&A as well:** Again it has been tough in the M&A market. There is a higher hurdle rate yet the dislocation of public and private valuations would appear to offer opportunities for exit via M&A, and there is a lot of dry powder out there. A recent Collier Capital survey of 110 PE investors from around the world, with total assets under management of \$2.2 trillion, found that 60% of investors said they expect an increase in mergers and acquisitions in global private markets over the next three to five years. Only 11% of respondents anticipated a decrease in M&A activity.

**How will the end of 2024 look?** US interest rates could be 75bps lower according to Fed officials with another 100bps of reduction in prospect for 2025. Venture Capital companies will be three years into the focus on profits and growth, more and more will be turning that corner to demonstrate profitability is there and looking for funding for renewed growth. Public investors may have made some good money on reasonably priced IPOs. Global economic growth may have slowed modestly in 2024 (2.7% in 2023 to 2.6% in 2024) but the incoming US President (Trump, Biden, Haley, Obama?) will be looking at forecasts of a reacceleration in 2025.

## The Biggest Venture Capital deals of 2023

### The US – Generative AI leads

The end of the year is traditionally a time for lists. We have fallen prey to the temptation. Here we outline the largest Venture Capital deals in the US and Europe that we have recorded.

First we look at the largest US deals. We have concentrated on deals of \$200m and above. With the help of Crunchbase we cite 74 deals in 2023 raising \$200m or more. In total these deals raised c\$44bn, making the average deal size for this group \$589m.

The profile is distorted by a couple of mega deals. These were the \$10bn investment in Chat GPT company Open AI made by Microsoft in January and the \$6.5bn invested in payments infrastructure Stripe by investors including Andreessen Horowitz, Baillie Gifford, Founders Fund and General Catalyst. Stripping these two out the average size of the net 72 deals drops to \$377m.



## Top 15 US VC deals in 2023 by amount raised

Company	Raise \$m	Lead investor	Sector	Date
OpenAI	10,000	Microsoft	Artificial intelligence	Jan-23
Stripe	6,500	n/a	Fintech	Mar-23
Juul	1,300	n/a	Consumer Goods	Nov-23
Inflection AI	1,300	Microsoft, Nvidia	Artificial intelligence	Jun-23
Anthropic	1,250	Amazon	Artificial intelligence	Sep-23
Metropolis	1,100	Eldridge, 3L Capital	Computer vision	Oct-23
Generate Capital	1,030	n/a	Energy	Jan-23
Stack AV	1,000	SoftBank Group	Autonomous vehicles	Sep-23
Redwood Materials	1,000	Goldman Sachs Capricorn's Technology	Renewable energy	Aug-23
Rippling	500	Greenoaks	Human resources	Mar-23
Lessen	500	n/a	Real estate	Jan-23
SandboxAQ	500	n/a	Artificial intelligence	Feb-23
Anthropic	500	Google	Artificial intelligence	Oct-23
CleanCapital	500	Manulife Investment Management	Cleantech	Jun-23
Databricks	500	T. Rowe Price Associates	Data	Sep-23
<b>Total</b>	<b>27,480</b>			

**AI leads the way – different rules apply:** Three of the top ten and five of the top 15 US raises in 2023 have been in generative AI with an initial \$15.4bn being raised.

The largest deal of the year was one of the earliest, the \$10bn invested in **OpenAI** in January by Microsoft. OpenAI also appears at number 32 in the top raises with a follow on investment by VC firms including Sequoia Capital, Andreessen Horowitz, Thrive and K2 Global at a c\$29bn valuation. The abrupt departure and then return of CEO Sam Altman highlighted corporate governance issues in a company founded as a non-profit where the commercial arm is a subsidiary of the core foundation. In 2015 the 'not for profit' transferred to a 'capped' for-profit status. OpenAI LP, a for-profit business was formed, of which the non-profit OpenAI Inc is the sole controlling shareholder. The governance episode though does not appear to have derailed plans for a secondary sale of Open AI stock. The WSJ and The Information report that an upcoming secondary sale could involve the purchase of up to \$1bn of employee stock at a valuation of c\$86bn in a deal led by Thrive Capital.

**Inflection AI** raised \$1.3bn in June in a deal supported by Microsoft and NVIDIA. Led by one of the founders of DeepMind the business has launched an AI powered chatbot called Pi.

**Anthropic** was founded in 2021 by former senior members of OpenAI. The company launched its ChatGPT style chatbot Claude ('helpful, honest, and harmless') in March 2023. In late 2022 Google invested \$3bn for a 10% stake with Anthropic sourcing cloud computing capability from Google.

In September 2023 Amazon and Anthropic announced a strategic collaboration with Anthropic selecting AWS as its primary cloud provider and agreeing to train and deploy its future foundation models on AWS Trainium and Inferentia chips. In turn Anthropic made a long-term commitment to provide AWS customers with access to future generations of its foundation models via Amazon Bedrock. Amazon announced an immediate investment of \$1.25bn in Anthropic as part of an overall pledge to invest \$4bn. Amazon said it would not gain a board seat and that its stake amounted to a minority position.

In turn in October 2023 Google announced another \$500m immediate investment in Anthropic with a further \$1.5bn pledged over time. Between the two big partners Anthropic has raised nearly \$7bn in funding in 2023.

**Sandbox AQ**, a spin off from Alphabet is a part AI, part quantum computing company and raised \$500m in February. **Adept AI** raised \$350m in a March 2023 Series B round led by General Catalyst and Spark Capital (also an investor in Anthropic) at a post money valuation of \$1bn.

## The top US VC deals in AI in 2023

Company	Raise \$m	Lead investor	Sector	Date
1 OpenAI	10,000	Microsoft	Artificial intelligence	Jan-23
2 Inflection AI	1,300	Microsoft, Nvidia	Artificial intelligence	Jun-23
3 Anthropic	1,250	Amazon	Artificial intelligence	Sep-23
4 SandboxAQ	500	n/a	Artificial intelligence	Feb-23
5 Anthropic	500	Google	Artificial intelligence	Oct-23
6 Anthropic	450	Spark Capital	Artificial intelligence	May-23
7 Adept AI	350	General Catalyst, Spark Capital	Artificial intelligence	Mar-23
8 Anthropic	300	Google	Artificial intelligence	Feb-23
9 OpenAI	300	n/a	Artificial intelligence	Apr-23
10 Hugging Face	235	Salesforce Ventures	Artificial intelligence	Aug-23
11 Imbue	200	n/a	Artificial intelligence	Sep-23
<b>Total</b>	<b>15,385</b>			

**Data management** is a key step in the generative AI process but has been rather overshadowed by the focus on generative AI LLM models. Two big raises in this field in 2023. Databricks hosts its Lakehouse Platform, a data intelligence platform which uses generative AI and machine learning to enable companies to process and explore large quantities of data. The company had a \$500m funding round in September valuing the business at \$43bn, at which time it disclosed its annualized revenue run rate was c\$1.5bn after Q2 revenue growth of more than 50%. It had previously raised \$1.6bn in August 2021 at a post money valuation of \$38bn. TPG led a \$350m funding round for **Denodo** in September. Denodo is a data management vendor whose platform specialises in data virtualisation.

## The top US VC deals in Data in 2023

Company	Raise \$m	Lead investor	Sector	Date
Databricks	500	T. Rowe Price Associates	Data	Sep-23
Denodo Technologies	336	TPG	Big data	Sep-23
<b>Total</b>	<b>836</b>			

**Cloud Services:** At numbers 58 and 71 ranks in the top US deals of 2023 is **Coreweave**. Its \$221m Series B raise in April was followed a month later by a \$200m extension both led by Magnetar Capital. Coreweave is powering the LLM and generative AI boom with purpose-built cloud infrastructure at scale and is riding the wave of enthusiasm for AI. The company followed up the equity raise with a \$2.3bn debt financing led by Magnetar and Blackstone in August *to purchase compute to serve its customers, while bolstering its talent base*. In December there was a \$642 million minority investment round by FMR at a valuation reported by Bloomberg to be at \$7bn.

## The top US VC deals in Cloud Services in 2023

Company	Raise \$m	Lead investor	Sector	Date
CoreWeave	221	Magnetar Capital	Cloud	Apr-23
CoreWeave	200	Magnetar Capital	Cloud	May-23
<b>Total</b>	<b>421</b>			

**Fintech was much less prominent in 2023** with just four of the top 74 raises and \$7bn raised. This included the \$6.5bn down round conducted by **Stripe** in March, 47% below its peak valuation of \$95bn in March 2021 and carried out in order to deal with the issue of its restricted stock units *“to provide liquidity to current and former employees and address employee withholding tax obligations related to equity awards.”*

**Ramp**, the finance automation platform operator, raised \$300m in a Series D in August in a round co-led by backer Thrive Capital and Sands Capital. The post-money valuation of \$5.8bn was 28% lower than its \$8.1bn valuation when it raised \$200m in March 2022. **Clear Street** raised \$270m from Prysm Capital valuing the New York based independent prime broker at \$2bn. Clear Street has developed a cloud-based prime brokerage and clearing system designed, in the words of CEO Chris Pento, to *‘replace the outdated infrastructure being used across capital markets.’* Insurtech **Next Insurance** raised \$265m in November.

## The top US VC deals in Fintech in 2023

Fintech				
Company	Raise \$m	Lead investor	Sector	Date
Stripe	6,500	n/a	Fintech	Mar-23
Ramp	300	n/a	Fintech	Aug-23
Clear Street	270	Prysm Capital	Fintech	Apr-23
Next Insurance	265	Allstate, Allianz X	Insurtech	Nov-23
<b>Total</b>	<b>7,335</b>			

**ClimateTech has momentum** with eleven of the of the top 74 US deals and \$5bn of funding.

**Generate Capital**, the San Francisco based infrastructure operator, raised \$1030m in January 2023 having previously raised \$2bn in 2021.

**Redwood Materials** which recycles batteries, refines reclaimed materials and is moving into the remanufacturing of anode copper foil raised \$1bn in a Series D round at a post-money valuation of over \$5 billion in August. **Ascend Elements** is a similar business, manufacturing advanced battery materials using reclaimed materials from discarded lithium-ion batteries. It raised \$542m in a Series D in September led by Blackrock's Decarbonisation Partners.

**Clean Capital** raised \$500m in June. The company focuses on middle-market solar and storage. The **Silicon Ranch Company**, another solar and carbon solutions business, raised \$385m in January.

**Electric Hydrogen** raised \$380m in an October Series C led by Fortescue, Fifth Wall and Energy Impact Partners. Its electrolyzer systems produce green hydrogen from renewable electricity and water. Green hydrogen is used for decarbonizing industrial processes like fertilizer production, steelmaking and the manufacture of base chemicals.

**Ohmium International**, a similar green hydrogen solutions business, raised \$250m in April in a deal led by TPG Rise Climate.

In May **Gradient**, an end- to-end solutions provider of advanced water and wastewater treatment, raised \$225m in a Series C. In December **X-Energy** a developer of advanced small modular nuclear reactors and fuel technology for clean energy closed a \$235m Series C after the cancellation of a SPAC deal proposal with Ares Acquisition.

**Electric vehicle businesses** – associated with the ClimateTech banner - saw some shakeouts in 2023 but raises continued as well. **Our Next Energy** raised \$300m in February in a Series B that valued the company at over \$1bn. It has a LFP ( lithium-iron phosphate cells ) battery business for electric vehicles (EVs) battery technology. The round was led by Franklin Templeton and Fifth Wall. The company also benefitted from \$220m of grants from the state of Michigan to build a US based LFP gigafactory in an environment supported by the US Inflation Reduction Act, which offers substantial incentives for companies to develop onshore production facilities. By early December the company had replaced its founder and cut 25% of its workforce citing 'market conditions'. Bloomberg cited ' a failed funding round and a cash crunch' with the full build out of the battery plant delayed. Meanwhile **EV Passport** which has rolled out 5,000 EV chargers across 35 US raised \$200m in October.

## The top US VC deals in ClimateTech in 2023

Company	Raise \$m	Lead investor	Sector	Date
1 Generate Capital	1,030	n/a	Energy	Jan-23
2 Redwood Materials	1,000	Goldman Sachs Capricorn's Technology	Renewable energy	Aug-23
3 Ascend Elements	460	Decarbonization Partners, Temasek, QIA	Batteries	Sep-23
4 CleanCapital	500	Manulife Investment Management	Cleantech	Jun-23
5 Electric Hydrogen	380	Microsoft's Climate Innovation , BP Ventures	Energy	Oct-23
6 Silicon Ranch Corp.	375	n/a	Renewable energy	Jan-23
7 Ohmium International	250	TPG Rise Climate	Energy	Apr-23
8 X-energy	235	Ares Management	Energy	Dec-23
9 Gradient	225	BoltRock Holdings, Centaurus Capital	Cleantech	May-23
10 Our Next Energy	300	Franklin Templeton Investments, Fifth Wall	Energy	Feb-23
11 EVPassport	200	Northleaf Capital Partners	Electric vehicles	Oct-23
<b>Total</b>	<b>4,955</b>			

**Biotech attracts steady interest:** The most heavily represented sector by number of deals is biotech with thirteen of the top 74 US VC deals. The biggest raise was the \$400m for cell and gene therapy company, **Elevate Bio** led by AyurMaya Capital Management in May. **ReNagade Therapeutic** raised \$300m from MPM BioImpact and F2 Ventures in April. It was one of the largest US Series A funding rounds in 2023. ReNagade, based in Cambridge,



Massachusetts aims to “address major limitations in RNA [ribonucleic acid] therapeutics by enabling the delivery of RNA medicines to previously inaccessible tissues and cells in the body.”

### The top US VC deals in Biotech in 2023

Biotech				
Company	Raise \$m	Lead investor	Sector	Date
1 ElevateBio	400	AyurMaya Capital Management Fund	Biotech	May-23
2 ReNAgade The.	300	MPM BiolImpact, F2 Ventures	Biotech	May-23
3 Generate Bio	273	n/a	Biotech	Sep-23
4 Orbital Therapeutics	270	Arch Venture Partners	Biotech	Apr-23
5 Cellares	255	Koch Disruptive Technologies	Biotech	Aug-23
6 Aiolos Bio	245	Atlas Venture, Bain Capital Life Sciences	Biotech	Oct-23
7 MapLight Thera.	225	Novo Holdings	Biotech	Oct-23
8 Heartflow	215	Bain Capital Life Sciences	Biotech	Apr-23
9 Nimbus Therapeutics	210	GV, SR One, Atlas Venture	Biotech	Sep-23
10 CARGO Therapeutics	200	Third Rock Ventures, RTW Investments	Biotech	Mar-23
11 Upstream Bio	200	Enavate Sciences, Venrock Healthcare	Biotech	Jun-23
12 ADARx Pharma	200	Bain Capital Life Sciences, TCGX	Biotech	Aug-23
13 Genesis Therapeutics	200	Andreessen Horowitz Bio + Health	Biotech	Aug-23
<b>Total</b>	<b>3,193</b>			

**Healthcare saw five raises of above \$200m totalling \$1.35bn.** The largest was a \$315m raise for **Monogram Health** which offers a software driven, remote biometrics based system for managing kidney disease at home. It previously raised \$160m in June 2022. **Main Street Health** raised \$315m in October. It is a value-based healthcare business addressing the particular issues facing rural America. The funding will enable it to expand to a further 26 states.

### The top US VC deals in Healthcare in 2023

Healthcare				
Company	Raise \$m	Lead investor	Sector	Date
Monogram Health	375	n/a	Healthcare	Jan-23
Main Street Health	315	Oak HC/FT	Health care	Oct-23
Aledade	260	Lightspeed Venture Partners	Health care	Jun-23
Paradigm	203	ARCH Venture Partners, General Catalyst	Health care	Jan-23
ShiftMed	200	Panoramic Ventures	Health care	Feb-23
<b>Total</b>	<b>1,353</b>			

**Aerospace and Space Systems:** The Space Tech industry saw six \$200m plus raises with a total of \$1.6bn.

Space Systems saw \$490m raised in 2023 led by the \$350m for **Axiom Space**, the space infrastructure developer looking to provide human spaceflight services, providing missions to the International Space Station and developing the ISS’ successor, the Axiom Station.

**Firefly Aerospace** was raising funds in a round that lasted much of the year, finally reaching its \$300m total in November. It is an end-to-end space transportation company with launch, lunar, and on-orbit services. **Partager Aerospace** is an intellectual property (IP), manufacturing and engineering provider in the space ecosystem. It raised \$250m in July. **Shield AI** is building Hivemind, an AI pilot, to allow drones and aircraft to operate autonomously without GPS, communications, or a pilot. It raised \$200m in October.

### The top US VC deals in Space and Aerospace in 2023

Space and Aerospace				
Company	Raise \$m	Lead investor	Sector	Date
Axiom Space	350	Aljazira Capital, Boryung Pharmaceutical	Space tech	Aug-23
Firefly Aerospace	300	AE Industrial, Mitsui & Co	Aerospace	Nov-23
Sierra Space	290	MUFG, Kanematsu Corp., Tokio Marine	Space	Sep-23
Partager Aerospace	250	Matthew Brown Companies	Aerospace	Jul-23
Astranis	200	Andreessen Horowitz	Space	Apr-23
Shield AI	200	Riot Ventures, U.S. Innovative Tech Fund	Aerospace	Oct-23
<b>Total</b>	<b>1,590</b>			

**Drones** saw two raises totalling \$560m. The **Zipline** drone based logistics business raised \$330m in April at a valuation of c\$4.2bn. Its new autonomous drone, the Platform 2, is able to carry eight pounds of cargo at a range of 10 miles. **Skydio**, a professional drone manufacturer whose systems are typically used by the US Department of Defense, most US State Departments of Transportation, over 200 public safety agencies and 60 power utilities raised \$230m in a February Series E at a valuation of \$2.2bn.

## The top US VC deals in Drones in 2023

Drones				
Zipline	330	n/a	Drones	Apr-23
Skydio	230	Linse Capital	Drones	Feb-23
<b>Total</b>	<b>560</b>			

Notable other raises in the US in 2023 included \$1.3bn for e-cigarette supplier **Juul Labs** in November. At its peak in late 2018 Philp Morris acquired a 35% stake in the business for \$12.8bn. In October the tech driven parking business **Metropolis** raised \$1.05bn in equity and \$650m in debt to acquire another parking services business, SP Plus.

## Other top US VC deals in 2023

Company	Raise \$m	Lead investor	Sector	Date
<b>Total</b>				
Juul	1,300	n/a	Consumer Goods	Nov-23
Metropolis	1,100	Eldridge, 3L Capital	Computer vision	Oct-23
Rippling	500	Greenoaks	Human resources	Mar-23
Lessen	500	n/a	Real estate	Jan-23
Lvrch Capital Advisory	400	n/a	Financial services	Jul-23
Madhivie	300	Goldman Sachs Asset Management	Advertising	Jun-23
EquipmentShare	290	BDT Capital Partners	Construction	Apr-23
Mapbox	280	SoftBank	Logistics	Sep-23
Neuralink	280	Founders Fund	Neuroscience	Aug-23
Skims	270	Wellington Management	Apparel	Jul-23
Indigo	250	Flagship Pioneering, State of Michigan	Agriculture	Sep-23
Divergent Tech	230	Hexagon AB	Manufacturing Tech	Nov-23
Kite	200	Juxtapose, Blackstone Group	E-commerce	Apr-23
Lvrch Capital Advisory	200	n/a	Financial services	Apr-23
Lyten	200	Prime Movers Lab	Manufacturing	Sep-23
<b>Total</b>	<b>6,300</b>			

## The Biggest Venture Capital deals of 2023

### Europe – Climate Tech and AI

For Europe we focus on VC raises of \$100m and above in 2023. As of December 13 we identify 69 of these, raising \$16.1bn in total. The top 15 are shown in the exhibit. These raised a total of \$8.6bn. ClimateTech dominates with all four of the top deals and six of the top 15. Artificial Intelligence made a late run with three of the top 15 deals.

#### Top 15 European VC deals in 2023 by amount raised

Company	Raise \$m	Sector	Country	Lead investor	Date
H2 Green Steel	1,649	ClimateTech	Sweden	Altor, GIC	Sep-23
Northvolt	1,300	ClimateTech	Sweden	Blackrock, IMCO	Aug-23
Verkor	910	ClimateTech	France	Macquarie	Sep-23
Zenobe	750	ClimateTech	UK	KKR, Infracapital	Sep-23
Aleph Alpha	500	AI	Germany	Innovation Park AI	Nov-23
Getir	500	Consumer	Turkey	Mubadala	Sep-23
Cubic Telecom	495	Software/Evs	Ireland	Softbank	Dec-23
Mistral AI	415	AI	France	a16z, Lightspeed	Dec-23
Northvolt	400	Climate Tech	Sweden	IMCO	Jun-23
Butternut Box	355	Consumer	UK	GA, L Catterton	Sep-23
SumUp	307	Fintech	UK	Sixth Street Growth	Dec-23
Driveco	262	Climate Tech	France	APG, Mirova,	May-23
eToro	250	Fintech	UK	ION Group, SoftBank	Mar-23
Builder AI	250	AI/Software	UK	QIA	May-23
Cato Networks	238	Software	Israel	LightSpeed	Sep-23
<b>Total</b>	<b>8,581</b>				

**Climate Tech dominates:** In the top 69 European VC raises in 2023 there were in total fifteen Climate Tech deals which cumulatively raised \$6.8bn.

The largest of these was \$1.65bn raised for **H2 Green Steel** in September led by Itor, GIC, Hy24 and Just Climate. The proceeds will be devoted to the construction of the company's flagship large-scale green steel plant in Sweden which will include Europe's first giga-scale electrolyser. Since its launch in 2021, H2 Green Steel has raised in total some €1.8bn of equity in three financing rounds as well as debt financing of over €3.5bn.

In August **Northvolt**, the Swedish battery maker, raised \$1.2bn via a convertible from investors including Blackrock, CPP Investments and Omers. Earlier in the year it raised \$400m in a convertible with IMCO. In total Northvolt has raised in excess of \$9bn in equity and debt as it builds manufacturing capacity to address EV battery orders estimated at more than \$55bn.

The French battery business **Verkor** raised \$910m in a Series C in September as part of an overall package of €2bn of financing which included debt support from the European Investment Bank, and French government subsidies of c€650m. The financing will fund the construction of Verkor's first gigafactory, in Dunkirk which, it is intended, will have an initial production capacity of 16 GWh/year and be operational by 2025. The Series C was led by Macquarie Asset Management's Energy Transition Solutions Fund.

**Zenobē**, a UK battery storage and EV fleet provider business secured funding of c\$750m in September from KKR. The investment will allow the expansion of its fleet electrification and grid-scale battery storage business. The KKR investment was made via its global climate strategy, which is part of its \$54bn Infrastructure business.

Other notable deals have been \$228m for photovoltaics leasing firm **Enpal** in January and three substantial deals for electric vehicle (EV) charging station businesses, **Driveco** (\$262m), **EV Chargers** (\$200m) and **JOLT Energy** (\$165m).

#### The top European VC deals in ClimateTech in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
H2 Green Steel	1,649	ClimateTech	Sweden	Altor, GIC	Sep-23
Northvolt	1,300	ClimateTech	Sweden	Blackrock, IMCO	Aug-23
Verkor	910	ClimateTech	France	Macquarie	Sep-23
Zenobe	750	ClimateTech	UK	KKR, Infracapital	Sep-23
Northvolt	400	Climate Tech	Sweden	IMCO	Jun-23
Driveco	262	Climate Tech	France	APG, Mirova,	May-23
1Komma5	232	Climate Tech	Germany	G2VP	Jun-23
Enpal	228	ClimateTech	Germany	TPG Rise ,Westly Group	Jan-23
Technique Solaire	214	ClimateTech	France	Bpifrance, Crédit Agricole	Nov-23
EV Chargers	200	Climate Tech/EVs	UK	Denham Capital.	Mar-23
SkyNRG	183	ClimateTech	Netherlands	Macquarie Asset Management	Nov-23
JOLT Energy	165	Climate Tech	Germany	Infrared Capital	May-23
APK	130	ClimateTech	Germany	MIG Capital, LyondellBasell	Feb-23
mylight150	105	Climate Tech	France	Eiffel Essentiel, Azora Capital	Dec-23
CorePower	100	Climate Tech	UK	Onomichi, Imabari Shipbuilding.	May-23
<b>Total</b>	<b>6,828</b>				

**Software and Cybersecurity** raised \$1.84bn in Europe across 14 deals in 2023. The three biggest rounds in this group were \$238m raised in September for **Cato Networks** an Israeli company offering a cloud-native security service – SASE (Secure Access Service Edge). In March 2023 **Travelport Worldwide**, a travel retailing platform for travel agencies, secured \$200m in funding from Siris Capital Group and Elliott Management who had taken the company private in a \$4.4bn deal (including debt) in 2019. In December 2023 there was a further deal with investors putting \$570m into the business including conversion of debt to equity. Another travel business, vacation rentals software company **Hostaway** raised \$175m in June.

**Odoo** a Belgian business with a suite of business management software tools (CRM, e-billing etc) raised \$162m in a deal led by General Atlantic. Decision Intelligence business **Quantexa** uses AI tools in tackling fraud, identity management, KYC, money laundering detection and compliance. It provides its data analysis services to clients in the banking and insurance sectors as well as government organisations. It raised \$129m in a Series E in April. The round was led by GIC and valued the business at \$1.8bn.

## The top European VC deals in Software and Cybersecurity in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
Cato Networks	238	Software	Israel	LightSpeed, Adams Street	Sep-23
Travelport	200	Software	UK	Siris Capital, Elliott Mgt.	Mar-23
Hostaway	175	Software/Travel	Finland	PSG	Jun-23
Odoo	162	Software	Belgium	General Atlantic	Jun-23
Quantexa	129	Software	UK	GIC, Warburg Pincus	Apr-23
ShopCircle	120	Software	UK	645 Ventures, 3VC	Sep-23
Patient 21	108	Software/Health	Germany	Pitango, Bertelsmann Inv.	May-23
IntegrityNext	106	Software	Germany	EQT Growth	Mar-23
ChapsVision	105	Software	France	Qualium	Sep-23
Netcraft	100	Cybersecurity	UK	Spectrum Equity	Jul-23
Nord Security	100	Cybersecurity	Netherlands	Warburg Pincus, Novator	Sep-23
Maltego	100	Software	Germany	Charlesbank Technology	Apr-23
Pvcase	100	Software	Lithuania	Highland Europe, Energize	Jul-23
UVeye	100	Software	Israel	Hanaco VC, GM Ventures	May-23
<b>Total</b>	<b>1843</b>				

**Artificial Intelligence** deals started to take off in Europe from mid-year. In total there were seven deals raising \$1.8bn. In contrast to the sums being devoted to LLM players in the US, the amounts raised in Europe have been relatively modest. There are signs though that governments and state authorities are making an effort to promote a European alternative in the Gen AI world.

Leading the way is the \$500m raised by **Aleph Alpha**, a German AI business producing large language models which allow users to protect data sovereignty. There was a strong Lidl connection with the round led by Innovation Park AI - a foundation established by Dieter Schwarz, the Lidl founder and funded by the state of Baden-Württemberg- and co led by Schwarz Group (the Lidl chain owners) and Bosch Ventures. It is reported that the Aleph founder Jonas Andrulis wanted to raise solely only from European investors.

In May 2023 French generative AI company **Mistral AI** was set up by a team of AI specialists who had formerly worked at Google and Meta with a plan to launch a LLM by 2024. Four weeks later the company raised €105m (\$113m) in a seed round led by Lightspeed. It was the largest seed round ever in Europe and valued the four-week-old business at \$240m. Shortly afterwards President Macron made one of his regular annual appearances at the VivaTech technology trade show in Paris appearing on stage with Arthur Mensch, Mistral's CEO. Mr Macron announced €500m in new French funding to 'create champions' in AI. In September the company released its first model the Mistral 7B making it available as a free download for developers. In early December Mistral closed a new \$415m Series A round valuing the company at \$2bn, this time led by a16z.

Other AI related raises included **Builder.ai's** \$250m led by the QIA in May. Builder AI's Natasha coding platform claims to build automated software apps faster and at considerably lower cost than traditional methods. Previously Microsoft had taken an undisclosed stake in the business with the aim of integrating the Natasha platform into Microsoft Teams. Defence AI company **Helsing** raised \$226m in September in a deal led by General Catalyst which also involved Saab buying a 5% stake for €75m. Helsing was founded in 2021 and describes itself as 'a new type of defence company, developing AI-based capabilities to protect our democracies.' It uses AI to process vast amounts of battlefield data to create a decision-making picture. It will provide the AI-enabled electronic warfare capabilities for the next update of the Eurofighter and has won the contract to provide the AI backbone for the Future Combat Air System (FCAS) programme as well as being active in Ukraine since 2022. The round valued Helsing at €1.5bn.

November also saw Israeli Enterprise AI business **AI21** raise \$208m valuing the business at \$1.4bn. Its investors include Intel Capital, Comcast Ventures, and Ahren Innovation Capital, Google and NVIDIA. It was founded in 2017, AI21 offers advanced large language models and natural language technologies to businesses through application programming interfaces.

Poolside is building an LLM with the aim of enabling users to create code for building applications using plain language. Originally a US company it raised \$26m in May 2023 and followed this up with a \$100m round in August led by French entrepreneur Xavier Niel. Simultaneously the US-founded Poolside decided to move its HQ to Paris.

## The top European VC deals in Artificial Intelligence in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
Aleph Alpha	500	AI	Germany	Innovation Park AI	Nov-23
Mistral AI	415	AI	France	a16z, Lightspeed	Dec-23
Builder AI	250	AI/Software	UK	QIA	May-23
Helsing	226	Software/AI	Germany	General Catalyst	Sep-23
AI21	208	AI	Israel	Intel, Comcast	Nov-23
Mistral AI	113	AI	France	Lightspeed, JCDecaux	Jun-23
Poolside	100	Software/AI	France	Xavier Niel, Felicis	Aug-23
<b>Total</b>	<b>1,812</b>				

There were big raises in **Consumer** in 2023 with five deals netting \$1.3bn. Largest of these was the \$500m raised by on demand grocery delivery company **Getir** in September at a \$2.5bn post money valuation. This round was led by Mubadala and GSquared. Getir is a survivor in the on demand grocery delivery space. In June 2021 Getir raised \$550m at a valuation of \$7.5bn post money; in March 2022 it raised \$800m at a valuation of \$11.8bn; in December 2022 it acquired its counterpart German business, Gorillas, in a deal valuing Getir's business at \$8.8bn. Although the latest valuation at \$2.5bn was greatly reduced, down almost 80% from the March 2022 deal, this was still a substantial raise.

Pet food manufacturer and brand **Butternut Box**, with its subscription based model, raised £280m in September 2023 in a deal led by General Atlantic and L Catterton. Rothschild & Co acted as sole financial adviser to **Castore**, the premium sportswear brand and end-to-end retailing platform for global sports teams in a £145m round led by the Raine Group announced in December.

## The top European VC deals in Consumer in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
Getir	500	Consumer	Turkey	Mubadala	Sep-23
Butternut Box	355	Consumer	UK	GA, L Catterton	Sep-23
Castore	180	Consumer	UK	Raine Partners, Hanaco Vent.	Dec-23
Urbanic	150	Consumer	UK	Mirabaud Impact, D1 Capital	Nov-23
Huel	100	Consumer	UK	MSIM IGT	Nov-23
<b>Total</b>	<b>1,285</b>				

It has been a relatively tough year for FinTech raises. S&P Global reports that the first nine months of 2023 saw 1,655 funding rounds raising \$29bn, down yoy from 2,684 rounds worth \$54bn. Q3 2023 was the slowest funding quarter since the start of 2021 in terms of both volume and values.

In Europe there were just seven fintech raises in the top 69 \$100m plus deals. The largest came late in the year. UK payments business **Sum Up** raised \$307m led by SixthStreet Growth and Bain Capital stating the valuation was higher than the \$8.6bn set when it raised €590m in summer 2022. In October Groupon had sold SumUp shares in a secondary at a value of \$4.2bn. SumUp says it has been operating on a "positive EBITDA basis" since Q4 2022 and has maintained 30% "top-line growth year over year". The \$250m of funding for the eToro social trading platform in March was the next largest raise.

That three of the top six fintech raises came in the last two months of the year may point to some sort of revival in 2024.

## The top European VC deals in FinTech in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
SumUp	307	Fintech	UK	Sixth Street Growth	Dec-23
eToro	250	Fintech	UK	ION Group, SoftBank	Mar-23
Merchant Money	115	Fintech	UK	Barclays Bank, Quilam Capital.	Feb-23
Blockchain.com	110	Fintech	UK	Kingsway Capital, Baillie Gifford	Nov-23
Atom	100	Fintech	UK	BBVA, Toscafund	Nov-23
Terrapay	100	Fintech	UK	IFC, Prime Ventures	Apr-23
Ledger	100	Blockchain	France	True Global, Cite Gestion SPV	Mar-23
<b>Total</b>	<b>1,082</b>				

As in the US, support for **Biotech** in VC fundraising was consistent through the year. There were seven deals of over \$100m raising \$845m in total. The largest of these was the \$138m Series C for **Amolyt Pharma**, which specialises in



the development of therapeutic peptides for rare endocrine and related diseases. The financing was led by Sofinnova Partners and Intermediate Capital Group.

### The top European VC deals in Biotech in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
Amolyt Pharma	138	Biotech	France	Sofinnova, Intermediate Capital	Jan-23
Hemab Therapeutics	135	Biotech	Denmark	Access Biotech, Deep Track	Feb-23
VectorY Therapeutics	135	Biotech	Netherlands	EQT Life Sciences, Forbion	Nov-23
Beacon Therapeutics	120	HealthTech	UK	Syncona Limited	Jun-23
Noema Pharma	112	Biotech	Switzerland	Forbion and Jeito Capital	Mar-23
Alentis Therapeutics	105	Biotech	Switzerland	Jeito Capital, Novo Holdings	Apr-23
Agomab	100	Biotech	Belgium	FMR, EQT Life Sciences	Oct-23
<b>Total</b>	<b>845</b>				

The related Healthcare field saw two \$100m raises totalling \$315m, the largest being a Softbank led \$165m raise for the UK surgical robotics company, **CMR Surgical**. The company continues to develop its Versius surgical robot, announcing at the time of the raise in September that it had passed 15,000 instances of use in surgeries. The company's previous fund raise was a \$60m Series D in June 2021 at a valuation of \$3bn. The September 2023 valuation is reported to be at around the same level. **Distalmotion** also has a surgical robot- it is called Dexter – and raised \$150m in April led by Revival Healthcare Capital.

### The top European VC deals in Healthcare in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
CMR Surgical	165	HealthTech	UK	SoftBank	Sep-23
Distalmotion	150	Medical Devices	Switzerland	Revival Healthcare Capital.	Apr-23
<b>Total</b>	<b>315</b>				

Some interesting deals in the field of AutoTech for vehicles.

In December Softbank took a 51% stake in **Cubic Telecom**, injecting c\$500m. Cubic Telecom is a software driven mobile connectivity business for automotive, transportation and agriculture OEMs. The company currently connects more than 17 million vehicles. The CEO observes, "We can update the car in the production line, we can update the car on the ship, we can update the car when it arrives anywhere".

**Oxbotica** (now Oxa Tech) raised \$140m in a Series C round in January. The company develops software to power autonomous vehicles, customising its 'Universal Autonomy' autonomous software for a range of enterprise customers. In September **Envisics** completed its Series C fundraising round at \$100m. Envisics specialises in holographic technology and the development of Augmented Reality HeadUp Displays, a feature which is making headway amongst auto makers.

### The top European VC deals in AutoTech in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
Cubic Telecom	495	Software/Evs	Ireland	Softbank	Dec-23
Oxbotica	140	AV Software	UK	Aioi Nissay Dowa Insurance	Jan-23
Envisics	100	Automotive	UK	Hyundai Mobis	Sep-23
<b>Total</b>	<b>735</b>				

**Deeptech and Semiconductors**. Four raises here with a combined value of \$543m. UK semiconductor manufacturer **Pragmatic** raised \$227m at a post money \$500m valuation with the deal led by M&G, UK Infrastructure Bank and Northern Gritstone (the VC business founded by the universities of Manchester, Leeds and Sheffield).

**Smart Photonics** is a foundry for integrated photonic circuits, offering applications for data and telecommunication, as well as for sensing application such as Lidar. It raised €100m in July 2023 with €60m from the government of the Netherlands and €40m from strategic investors in the semiconductor industry including ASML, NXP and VDL Groep **PASQAL** builds quantum computers from ordered neutral atoms in 2D and 3D array. The Paris based company raised a €100m Series B in January led by Temasek. **Oxford Quantum Circuits** is a 'quantum compute-as-a-service' business

and raised a \$100m Series B led by Japanese fund SBI investment in November. It simultaneously announced the public availability of OQC Toshiko, the world's first enterprise-ready quantum computing platform.

### The top European VC deals in DeepTech and Semiconductors in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
Pragmatic	227	Semiconductors	UK	M&G, UK Infrastructure Bank	Dec-23
Smart Photonics	107	Deeptech	Netherlands	Dutch Government, ASML, NXC	Jul-23
Pasqal	107	Quantum Comp	France	Temasek, BPI France	Jan-23
Oxford Quantum Circuits	100	Quantum Comp	UK	SBI Investment	Nov-23
<b>Total</b>	<b>541</b>				

Four more raises of significant size. Health and fitness startup **EGYM's** "*smart workout solution*" business provides connected hardware and software - to measure users work outs - and has its Wellpass corporate health network operation with more than 2.5m users. It raised \$225m in July on a round led by Affinity Partners. Revenues were \$130m in 2022. **TechMet** is a permanent capital vehicle focused on the critical minerals value chain from mining and processing to recycling and battery component manufacturing. It raised \$200m in August 2023. The US International Development Finance Corporation (DFC) is a key shareholder in the company. Satellite launch service company **Isar Aerospace** raised \$165m in a Series C round in March as it looks to build towards the initial flight of its Spectrum launch vehicle. **Gropys**, an Austrian sustainable building operations company, raised €100m in Series B funding in January.

### Other top European VC deals in 2023

Company	Raise \$m	Sector	Country	Lead investor	Date
EGYM	225	Fitness	Germany	Affinity Partners, Mayfair Equity	Jul-23
TechMet	200	Natural resources	Ireland	DFC, Mercuria Energy,	Aug-23
Isar Aerospace	165	Satellite	Germany	7-Industries, Bayern Kapital	Mar-23
Gropys	107	Construction	Austria	Vonovia	Jan-23
<b>Total</b>	<b>697</b>				

## Venture Capital funds consolidation

### *Some signs of consolidation beginning to emerge in the venture capital industry.*

In November Molten Ventures agreed to buy Forward Partners. The deal is aimed at creating a bigger player in the UK based technology funding scene. Molten Ventures Offered £41.4m in stock for Forward's shares, a circa 7% discount to its price immediately before the offer was made. Molten commented that its motivation was not just shareholder returns but ensuring that it retain its role as a leader in the European ecosystem for supporting entrepreneurial companies.

Martin Davis, CEO of Molten said: "*Forward Partners has a portfolio of 43 high-quality companies and, through combining our considerable resources, experience and networks, we will be even better placed both to support our existing portfolio companies and to capture attractive investment opportunities amid a buyer's market for venture capital.....The deal [will] provide Molten with a broader and more diverse pipeline through access to Forward Partners' early-stage deal flow opportunities in fast growing sub-sectors like applied AI and digital marketplaces.*"

The deal was supported by Blackrock who owned about 70% of Forward Partners and agreed to subscribe for £25m of an associated £50m fundraise by Molten.

General Catalyst, one of the largest US VC firms with c\$250bn under management, has announced a merger with the Berlin based venture investor, La Famiglia. La Famiglia, which has c\$360m under management, has been a prominent investor in European AI start-ups including Mistral and defence AI business Helsing. The deal is expected to close early in 2024. General Catalyst opened a base in London in 2021 but part of the reason for La Famiglia deal appears to be to get more presence on the ground in Europe. General Catalyst CEO Hemant Taneja commented:

"Seed investing is a local business and you have to be set up to interact with founders. La Famiglia allows us to do that."

Andreessen Horowitz opened its first international office in London in 2023.

US investors spent €51bn in European venture deals in 2021, compared with less than €3bn in 2011, according to PitchBook.

## Atomico report on the state of European technology 2023

Atomico's annual report on **'The State of European Tech 2023'** charts the decline in venture funding in European technology in 2023 while remaining optimistic about the medium term prospects both for the European Tech industry and its funding.

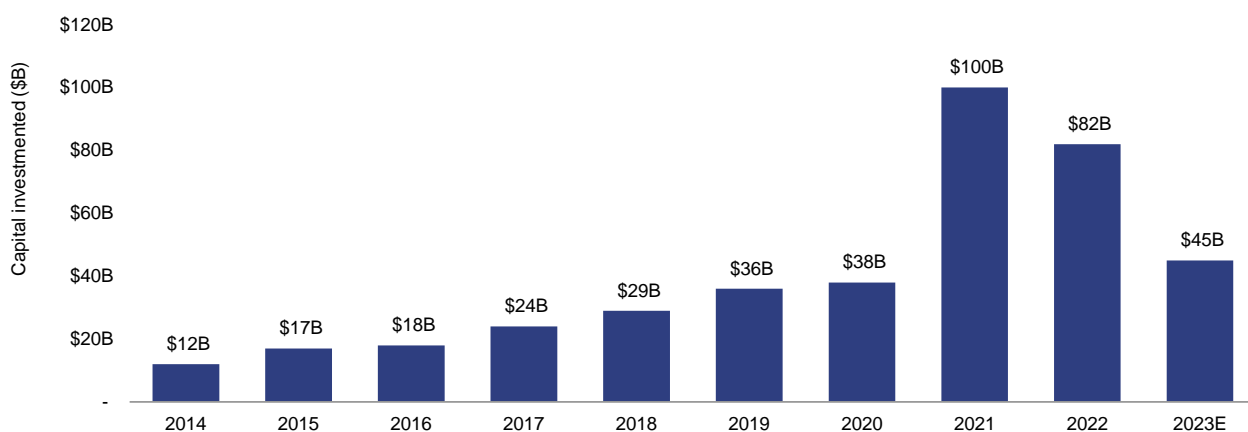
The report notes that funding for European technology companies is on a run rate to reach \$45bn in 2023, down from \$82bn in 2022. This is despite the surge of interest in AI deals seen in 2023. It reflects a relatively marked retreat by US investors. Their contribution to European tech funding has fallen from 39% of the total in 2021 to be on course for 25% of the 2023 total, in part caused by the fall away in cross over deals as the bigger late stage deals in which crossover investors tend to play a part, dried up.

As with most venture capital statistics the tough comparisons are with the bumper years surrounding the peak in 2021.

Atomico partner Tom Wehmeier observes in this context that investment in European tech companies in 2023 is on track to be c18% higher than in 2020.

*"The European tech environment looks more stable now than at any point since the pandemic. We see that bringing back certainty, a bit more predictability and helping restore confidence."*

### Total capital invested (\$B) in Europe, 2014 to 2023E



Source: Atomico

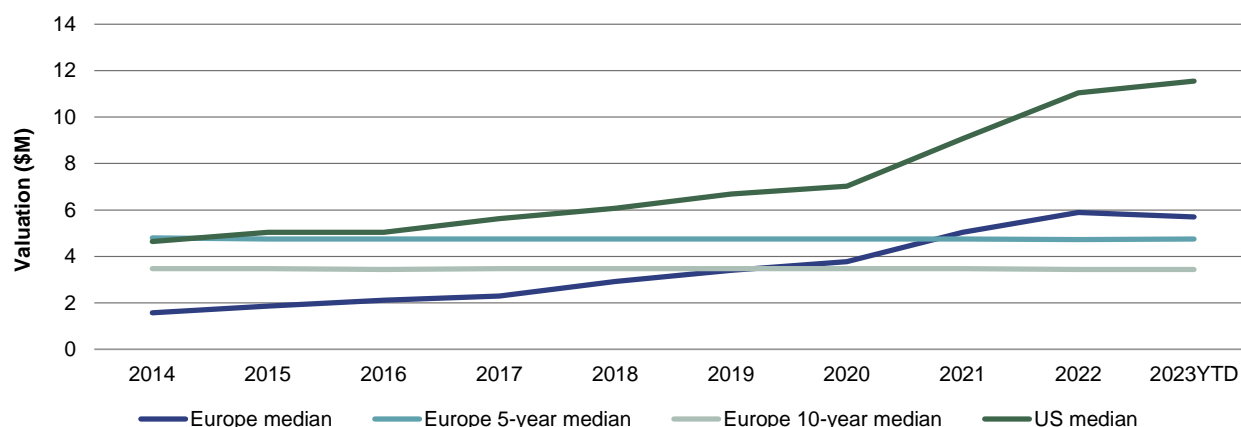
AI deals have attracted substantial interest in Europe. Although the industry is not as well advanced as in the US there have been a few substantial deals with more likely in the pipeline. Atomico estimates that eleven of the 36 European tech deals worth more than \$100m in 2023 were for companies broadly defined as AI companies. By contrast the US had 37 such AI deals in the same period.

Two of the biggest fund raising rounds in European Tech in 2023 were in AI with France's Mistral and Germany's Aleph Alpha which raised \$500m in a Series B in November.

Atomico reports that valuations across stages in Europe are now hovering around 5- and 10-year long-term averages. The notable stage exception is seed, where despite a levelling off of median seed pre-money valuations in 2023, there has not yet been a correction to long-term pricing averages, as has been seen in later stage deals. This shift back toward longer-term averages in Europe mirrors what is happening in the US.

## Valuation trends for Seed deals in Europe

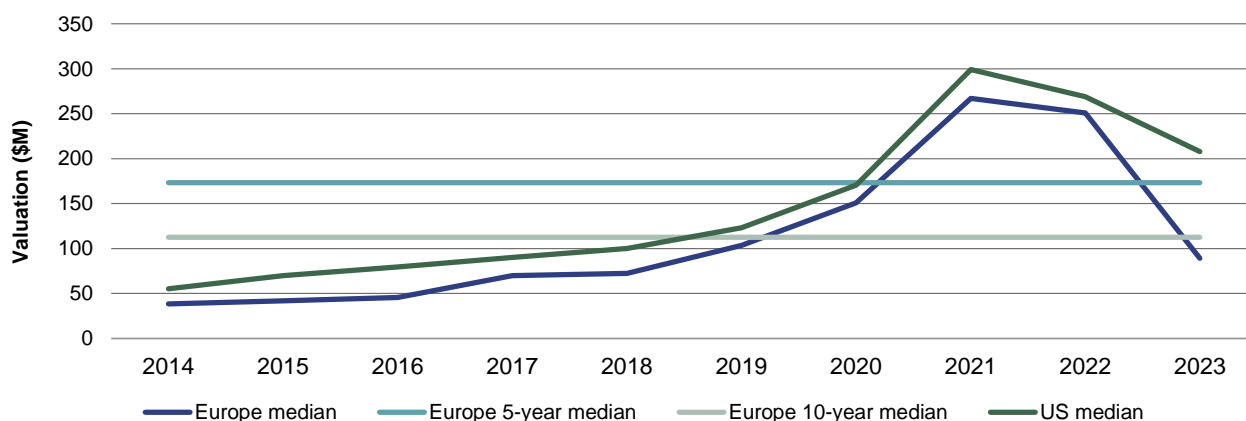
### Seed



Source: Atomico

## Valuation trends for Series C deals in Europe

### Series C



Source: Atomico

Separately, Genevieve Kinney of General Catalyst gave a recent interview to CooleyGo commenting on the trend of mid stage rounds being down. She observed,

*“Market uncertainty over the fundamental stability of the economy, direction of monetary policy and outlook for corporate earnings have made mid-stage growth (particularly Series B) challenging to underwrite over the last six months. With limited execution proof points in the businesses, and a longer path to exit with an unclear view on where multiples stabilize, we have seen investors move in a barbell fashion to earlier, founder investments, or enter into later-stage businesses that may be doing down or structured rounds or offering secondary at a discount. In both cases, investors have been looking to mitigate their risk in either capital invested or valuation.”*

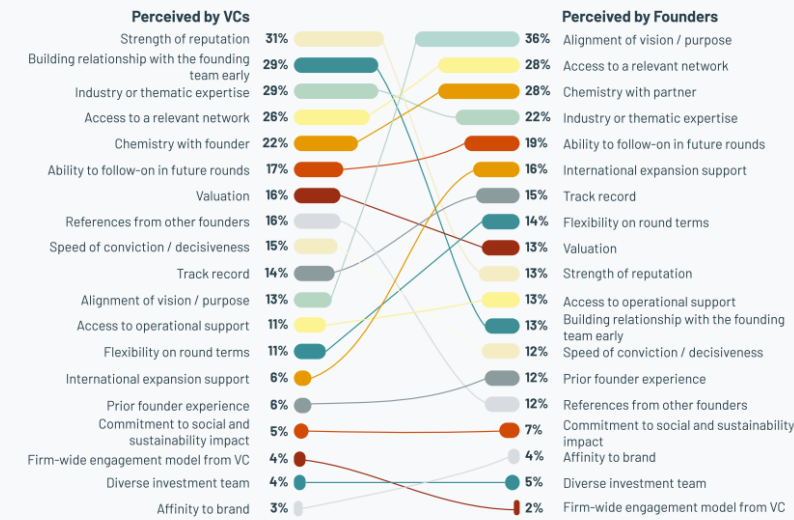
An interesting chart from the Atomico report about **VC and founder views on what is most important when raising a funding round**.

According to the Atomico survey, VCs believe that the key deciding factor for a founder should be the strength of the reputation of the VC firm with the establishment of an early relationship with the founder team and the strength of the VC's relevant industry expertise and network the other critical factors.

For founders choosing a VC investor the key priority is seen to be alignment with the vision of the founder although industry expertise and network are also highly ranked.

Interestingly valuation is a mid-ranked priority (ostensibly) for both VCs and founders. Considerations of diversity and social and sustainability impact are low on the priorities of both groups.

**What are the most important considerations when selecting an investor to lead your next round?**  
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?

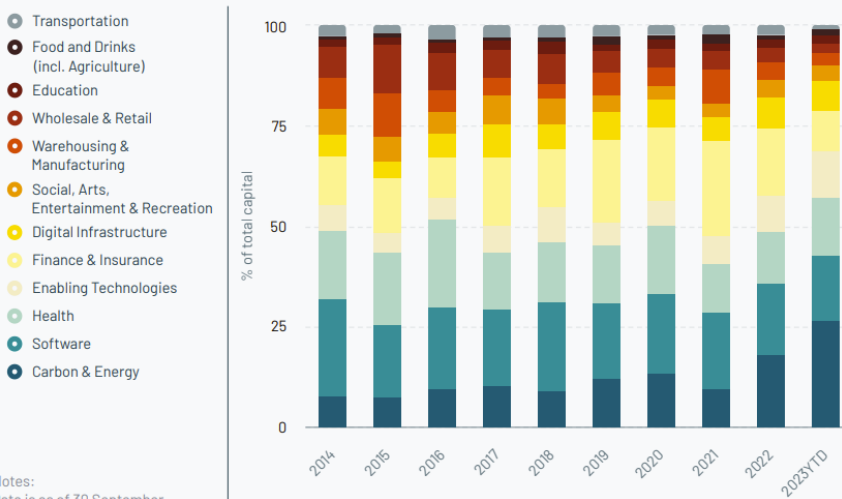


Notes:  
Founder and VC respondents only. Respondents who selected "other" are excluded from data. Number do not add to 100 as respondents could choose multiple options.

Sources: **STATE OF TECH EUROPEAN** Survey

Atomico reports that the biggest category for tech investment in 2023 has been in ClimateTech, the Carbon & Energy sector with an estimated 27% of all capital invested in European tech in 2023. ClimateTech has more than doubled its share of investment since 2021 and has overtaken Fintech/Insurtech and Software as the single largest sector by capital raised.

**Distribution of total capital invested by sector (%), 2014 to 2023**



Notes:  
Data is as of 30 September 2023. Excludes the following: biotech, secondary transactions, debt, lending capital, and grants.

Sources: **atomico** Powered by **dealroom.co** **crunchbase**

Source: <https://stateofeuropeantech.com/>

## Our views on the state of the venture capital markets

2022 saw sharp falls in the public markets on the back of a combination of global inflation, rising interest rates, and increased geopolitical risk. By Q4 2023 inflation is coming down and interest rates appear to be at their peak, albeit



















the peak may be sustained for longer than the market originally hoped. There has been a substantial rally on NASDAQ, led by the major tech stocks, a rally more palely reflected in other markets. The Refinitiv Venture Capital Index, which seeks to monitor the real time performance of the venture capital industry, fell 55% in 2022. YTD to mid-December it is up 54%, meaning the total fall since the start of 2022 is now 37%. Our summary of the outlook is:

- The deterioration in the interest rate, inflation and macro-economic environment has had a sharp impact on valuations in private markets. The scale of the fall in the Refinitiv VC index in 2022 was much more substantial than the 33% fall on NASDAQ. This has been reflected in some big valuation reductions in some high-profile VC rounds
- There is substantial dry powder in the VC industry. This though appears to be prioritised to support existing rather than new investments
- Best-in-class companies, addressing critical rather than nice-to-have requirements, continue to attract support. There are still hotspots for investment most notably in Artificial Intelligence. Certain investors remain very active in the space with substantial funds to deploy
- The speed of the investment process has slowed considerably. The volume of new deals has reduced. The level of diligence on new deals has stepped up
- For much of the year big late-stage deals were few and far between with the strongest part of the market in terms of appetite being in Seed and Series A where there is less immediate pressure on valuation. The last few months though have seen a notable pick-up in large later stage deals, most notably in AI, ClimateTech and Software
- 2023 has seen more downrounds, albeit the substantial fund raising of 2021 and the ability of companies to eke out existing resources has limited the number of these
- It seems likely that the more difficult conditions for fundraising, and the lack of a clear path in some cases to early cash positive status, will mean a flurry of venture capital backed businesses looking to sell or merge their businesses
- Valuation priorities have shifted with investors having moved away from an emphasis on revenue growth and revenue multiple emphasis. There is a sharp focus instead on profitability (or a rapid path to it), on positive free cash flow and an emphasis on DCF and comparative based multiples.

## Rothschild & Co: Selected recent deals in Growth Equity and Private Capital

A selection of recent deals on which we have advised.

 <p><b>Castore: £145m equity funding</b></p> <ul style="list-style-type: none"> <li>Sole adviser to Castore, the premium sportswear brand and end-to-end retailing platform for global sports teams on its first institutional funding round</li> <li>The £145m equity investment was led by The Raine Group and valued Castore at £800m pre-money (£945m post)</li> <li>Rothschild &amp; Co Debt Advisory also upsized Castore's RCF by £25m to a total of £100m</li> </ul>	 <p><b>Skyroot: \$51m Series B</b></p> <ul style="list-style-type: none"> <li>Sole adviser on its Series B raise of INR 4,030m (US\$51m) from GIC Private Limited and LK Advisers</li> <li>Looking to 'uberize' space for small satellite operators, Skyroot will use its differentiated solid propulsion technology to offer on-demand, affordable launch vehicles. It plans its first orbital launch by early 2023</li> </ul>	 <p><b>YuLife: c \$120m+ Series C</b></p> <ul style="list-style-type: none"> <li>Adviser to YuLife on its investment by T Rowe Price</li> <li>T Rowe Price's first ever private investment in European FinTech</li> <li>The Series C extension valued YuLife at c.\$800m, a 3x uplift from its valuation at its Series B announced in July 2021</li> </ul>	 <p><b>Carsome: US\$290m Series E</b></p> <ul style="list-style-type: none"> <li>US\$290m Series E fundraise led by SeaTown Holdings International and 65 Equity Partners Holdings</li> <li>The funding round brought Carsome's valuation to US\$1.69bn, cementing its position as Malaysia's first and largest tech unicorn</li> <li>Follows US\$170m Series D2 round in Sept 2021, on which we also advised</li> </ul>
 <p><b>FL Entertainment: €7.2bn combination with Pegasus Entrepreneurs and simultaneous c€550m equity raising</b></p> <ul style="list-style-type: none"> <li>FL Entertainment is composed of Banijay, largest independent content producer globally, and BetCliff Everest Group, Europe's fastest-growing sports betting platform. Pegasus is an Amsterdam-listed SPAC</li> <li>Largest ever European SPAC business combination an PIPE raising</li> </ul>	 <p><b>Insight Partners: strategic investment in Precisely</b></p> <ul style="list-style-type: none"> <li>Led investment in a recap of Precisely Software Incorporated, in an investor group that will also include Partners Group, Clearlake Capital, TA Associates, and Centerbridge Partners</li> <li>Precisely is a leading data integrity and infrastructure software company</li> </ul>	 <p><b>Kpler: Minority stake Acquisition</b></p> <ul style="list-style-type: none"> <li>Adviser to Five Arrows Growth Capital and Insight Partners on joint acquisition of a minority stake in Kpler Holding S.A. from its founders</li> <li>Consisted of acquisition of c.30% of secondary share capital of Kpler plus primary investment of €20m</li> <li>Kpler is a leading SaaS provider of data and analytics to energy markets</li> </ul>	 <p><b>Harmay: US\$90m Series D</b></p> <ul style="list-style-type: none"> <li>Advised Harmay on its US\$90m Series D equity financing from a group of leading Chinese and global growth equity /venture capital funds</li> <li>Harmay is a premium beauty retailer</li> <li>Raise was led by QY Capital (an entity related to Alibaba New Retail Fund) plus existing investors</li> </ul>
 <p><b>SEBA Bank: CHF110m raise</b></p> <ul style="list-style-type: none"> <li>Advised on fundraising co-led by a consortium of new investors specialised in blockchain and fintech including Altive, Ordway Selections and Summer Capital</li> <li>DeFi Technologies, leader in decentralized finance, and Alameda Research, a global cryptocurrency quantitative trading firm, also participated</li> </ul>	 <p><b>First Digital Bank: US\$120m capital raise</b></p> <ul style="list-style-type: none"> <li>Advised on capital raise through a syndicate of investors including Tencent, SBI Investment Co, Julius Baer, and West Coast Equity Partners</li> <li>First bank to receive a banking license in Israel for over 42 years and first neobank in Israel</li> </ul>	 <p><b>GreenWay: €85m Series C</b></p> <ul style="list-style-type: none"> <li>Advised Greenway Infrastructure on its €85m Series C fundraise</li> <li>Led by a consortium of infrastructure funds including Generation Capital and Helios Energy Investments. The transaction is the first known investment by an infrastructure fund in an EV charging network in Central and Eastern Europe</li> </ul>	 <p><b>Marwyn Acquisition Company II: £500m equity raise</b></p> <ul style="list-style-type: none"> <li>Advised Marwyn Acquisition Company II on the launch of its equity raise, by way of a 12-month placing programme</li> <li>The company will seek to raise up to £500m during the next twelve months from equity investors in a structure which is distinct from the typical 'SPAC' structure</li> </ul>
 <p><b>Azerion: €1,300m enterprise value combination with EFIC1</b></p> <ul style="list-style-type: none"> <li>Advised on combination with European FinTech IPO Company 1 B.V - a SPAC that raised c.€382m through IPO on Euronext Amsterdam in 2021</li> <li>Azerion provides solutions to automate purchase and sale of digital advertising inventory</li> <li>Landmark transaction - one of the largest de-SPAC transactions across Europe to date</li> </ul>	 <p><b>Gousto: £240m primary and secondary rounds</b></p> <ul style="list-style-type: none"> <li>£70m primary financing for food delivery company Gousto with Softbank Vision Fund 2 in Jan '22</li> <li>In Feb '22 secondary component of £170m from institutional investors including SoftBank, Grosvenor Food &amp; AgTech, Railpen and Fidelity</li> <li>Valued Gousto at £1.2bn on a pre-money basis</li> </ul>	 <p><b>GreenWay: €85m Series C</b></p> <ul style="list-style-type: none"> <li>Advised Greenway Infrastructure on its €85m Series C fundraise</li> <li>Led by a consortium of infrastructure funds including Generation Capital and Helios Energy Investments. The transaction is the first known investment by an infrastructure fund in an EV charging network in Central and Eastern Europe</li> </ul>	 <p><b>Diabeloop: €37m Series C</b></p> <ul style="list-style-type: none"> <li>Advised on its €37m Series C capital raise</li> <li>Following extensive investor outreach, LBO France was chosen to lead the raise jointly with existing investors including Supernova Invest, AGIR à dom., CEMAG INVEST and Odyssée VenturesA</li> <li>Diabeloop provides automated insulin delivery system and handset facilitating diabetes management</li> </ul>

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