

## 2024 European Venture & Growth Outlook

2023 was a period of reset for the European Venture & Growth markets. Heading into 2024, we believe there are five key questions likely to affect equity fundraising, which we discuss within this outlook. In our view, there could be cause for optimism heading into the coming year.

- 1. Will central banks' easing cycle be driven by disinflation or recession? Lazard's Market Strategists expect a 'soft' economic landing in 2024. This scenario could catalyse a change in risk sentiment, leading to multiple expansion, and creating an improved backdrop for higher risk assets, with a greater equilibrium between growth-profit. Recession and geopolitical factors are among the downside risks.
- 2. Will liquidity across the Venture & Growth capital cycle improve? A key challenge over the past 18 months has been the recycling of invested capital, driven by the fall in primary issuance and lower exit volumes. Heading into 2024, a growing IPO backlog and signs of increased strategic and sponsor participation could help increase levels of DPI. In turn, this may encourage European venture-backed companies and investors to return to the equity funding market.
- **3. Will funding into hard technologies continue to gain momentum?** The European Venture & Growth market stabilized into the second half of 2023, running at around US\$8bn per quarter. Headline figures benefitted from large Energy Transition funding rounds, and we believe we may be undergoing a secular investment shift towards areas such as Clean Energy, Al and Life Sciences. The long duration of venture and growth capital means the asset class could be an important source of funding across these disruptive technologies.
- **4. To what extent will sectors with lower 2023 activity recover?** After leading the market through 2020 to 2022, European FinTech and Software deal value was down around 80% year-on-year in 2023. In 2024, many companies across both sectors may return to the equity market, with fundamentals better matching valuations and signs of lower availability of venture debt financing. Increased activity in FinTech and Software could drive a broad-based funding recovery in 2024.
- **5.** Will Al continue to dominate the larger funding rounds and which other verticals will outperform? In our view Al may have catalysed the largest platform shift since cloud computing, and we might see activity progressively broaden across the Al value stack. Other areas of potential activity include adjacent DeepTech verticals, Life Sciences, climate technologies, cost-focused SaaS applications and vertical software.

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### Introduction

The European Venture & Growth market continued its reset through 2023. Deal value stabilized between US\$5bn to US\$8bn per quarter, but overall funding was down around 50% year-on-year. Many companies and investors retained a defensive posture which delivered a narrow funding market. Other companies focused on cost optimization and seemed reluctant to mark their equity to market; alternative non-dilutive financing options were often preferred. Investors appeared disciplined, retaining a high-quality threshold, and focusing on portfolio management. As a result, larger funding rounds accrued to high quality companies in specific verticals.

Heading into 2024, the economic narrative is focused on the impact of higher rates, slowing economies and potential disinflation. Lazard Market Strategists believe central banks have concluded their rate hiking cycles, with a 'soft' economic landing now their base case.<sup>2</sup> Liquidity conditions are important for the fundraising (and valuation) environment. The figure below shows the relationship between the UST 10y yield and European invested capital since early 2021.

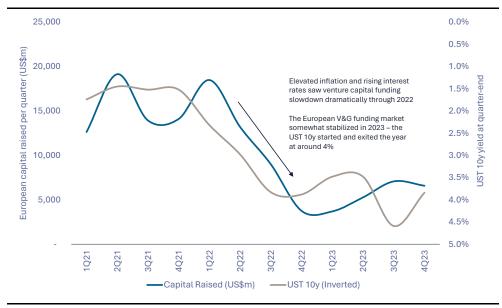


Figure 1: European Venture & Growth funding vs. UST 10y Yield: 1Q21 to 4Q23

Source: FactSet, Lazard VGB Insights, Pitchbook Data, Inc.

We believe two main factors may drive funding levels in 2024. First, whether a soft-landing can re-focus investors into growth and higher-risk assets. Second, the level of technological innovation. The secular investment trends towards Energy Transition, AI and many DeepTech verticals provide cause for optimism. A key risk for 2024 may lie in a recessionary scenario, where capital flight could result in liquidity challenges and a rise in bankruptcies, impacting venture-backed firms.

<sup>&</sup>lt;sup>1</sup> Lazard VGB Insights, Pitchbook Inc (deals >\$25m)

<sup>&</sup>lt;sup>2</sup> Global Outlook 2024, Lazard (link here)

In this 2024 outlook, we reflect on what we've learnt over the past 12 months and highlight areas of potential deal activity for the coming year. The report is split into three main sections:

- 1. The Venture & Growth Capital Cycle
- 2. Key European Funding Trends in 2023
- 3. Our 2024 European Sector Outlook (Consumer, DeepTech, Enterprise Software, FinTech, Healthcare & InfraTech)

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### Section One: The European Venture & Growth Capital Cycle

### Where are we in the Cycle?

We are often asked, where we are in the current Venture & Growth cycle. In short, as we head into 2024, we believe we may be nearing *the third stage*.

- **2020-2021:** The first period saw rapid growth in deal activity through 2020-21, with valuations reaching beyond the fundamentals. The rapid increase in the cost of capital caused an abrupt end to this phase.
- 2022-present: The second period since early 2022 we categorize as 'payback' or a 'reset' where capital deployment has mainly been restrictive, and companies and investors have protected their marked equity value. For example, European Venture & Growth funding fell from US\$22bn in 1Q22 to lows of US\$5bn in 1Q23.
- **Future:** The third leg would be a period of 'normalization', with capital allocated towards the most disruptive technologies, and companies with the most attractive terminal growth prospects.

While macro events could de-rail entry into the third phase, the base case from Lazard's Market Strategists is for a 'soft economic landing,' where the labour market remains broadly resilient, and interest rate cuts start in mid-2024. The peak in the Fed's hiking cycle may be accommodative to entry into a period of normalization.

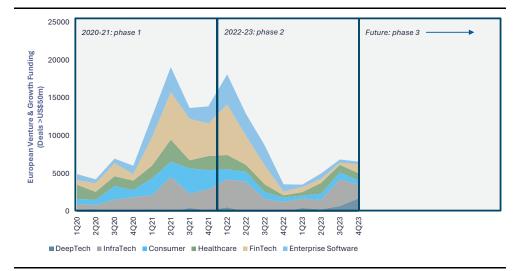


Figure 2: The Venture and Growth cycle – 2020 onwards

Source: Lazard VGB Insights, Pitchbook Data, Inc.

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#### The Venture and Growth Cycle

Within our quarterly reviews throughout 2023, we assess Venture & Growth market activity around three aspects of a simple framework. This is summarized in the figure below.

- 1. **GP/investors** (including funds raised at the GP level)
- 2. **Company activity** (including company funding and operational profile)
- 3. Exit environment (including IPO activity and strategic exits)

GPs Strategic / Sponsor Exit Primary/ 3 Secondary

Figure 3: Venture & Growth capital cycle framework

Source: Lazard VGB Insights

**IPO** 

#### 1. GP/investor activity

In 2023, the rising cost of capital created two-sided challenges for capital allocators. First, closing new funds was difficult; and second, there was a lack of portfolio liquidity (or DPI). Both factors were also impacted by the elevated level of deal activity in previous years, with many companies yet to grow into their prior round valuation.

#### The largest, most established GPs mainly raised new funds in 2023

Taking Pregin data, European venture capital raising at the GP level was down by ~25% in 2023, with fund volumes significantly lower.3 However, interestingly the average fund size was ~10% higher year-on-year. This suggests the largest, most established venture capital funds in Europe have been relative beneficiaries, likely utilizing their strong track records to attract new funding through the cycle. Smaller funds on the other hand, may have struggled to raise fresh capital.

The data also suggests the marginal LP dollar may have been re-allocated away from venture capital and towards lower-risk, now higher-yielding assets. For reference, the fed funds rate exited 2023 at 5.25% to 5.5%, with high-quality corporate bonds yielding above 5%.4 Investors deploying across multi-asset

<sup>3</sup> Pregin

<sup>&</sup>lt;sup>4</sup> Bloomberg Barclays Corporate Bond Aggregate Index (USD)

strategies such as crossover investors, shifted near-term focus towards other asset classes. For example, Tiger Global's public portfolio returned almost 30%<sup>5</sup> in 2023.

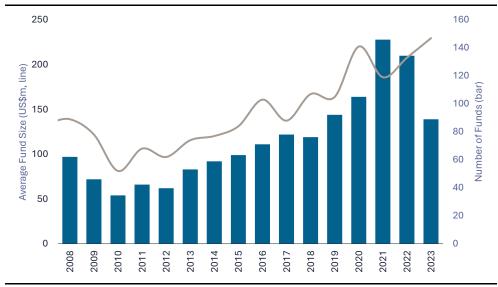


Figure 4: European Venture Capital funds raised by GPs – 2008 to present

Source: Pregin, Lazard VGB Insights

#### Low levels of DPI likely caused GPs to focus on alternative liquidity solutions

The issue of portfolio illiquidity reflects LP's demand for capital returns. In our view, lower volumes in the primary fundraising market left GP's focused on portfolio management and exploring alternative liquidity solutions such as continuation vehicles, or NAV financing.

Secondary transactions have also notably picked up at both the GP and LP level. Many venture and growth funds have looked to reduce fund concentration and rebalance their portfolios, with liquidity strongest for higher quality assets. LPs have also increased their use of secondaries to provide exits and lock-in DPI as cited by Lazard's Private Capital Advisory Team's within their biannual 'Secondary Market Report.<sup>6</sup>

When investors have deployed into new opportunities, primary capital has often been targeted towards existing portfolio companies, or new investments which focus on core geographies/sectors, areas of clear technological disruption (i.e. Al), or companies with perceived lower risk (i.e. B2B or profitable).

#### 2024 outlook - GP/investor activity

Portfolio management and improving DPI may continue to be in-focus heading into 2024. Should exit activity and capital returns improve across the year, company fundraising may benefit from the high levels of dry powder still available. This could also increase capital raising at the fund level.

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<sup>&</sup>lt;sup>5</sup> Tiger Global's Coleman Regains Control of Venture Unit After Losses, Bloomberg (link here)

<sup>&</sup>lt;sup>6</sup> Lazard Private Capital Advisory: Secondary Market Report 2023 (link here)

#### 2. Company Fundraising Environment

The higher cost of capital in 2023 saw many venture-backed companies take a more defensive approach. Companies focused on cost efficiencies and often raised non-dilutive financing sources such as venture debt, to help re-position equity narratives and bridge funding gaps (to the prospect of an improved valuation environment). Extending cash runway also meant the volume of venture-backed defaults were possibly lower than many anticipated in 2023. However, recent EU data in the figure below shows an acceleration in bankruptcies in Europe.<sup>7</sup>

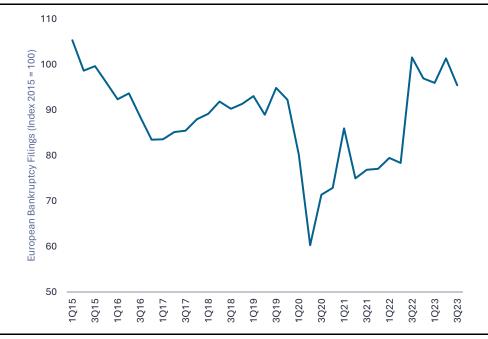


Figure 5: EU bankruptcy filings - 1Q15 to 3Q23

Source: Eurostat, Lazard VGB Insights

The uses of proceeds from companies who raised equity also shifted into 2023, with M&A to roll up fragmented end markets, or acquiring profitable competitors, both increasingly common. This dynamic has been a notable shift compared to prior years, where geographical and product expansion were pre-dominant areas of focus.

## Equity and debt funding volumes have fallen; debt providers increase focus on credit quality

We believe that the expectation that venture debt can bridge company funding gaps until the equity market returns, could be coming under some pressure. To illustrate, we have analysed data from publicly-listed Hercules – the largest venture debt provider globally – which shows loan volumes falling through 2023, with the average credit rating increasing.<sup>8</sup> As a result, companies may be forced back into the equity market in 2024 where the quality bar has also been raised, resulting in accelerated exits, or even default in some cases.

<sup>&</sup>lt;sup>7</sup> Eurostat: Quarterly registrations of new businesses and declarations of bankruptcies

<sup>&</sup>lt;sup>8</sup> Company Reports

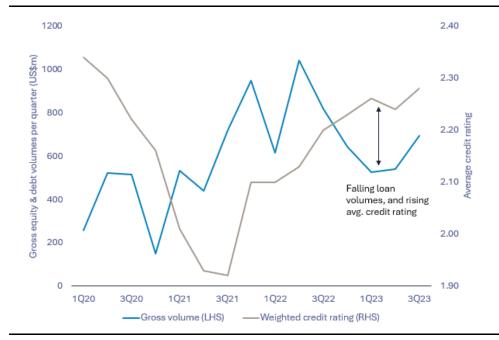


Figure 6: Hercules Capital's volumes and credit quality since 1Q20

Source: Hercules Capital, Lazard VGB Insights

### Down-rounds continued to run in-line with the historical average of $\sim$ 20% in 2023

Two additional trends we have identified for 2023 include: i) an aversion to down-rounds, and ii) the ongoing shift between growth and profitability. Data from Atomico's recent 'State of Technology Report,' suggests down-rounds as a share of deal volume stayed broadly flat in 2023, contributing ~20% of all funding rounds<sup>9</sup>. This was consistent with the 5yr average. The use of liquidation preferences and alternative funding likely offset the potential for more deal activity at lower valuations.

<sup>&</sup>lt;sup>9</sup> Atomico: State of European Tech 2023



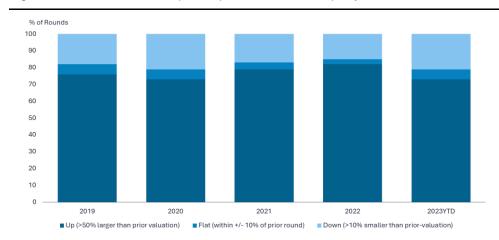


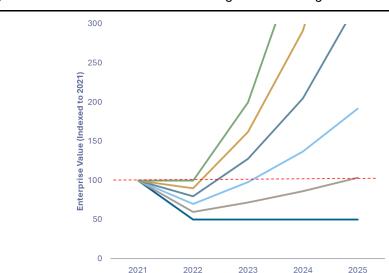
Figure 7: Distribution of European up vs. down rounds per year

Source: Atomico State of European Tech Report 2023

Note: Down round based on Change in Pre-Money Valuation Compared to Prior Round

### 2024 could be when many venture-backed companies grow into their 2021 valuations

The continued aversion to down-rounds could provide a pillar for some potential optimism in 2024. Below, we show why. To illustrate, we have taken a company who raised equity in 2021. We have then sensitized an annual revenue growth rate between 0% and 100% and calculated the company enterprise value assuming 50% multiple compression (in line with Refinitiv's venture capital index which is down ~50% from its 2021 peak). In 2024, only companies with a revenue CAGR below 25% would raise equity at a lower valuation compared to 2021. In 2025, the breakeven point falls below 20%.



**-**0% —20% —40% —60% —80% —100%

Figure 8: Illustrative valuation - Sensitizing annual sales growth since 2021

Source: Lazard VGB Insights

### Growth-profit relationship may have 'over-rotated' towards profit and FCF margin

Many investors remain focused on growth and profitability metrics – especially for asset-light, recurring revenue models. Regression analysis of public market securities has demonstrated the declining relationship between sales growth and valuation multiples in 2023 (and the improving correlation with EBITDA margin). Many growth-stage companies have therefore focused on profitability. Should interest rates fall, the relationship between growth-profit may reach a balanced equilibrium.

To help frame where the steady state relationship between growth rate and profit may sit, we point to recent analysis from Bessemer Venture Partners, titled 'the rule of X.'10 Bessemer suggests growth for late-stage private companies should be valued ~2x ahead more than profit. Or said another way, the investment firm suggests the market has 'over-rotated into a FCF margin mindset' and highlights the ~2x valuation sensitivity for a 1% increase in growth rate, compared to a 1% FCF margin uplift.

### 2024 outlook - Company fundraising

A combination of operational changes, reduced debt availability, avoidance of down-valuations, and a more balanced growth-profit relationship could, in our view, potentially deliver an improved equity funding environment in 2024. Conversely, a hard economic landing could result in distressed sales and default rates rising, and higher quality companies receiving internal financing support.

#### 3. Exit Activity

As a reminder, we break down exit activity into three segments: IPO, M&A/strategic exits, and secondary transactions. The third pillar, which has recently demonstrated the most resilience, is discussed within section 1 above.

#### IPO backlog has reached new highs heading into 2024

In 2H23, we saw glimpses of a re-opening of the IPO window, with two venture-backed firms, and another backed by a notable growth investor listing on the NYSE. Since then, the IPO market has remained selective with the backlog of companies ready to list continuing to build. According to data from Apollo's 2024 Private Markets Outlook, the volume of VC-backed companies ready for a public listing has reached new highs.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> Apollo: 2024 Private Markets Outlook (link <u>here</u>)



<sup>&</sup>lt;sup>10</sup> Bessemer Venture Partners: the Rule of X (link <u>here</u>)

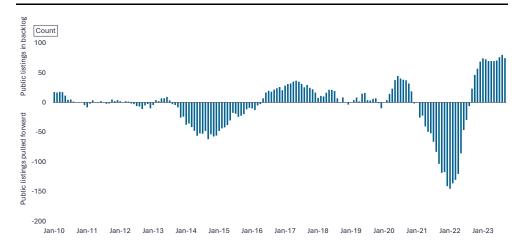


Figure 9: Backlog of VC-Backed IPOs

Source: Pitchbook Data, Inc., Apollo Chief Economist

# Private capital formation has created more optionality for later stage companies

While the IPO backlog is material, a public listing may not always represent the best option for many late-stage venture-backed companies. We identify three main reasons:

- Private capital formation has been significant
- Public markets have been shrinking
- The quality bar has risen for a successful public listing

Zooming in on the first point, global private capital has grown over the past 10 years from around US\$10trn to almost US\$25trn today<sup>12</sup>. This has helped create a long-term, stable funding base for innovation and technology companies. As such, private market participants have captured an increasing share of company value creation, with technology firms taking longer to reach the public markets than ever before. The figure below shows the average age of tech company IPO has increased from only 4 years in 1999 to almost 15 years in 2022.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Initial Public Offerings: Median Age of IPOs Through 2022, Jay Ritter (link here)



<sup>&</sup>lt;sup>12</sup> The rise and rise of private capital, EY (link <u>here</u>)

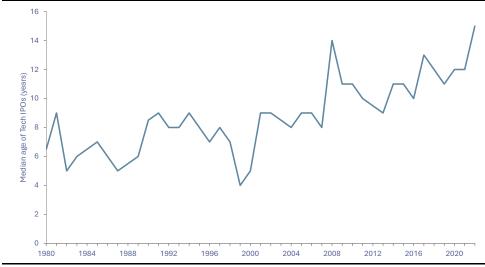


Figure 10: Median age of Tech IPOs - 1980 to present

Source: Jay R. Ritter, Initial Public Offerings: Median Age of IPOs Through 2022

Heading into 2024, we believe IPO market activity may increase across the year, with issuance from higher quality venture-backed firms possibly needed to restore broad-based investor appetite.

# Strategic exits may pick up driven by valuation environment and operating model optimization

According to Pitchbook data, M&A activity for venture-backed businesses in Europe sat at 10-year lows in 2023. 14 Both strategic and sponsor activity was largely subdued, but there were examples of successful exits. These included: UKG's acquisition of **Immedis** in June; SAP's acquisition of **LeanIX** in November; and Softbank Corporation taking a majority stake in **Cubic Telecom** in December. There were also examples of distressed sales, including e-bike manufacturer **VanMoof** which was acquired from bankruptcy by Lavoie, having raised nearly US\$240m since 2017.

Heading into 2024, we believe exit volumes may gradually increase as: i) the valuation delta between public and private companies erodes, and ii) operational changes made over the last 18 months positions companies for a more favourable outcome.

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<sup>&</sup>lt;sup>14</sup> Pitchbook Data, Inc.

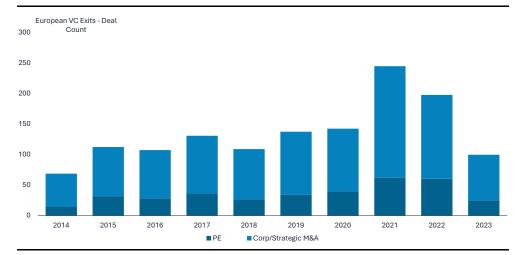


Figure 11: Exits of European VC-backed companies – 2014 to present

Source: Lazard VGB Insights, Pitchbook Data, Inc.

In 2023, we also saw evidence of consolidation among venture-backed businesses – especially in verticals which had received high levels of growth capital. For example, in the online grocery space, **Mathem** merged with **Oda** to create the largest online grocery retailer in the Nordics, with combined revenue of ~US\$500m. The two companies notably shared common investors in Kinnevik and Verdane.

#### 2024 outlook - Exit activity

The IPO backlog may provide potential optimism for 2024, while more realistic valuations and the operational changes made in 2023 could suggest strategic exits and sector consolidation may step up. However, given limited visibility we expect many late-stage companies might explore dual-track processes to provide optionality across an IPO, sponsor-backed or strategic exits. We believe exit activity is important to the efficiency of the Venture & Growth capital cycle, with higher exit volumes likely to be a catalyst for improved LP capital return (step 1) and activity in the primary equity market (step 2).



### Section Two: Key European Funding Trends in 2023

At VGB Insights, we break down the company universe into six sectors (Consumer, DeepTech, Enterprise Software, FinTech, Healthcare, InfraTech) - we then subcategorize by verticals. This approach helps provide a bottom-up view on real-time market and fundraising dynamics. In this next section, we use this data to review 2023 deal activity.

# European funding fell 50% in 2023 but the second half showed signs of stability

To set the scene, we'll share two charts. First, quarterly deal value by sector which includes deals >US\$25m. Overall European funding reached just shy of US\$30bn in 2023, down 50% YoY. Quarterly deal value bottomed in 1Q23 at around US\$5bn but improving across the year. The sector rotation in 2023 was notable. In 2023, DeepTech and InfraTech contributed over 50% of total funding (vs. 25% in 2022), whereas in 2022, FinTech and Software contributed over 50% (vs. 25% in 2023).

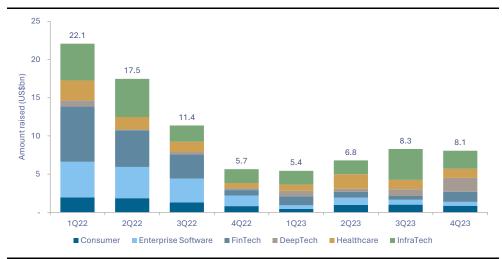


Figure 12: Capital raised in Europe by sector since 1Q22

Source: Lazard VGB Insights, Pitchbook Data, Inc

#### Life Sciences, Energy Transition and Al contributed almost half of funding

The second chart below provides a view of 2023 performance by vertical (relative to 2022) – a layer deeper than our sector data. The cluster of bubbles in the bottom left of the chart demonstrates a vertical with low volume and a decline in deal value compared to the prior year. Bubbles towards the top and right of the chart such as Life Sciences, Energy Transition and Next-Gen Computing (i.e. AI) have driven capital raising in 2023.



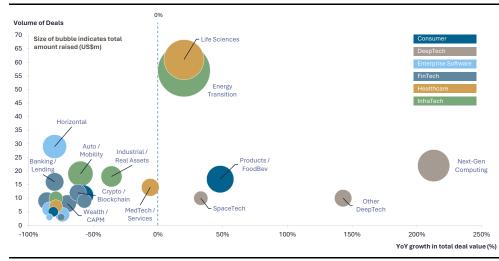


Figure 13: European vertical fundraising dynamics - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc

Presenting the vertical data differently, we have stacked each vertical in order of 2023 deal value below. The figure below underpins the dominance of Energy Transition, Life Sciences and Next-Gen Computing, which collectively contributed almost 50% of total funding.

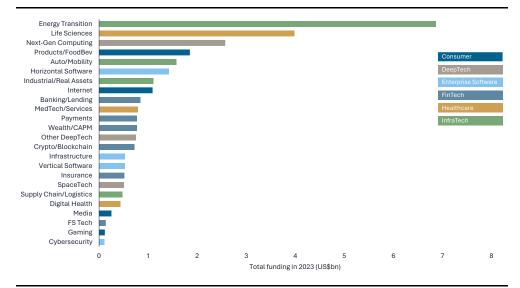


Figure 14: Capital raised in Europe by vertical - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc.

#### 2023 saw a notable shift towards Hard Technologies

We have identified a shift towards 'hard technology' during 2023. We categorize AI, Energy Transition (asset-heavy), Life Sciences, Quantum Computing, Robotics, Semiconductors and Space within our definition. In the chart below, we highlight the contribution of these technologies to overall European Venture & Growth funding. The results are clear, with the share of overall deal value reaching new highs of 70% in 2H23, up from only 20% in 2021.

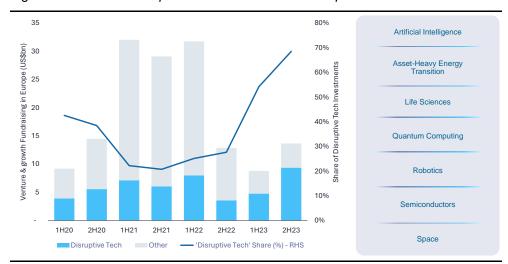


Figure 15: Share of Disruptive Tech Investment in Europe Venture & Growth

Source: Lazard VGB Insights, Pitchbook Data, Inc.

There are two variables which may have driven the rising share of hard technology funding: i) increased activity within HardTech, and ii) lower levels of funding from sectors such as Software and Fintech. Looking ahead, we believe the competitive moats of disruptive technologies operating within large global market opportunities could be viewed more favourably in a period of higher interest rates. The alignment of government, strategic and financial capital has shown collective support, with some investors now raising dedicated fund vehicles to increase allocations across these thematic trends.

### Both public and private market performance has been narrow through 2023

Benefitting from a strong rally in the last two months of the year, 2023 turned out to be a relatively strong year for public equity markets, with S&P 500 up 24%, and the Nasdaq 43% higher. The Europe, the FTSE 100 was up less (+4%) with the Stoxx 600 13% higher. The outperformance of the S&P 500 was driven by a narrow set of companies, with share price performance heavily bifurcated between the 'Magnificent Seven' and other index constituents. We have broken down the S&P returns to demonstrate this point in the figure below.

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<sup>15</sup> Bloomberg

250 NVIDIA. 200 % Change since 1st Jan 2023 150 100 amazon Meta
 Meta
 Meta
 Meta
 Meta Mic TESLA (50) Jan-23 Jul-23 Aug-23 Oct-23 -NVIDIA S&P493

Figure 16: Share price performance since Jan-23 - S&P 7 vs. S&P 500

Source: Bloomberg, FactSet, Apollo Chief Economist

Note: The "S&P 6" includes Alphabet, Amazon, Apple, Meta, Microsoft and Tesla

A similar dynamic played out in the European Venture & Growth market. We use the contribution from the top 3 deals in each quarter as a proxy for market breadth. In 3Q23 and 4Q23, the share of the top 3 deals approached 40%; this was driven by large-scale Energy Transition projects such as **H2 Green Steel**, **Verkor**, and **Octopus Energy**. Given the global requirement to de-carbonize, we expect similar large funding rounds to continue.

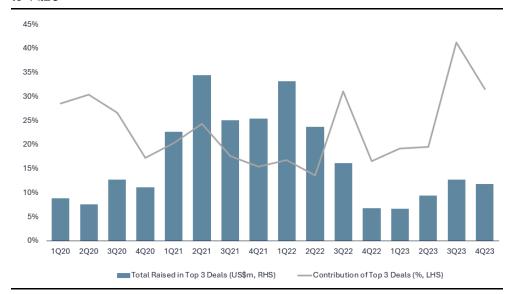


Figure 17: Share of the top 3 deals in European Venture & Growth Market – 1Q20 to 4Q23

Source: Lazard VGB Insights, Pitchbook Data, Inc.

# Larger rounds fell by over 60% in 2023 seeing a greater drop in volumes compared to rounds <\$250m

2023 was also marked by a significant decline in the largest rounds vs 2022. Whilst deal volumes were more robust at the smaller end of the market, there were just 4 deals >US\$500m (-73% YoY) and 9 deals from US\$250m to US\$500m (-61% YoY). This was an acceleration of the trend observed in 2022 where larger rounds fell by one-third, having exploded in 2021 when they grew by >200% YoY. We would expect that 2024 marks a return to the mean for larger VC rounds, improving on 2023 but remaining below 2021 levels.

■\$50m - \$100m ■ \$100m - \$250m ■ \$250m - \$500m 180 160 140 120 -32% Number of Deals 100 80 -43% 60 40 -61% 20 -73% 2020 2021 2022 2023

Figure 18: European Venture & Growth deals segmented by round size

Source: Lazard VGB Insights, Pitchbook Data, Inc.



### Section Three: Lazard VGB's 2024 European Sector Outlook

#### **Consumer**

The Consumer Venture & Growth funding market continued to slow through 2023, raising US\$3.3bn in total and falling 44% year-on-year. The sector contributed around 10% of the overall market which was consistent with 2022. The distribution of vertical funding changed significantly however, with food/consumer products faring much more strongly than internet, media and gaming which saw a slowdown in activity.

7 Overall - Consumer By Vertical 6 Internet Media Amount Raised (US\$bn) Gaming Products/FoodBev -44% 1 0 2022 2023 2022 2023

Figure 19: Consumer sector overview - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc.

Note: European deals > US\$25m

# Rising cost of living has seen a depletion of excess savings with consumers optimising spend

Against the backdrop of high inflation (notably food, energy and shelter), falling excess savings and the broader cost of living crisis, consumers optimized spend through 2023. This resulted in consumers trading down within non-discretionary categories and out of many discretionary areas. The recessionary overhang and lower consumer confidence also created limited revenue visibility for many early-stage consumer companies, with a challenging read-across to the performance of many general retail and luxury public market peers. The figure below demonstrates the depletion of excess savings accumulated during the pandemic for US households.



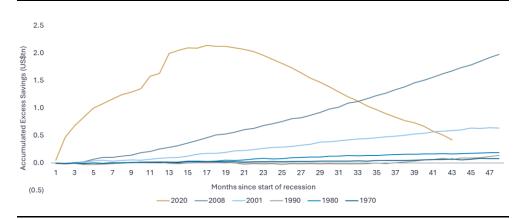


Figure 20: US Households: Excess Savings

Source: Apollo Chief Economist

### Consumer competitive moats may have been re-defined over the past 18 months

Consumer Venture & Growth funding has been subdued since early 2022, but funding trends in 2023 suggests there may been a re-definition of competitive moats across the sector. We believe that investors are now less prepared to reward companies who recycle venture-capital dollars into direct marketing to drive top-line growth, especially without the underpin of more robust marginal economics. Many direct-to-consumer operating models have received lower levels of funding.

Conversely, it seems that companies who can build brand value within secular themes (such as sustainability or experiences), provide differentiated approaches to multi-channel distribution, and leverage high-margin operating models are potentially able to attract investment.

An example of two consumer companies who raised in 2023 are Huel and Castore. **Huel**, a food nutrition brand, raised US\$100m from Morgan Stanley's 1GT Climate Fund in a secondary transaction in Oct-23. Huel distributes its health product range through both retail stores and via a subscription service. This omni-channel mix aims to maximize customer spend and builds strong unit economics. Huel's gross margin approached 60% in FY23-Jul, and the company delivered EBITDA profitability. <sup>16</sup> The alignment of brand, sustainability and strong customer economics is likely favoured by consumer-focused investors.

The second example is **Castore** who raised US\$179m in Nov-23 led by the Raine Group. Since being founded in 2015, the company has built partnerships with established sports teams and franchises. This approach aims to de-risk demand, with Castore then overlaying its digital infrastructure to broaden distribution to a global audience. The firm generated around US\$150m in revenues in FY23-Jan, with a 70% gross margin generated via manufacturing efficiencies. <sup>17</sup> Castore's exposure to global sports fans, the multi-channel mix and high margin structure likely helped construct an attractive model.

<sup>&</sup>lt;sup>17</sup> Companies House: FY23 Annual Report



<sup>16</sup> Companies House: FY23 Annual Report

### Experiences, travel and sustainability were also key funding themes in 2023

Other common themes across the consumer landscape included down-rounds, as well as exposure to specific trends such as experiences and sustainability. Deals across the year included **GetYourGuide** – the travel experience marketplace – which raised US\$85m during a series F round led by KKR and Temasek. The round valued the company at US\$2bn, double its prior round in 2019. **Getir** (US\$500m in Sep-23) and **Gousto** (US\$54m in Feb-23) both raised funding rounds at lower valuations, likely reflecting the challenging demand backdrop. Within secondhand marketplaces, **Refurbed** raised US\$57m in November 2023, aiming to reduce the environmental impact of electronics.

#### Lazard VGB's 2024 outlook - Consumer

We believe that the consumer environment remains uncertain heading into 2024, with the outlook largely dependent on the strength of the labour market. A soft economic landing could see core inflation trend towards the Fed's 2% target, with rate cuts helping drive real wage growth and re-build savings. In this scenario consumer confidence may improve, potentially benefitting the revenue prospects of some venture-backed companies.

Within specific themes, we could potentially see the circular economy, ecommerce enablement and community-focused marketplaces playing a role from an equity funding perspective. The ability to drive more personalized, affordable experiences could also be viewed favourably.



#### DeepTech

DeepTech was the top-performing sector in Europe in 2023, growing by over 150% YoY. This grew its share to around 25% of overall funding. The sector raised more capital than FinTech and Enterprise Software combined, and the sector is showing continued momentum. For example, over half of DeepTech deals >US\$50m since 2020 have occurred in the last 12 months. Within the verticals, Next-Gen Computing (inc. AI) was increasingly dominant across 2023 and drove around two-thirds of sector funding.

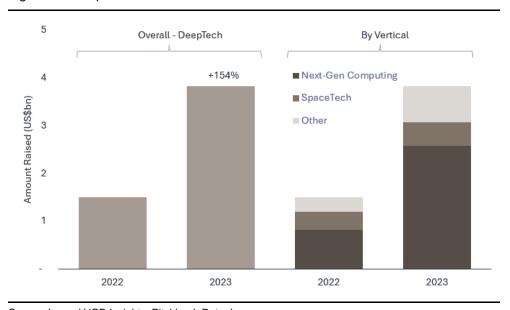


Figure 21: DeepTech sector overview - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc.

Note: European deals > US\$25m

# Innovation, geopolitics and strategic participation contributed to DeepTech funding momentum

In our view there are three main drivers to the strong performance of DeepTech. First, rapid technological innovation has crowded strategic and financial investors into specific sub-sectors. This includes both the explosion of large-language models, as well as the continued technological and commercial momentum across SpaceTech, Semiconductors, and other areas of Next-Gen Computing such as Quantum.

Second, national sovereignty and productivity growth is increasing support for local DeepTech companies. This has led to the formation of several government-backed funding vehicles across Europe, including Bpifrance, the British Business Bank, and the Future Fund in Germany. These initiatives aim to support R&D development and help build commercial progress. In the figure below, we highlight how innovation capital has quickly become a strategic asset for governments as geopolitical risk has increased in recent years.



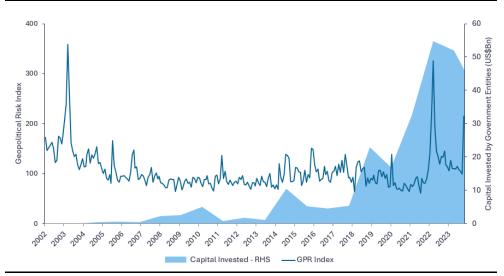


Figure 22: Global political risk index vs. capital invested by governments

Source: Pitchbook Data Inc., Lazard VGB Insights, Dario Caldara and Matteo Iacoviello

Lazard's Geopolitical Advisory Team believes security considerations from the ongoing 'Tech War' will be a key trend this year, with Al and biotechnology increasingly classified as 'strategic sectors' by governments. Heading into 2024, state influence over both regulation and investment parameters may create more costly compliance structures which companies and investors may need to navigate.

Third, participation in private funding from public companies has accelerated in 2023 on a global basis. This dynamic has been notable within AI. The figure below may help suggest why, with AI-focused equity stories such as Nvidia commanding richer multiples. Nvidia notably participated in over 30 AI-focused deals in 2023 – more than 3x ahead of any prior year – allocating to companies likely to use their GPUs or software.<sup>18</sup> In Europe, these included both Mistral and Aleph Alpha.

<sup>&</sup>lt;sup>18</sup> Pitchbook Data, Inc.





Figure 23: EV/Sales multiple since Jan-23 - S&P 7 vs. S&P 500

Source: FactSet, Lazard VGB Insights

Note: The "S&P6" includes Alphabet, Amazon, Apple, Meta, Microsoft and Tesla

We believe the participation of public companies within early-stage AI companies may be driven by a few factors: AI is viewed as highly disruptive to incumbent revenue models; pure-play exposure is scarce in the public markets; and public equity investors are likely keen to tap into a rapidly expanding AI value pool. It could be that some public companies are therefore diversifying and looking to allocate capital to early-stage companies who provide exposure to AI. Other recent transactions include Microsoft's investments in OpenAI, and Amazon and Alphabet investing in Anthropic.

Moreover, the level of public market influence may be set to continue. This can potentially be demonstrated by comparing the forecasted capital expenditure of the 'Magnificent 7' companies of ~\$170bn against the total investments made in the US and European Venture & Growth markets, which came in at ~US\$103bn in 2023 (note: includes deals >US\$25m in Europe, >US\$50m in US).

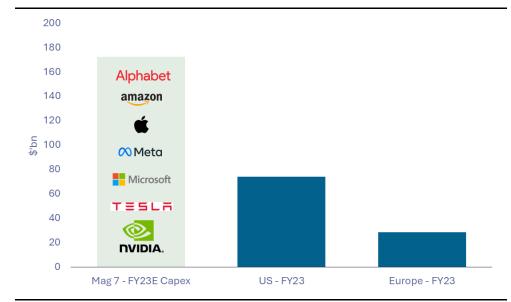


Figure 24: Capex Mag 7 vs. US / Europe Venture & Growth invested capital (FY23)

Source: FactSet, Lazard VGB Insights

Note: The "Mag 7" includes Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla

### The Al platform shift in Europe is starting to gain traction

In Europe, there were 21 European DeepTech deals (>US\$50m) in 2023, raising over US\$3bn. Eight of these deals were Al-related, raising almost 60% of the total, with 80% of Al funding invested into open-source foundational models. While the foundational layer took off in Europe through 2023, most of the funding continues to be attracted to US companies. For example, only US\$1 in every US\$10 invested in Al was raised by a European-HQ company in 2023, according to data from Pitchbook.



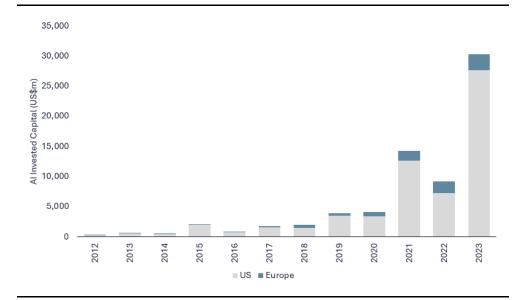


Figure 25: Al invested capital: Europe vs. US

Source: Lazard VGB Insights, Pitchbook Data, Inc.

Within the foundational layer, three European companies raised large growth rounds – with two companies raising twice, which may highlight the high capital requirements of training large models. Germany-based **Aleph Alpha** raised over US\$500m in a series B round in November, who are building their Luminous series - a family of LLMs - targeting specific industries and government use cases.

**Mistral AI** also raised two rounds in quick succession to develop its community-focused open-source models, which can be deployed through APIs. A key aspect for Mistral was the management team's previous experience from Meta and DeepMind which likely helped provide conviction for investment during the seed and series A rounds. The recent US\$450m series A commanded a US\$2bn post-money valuation and was led by A16Z. Finally, **Poolside** – also based in France - raised a US\$126m seed round led by Redpoint Ventures in August 2023, with the aim to build a model focused on software creation, and rapidly integrate AI into vertical workflows.

## 2023 saw many notable deals across verticals including PragmatIC and Isar Aerospace

More broadly within DeepTech, Cambridge-based, semiconductor company **PragmatIC** raised in excess of US\$200m in a series D round led by M&G Catalyst and the UK Infrastructure Bank. The company manufactures low-cost flexible, integrated circuits, and aims to reduce the global semiconductor reliance on silicon and geographical foundry concentration. The RFID market is the first market targeted, with many use cases beyond RFID also within the company growth plans.

Activity across the SpaceTech value chain also continued through the year. For example, **Isar Aerospace** – the verticalized developer of launch vehicles - raised US\$166m in Mar-23 led by UVC Partners and the European Investment Fund. Within space logistics **D-Orbit** also raised US\$106m in a round led by the Japanese conglomerate Marubeni in Nov-23. In 2024, we might potentially see further capital deployment across the European SpaceTech ecosystem as launch heritage

becomes increasingly established, and commercial traction continues to improve revenue visibility.

#### Lazard VGB's 2024 outlook - DeepTech

We believe we may be experiencing a secular shift for the deployment of growth capital into hard technology sectors – many of which fall within DeepTech. In 2024, we might see continued cross-vertical funding, with Al likely driving the highest levels of activity, where we may be experiencing the largest platform shift since cloud computing.

As we wrote within our SUV report focused on AI commercialisation (linked <a href="here">here</a>), we believe two key trends may drive AI fundraising in 2024. First, developer tools are being rapidly democratised by foundational models; and second, infrastructure and AI applications are becoming more prominent, such as vertically focused AI assistants and summarization tools. Moreover, Europe looks well placed to continue its contribution to overall AI funding, with a potential shift in focus from the foundation to the application layer also potentially attracting capital.

Within adjacent DeepTech verticals, we believe there could be growing participation across capital pools (strategic, government and financial) to help support highly disruptive companies who are well-placed to capture large and growing market opportunities within SpaceTech, Quantum Computing and Semiconductors.



#### **FinTech**

European FinTech saw venture & growth capital deployment fall by almost 80% in 2023 to US\$3.6bn (deals >US\$25m). FinTech contributed around 13% of the market, down from over 25% in 2022. The volume of European FinTech deals >US\$50m fell from 71 in 2022 to 26 in 2023. Within FinTech verticals, funding rotated away from some areas including B2C lending and areas of payments. Others fared more positively on a relative basis, including crypto/blockchain.

The overall slowdown was likely driven by factors including higher interest rates and lower liquidity. The period of higher rates (i.e. UST 10y started and ended 2023 at ~4%) benefitted some FinTech business models, but reduced access to growth capital for others. The regulatory backdrop continued to evolve for areas such as open banking and embedded finance.

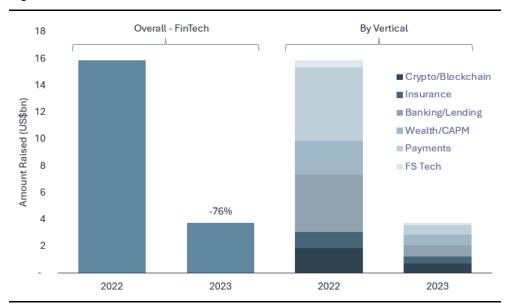


Figure 26: FinTech sector overview - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc.

Note: European deals > US\$25m

# Shifting allocations into cash benefitted many investment and cash management platforms

Notable 2023 deals included **Scalable Capital** - the Munich-based digital investment platform - who raised US\$65m in Dec-23 at a US\$1.4bn valuation; the round was led by Balderton Capital. The company has now scaled to US\$19bn of AUM, coupling a breadth of savings plans with a full stack product offering, across equity, bonds, crypto and derivatives. Investment platforms who can leverage the through-the-cycle re-allocation of assets are potentially well-placed to build sustainable growth models, in our view.

More broadly, the shift from risk assets into money-market funds has been well documented. Taking SEC money market data, assets rose by over US\$1 trillion in 2023 to reach US\$6.4 trillion by end of November 2023.

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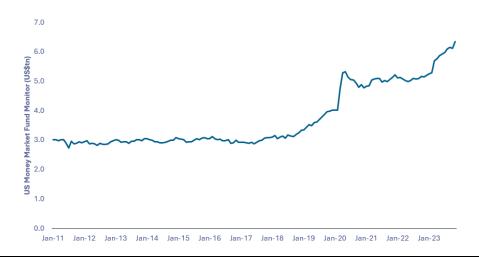


Figure 27: US money market funds – since 2011

Source: Office of Financial Research

The sensitivity of growth to deposit betas – the degree to which changes in base rates are passed through to savers – has been a focus for some public and private investors. The positive impact of higher rates on cash investment volumes saw some related fundraises, including deposit marketplace **Raisin** (raised US\$64m series E in Mar-23) and cash treasury platform, **TreasurySpring** (raised US\$30m series B in Jun-23). Neobanks have similarly benefitted from higher net interest margins, with **Zopa** raising US\$93mn in Feb-23 at a >US\$1bn valuation, and the company reporting an annualised revenue run rate of >US\$300m in August.

# Account-to-Account and vertical payments supported activity within the Payments sub-sector

Despite being particularly active over the last few years, funding into payments companies slowed through 2023. This was likely due to several factors including the shorter duration of the Venture & Growth funding market and some evidence of slowing payment volumes. That said, there were two pockets of notable activity which we believe represent two key structural growth trends.

First, Account-to-Account payments which has continued to benefit from new open banking legislation, and the increased focus on both cost efficiency and user experience for merchants. These dynamics seem reflected in **Volt**'s US\$60m series B round in June 2023 led by IVP, as well as Stockholm-based **Brite Payments** who raised a \$60m series A round. The ongoing shift to instant bank payments (and payouts) at checkout, has led to several funding rounds in recent years, with some selected European players included in the figure below.



**FORM**<sup>3</sup> GoCardless Volt NUAPAY YAPILY **Brite\*** TRUELAYER Acquired by EML Series F – Later stage VC -Series G - Series B -Last Raise US\$130m (**Sep** US\$312m (Feb-US\$60m (Jun-Payments – US\$120m (Sep-US\$51m (Jul-US\$60m (Oct-(Sep-23) 22) 21) 21) 23) Raised to date: Raised to date: Raised to date: Raised to date Raised to date Raised to date: 21) US\$307m US\$232m US\$621m US\$87m US\$71m US\$71m Tiger Global IVP Fuel Ventures Part of listed Dawn Capital
 Headling Investors company Ithaca (bold = lead) Addition Private Equity Augmentum Fintech Cocoa VC Coinbase Investments Hambro Perks CommerzVentures

Figure 28: Selected European Account-to-Account payment companies

Source: Lazard VGB Insights, Pitchbook Data, Inc.

The second dynamic is the inter-section of payment processing with independent software vendors (ISVs) - and notably, the disintermediation risk of direct merchant relationships. This is a theme we have written on throughout 2023 (see link to SUV here). In summary, we could potentially see a continued convergence. On one side, incumbent merchant acquirers and vertical payment platforms acquiring end market, SMB-focused workflow tools. On the other, ISVs are progressively integrating payment capabilities and even becoming payment facilitators. Notably, Sumup – provider of retail POS and software solutions - raised US\$307m of debt & equity in Dec-23, in a round led by Sixth Street and Bain Capital.

## Crypto saw some evidence of recovery with tokenization of financial markets an ongoing theme

Finally, crypto exited 2023 with a resurgence as bitcoin reached ~US\$44k, up over 160% from the start of the year. We have identified three notable deals within crypto: wallet hardware provider **Ledger** (raised US\$108m in Mar-23), crypto exchange **Blockchain.com** (raised US\$110m in Nov-23), and blockchain-based payments system **Fnality** (raised US\$93m series A in Nov-23). These fundraises represent three interesting themes to us. First, the need for digital asset custody solutions; second, the prevalence of down-rounds - Blockchain.com raised at a US\$5bn postmoney valuation (around two-thirds lower than the March 2022 round); and third, the de-centralization of wholesale funding and settlement, and the shift towards tokenization. We capture the expected growth of tokenization in the figure below.

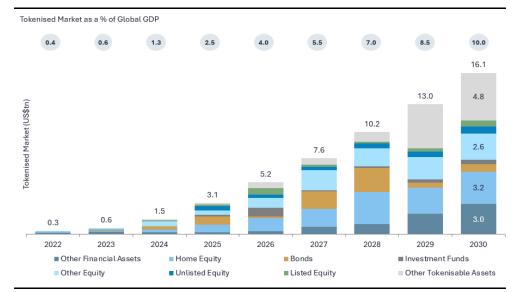


Figure 29: Asset tokenization market forecast - 2022 to 2030

Source: World Economic Forum - Global Agenda Council, BCG Analysis, McKinsey

#### Lazard VGB's 2024 outlook - FinTech

FinTech is often viewed as an area of European leadership, and the fundraising environment may start to recover in 2024. While the trajectory of interest rates will impact the growth and earnings performance of many companies, there are a few funding trends which could playout. Beneficiaries could include: neobanks or neobrokers and investment platforms who can deliver through-the-cycle revenue growth; payments firms who can reduce friction and improve economics for merchants (i.e. account-to-account and cross-border payment providers); and finally, firms who enable the re-platforming of capital markets, such as scale-ups who benefit the shift towards tokenization.

#### InfraTech

In 2023, European InfraTech funding reached US\$10bn (deals >US\$25m), which was down ~25% against the 50% fall from the broader market. InfraTech contributed 35% of total funding and become the largest sector, overtaking FinTech in 2022. The strong relative performance was largely driven by asset-heavy companies within the Energy Transition vertical which contributed ~75% of total InfraTech funding. Conversely, activity within supply chain and logistics notably fell, as demand for goods softened and bottlenecks eased.

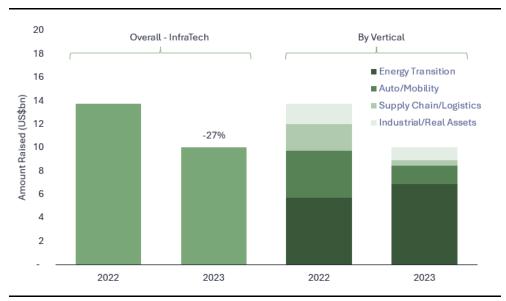


Figure 30: InfraTech sector overview - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc.

Note: European deals > US\$25m

# Both asset-heavy and capital-light technologies will likely be key to enabling the Energy Transition

Our Energy Transition vertical largely consists of two main buckets: i) large-scale capital projects and ii) asset-light technologies. Companies within the Energy Transition vertical will be important in keeping global temperatures below 1.5°C of pre-industrial levels, with the capital requirement needed to achieve this goal expected to reach US\$200 trillion by 2050. As such, European Venture & Growth capital is expected to play a crucial role. The figure below reflects the annual investment required on a global basis.



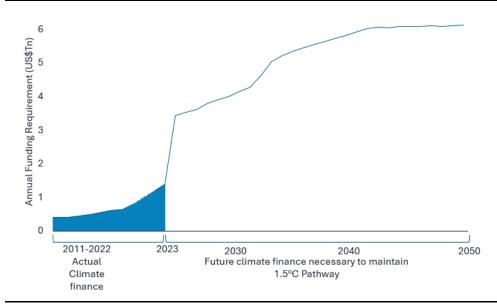


Figure 31: Potential annual funding requirement to reach Net Zero

Source: Climate Policy Initiative 2023, Global Landscape of Climate Finance 2023

#### Large-scale capital-intensive projects dominated funding activity in 2023

There were three examples of large Energy Transition fundraises in Europe during 2023. **Octopus Energy** raised US\$800m in Dec-23 from its existing shareholders – the round valued the company at nearly US\$8bn. The funds will be used to grow the energy supply business internationally, and scale its home services offering, including heat pumps. The company may be able to leverage its deep customer relationships and continue to scale Kraken, its CRM and flexibility management software platform.

The need to fund large-scale asset-heavy projects is clear but attracting capital can be challenging where the capital requirement is significant but technological risk still exists. **H2 Green Steel** (H2GS) raised US\$1.7bn in Sep-23 from a blend of financial, strategic and sovereign wealth investors. The proceeds are to be used to finance the development of a green steel plant in Sweden, with the deal underpinning the quantum of capital needed to decarbonize industrial processes. H2GS pre-sold 1.5m tonnes of annual output to provide commercial visibility and encourage participation from sovereign wealth funds. In our view, SWFs will be important in financing the Energy Transition.

**Verkor** also raised €2bn of funding in Sep-23 to finance its low-carbon battery gigafactory in Dunkirk. The round mapped a similar profile to H2GS, with French subsidies and debt funding from the EIB contributing to raising the quantum needed.

# The Climate software opportunity to be increasingly unlocked over the coming years

The majority of Energy Transition funding to-date has been focused on i) renewable energy generation, and ii) other large-scale capex-heavy projects such as H2GS and Verkor. We might expect the scaling of generation and infrastructure projects to continue to unlock an attractive opportunity in climate software (read our Nov-23 SUV <a href="here">here</a>), with a requirement to drive efficiency and resilience across the Energy complex. In the figure below, we have identified and broken down the potential investable universe within ClimateTech.

**ESG Reporting** Carbon Accounting / Emissions Management / Batteries / Storage **Built Environment** Reporting Software enabling organizations Software managing performance and optimization of to manage and measure their Software helping organizations Software enabling organizations environmental (i.e. carbon monitor and reduce methane to quantify, calculate, track, and battery and other energy storage systems that improve emissions), social (i.e. diversity and other GHG emissions. We report on their GHG emissions and inclusion), and governance grid efficiency and lower costs have grouped this category with leveraging standardized frameworks (i.e. risk management) software tools managing performance emissions for real estate and other built environment assets PERSEFONI (1) Watershed I Him | WALLOGII Stem / Ansys SUSTAINALYTICS ENVIZI Sphera Diligent COrity EVs / Mobility **Grid / Distributed** Carbon Offsets / Energy Management / Marketplaces Optimization Software managing EVs, Software optimizing performance charging stations / other mobility of distributed energy resource Software facilitating the Software applications that assist infrastructure, vehicle-to-grid, management systems and smart purchase, sale, and rating / industrial, real estate, and other and asset interoperability and grid management and monitoring validation of regulated and infrastructure operators with a capabilities security unregulated / voluntary carbon range of solutions including offsets ("vouchers") derived from energy usage, billing, metering, renewable, community, and modeling, and equipment nature-based projects CHARGELAB GRIDPOINT Schneider A INTEGRAL Xpansiv CARBON O Partch O POWERFACTORS FLUENCE RADIAN ADMINISTRATION OF THE PROPERTY **Data Services** Circular Economy / Climate Finance I Supply Chain Investments Software providing primary sources of climate and energy-Broad category encompassing software solutions related to FinTech applications, related data points to infrastructure, and marketplaces organizations, as well as data analytics tools that integrate with sustainable product enabling both consumer and manufacturing, packaging corporate sustainable banking, a company's existing enterprise supply chain, transport, and financing, and investing solutions workflow solutions to measure returns / waste management energy / ESG-related performance metrics REFINITIV ethic. Doconomy optoro ecovadis ENVERUS AVEVA @ ORENNIA

Figure 32: Climate software market segmentation

Source: Lazard VGB Insights

In Europe, there were a number of ClimateTech deals in 2023. **Infogrid** raised US\$90m of equity funding in Apr-23 in a round led by Softbank. Buildings produce almost 40% of carbon emissions, and the need to measure, monitor and reduce output has become a strategic priority for some asset owners. **IntegrityNext** – the ESG supply chain compliance platform - raised US\$106m from EQT in Mar-23. Scope 3 represents over 70% of emissions for many companies, with the ability to audit suppliers an important part of monitoring and achieving corporate ESG goals. **PVCase** – a global leader in solar project design software – also raised US\$100m led by Highland Europe in Jun-23. PVCase's software aims to help drive efficiency through the design and operation of utility-scale solar projects, with the funds helping finance the acquisition of US-based Anderson Optimization.

## Home Services saw high levels of activity as rising energy costs reduced payback periods

A further area of activity has been within behind-the-meter electricity generation - with Home Services an area of interest for some European growth investors. The recent energy crisis saw higher spot energy prices reduce the payback period for hardware solutions like solar panels and heat pumps. Companies like German-based Enpal benefitted, offering flexible financing solutions to help residential reduce annual energy costs and their carbon emissions. In 2023, **1Komma5** in Germany and **Aira** in Sweden raised US\$232m and US\$91m respectively, showing continued momentum.

The longer-term business model of many such companies is predicated on generating product gross profit on the sale of carbon efficient energy devices, and then upselling recurring energy management services. Other Home Services market participants include energy suppliers like **Octopus Energy** — who utilize low customer acquisition costs to upsell green energy products — and more traditional firms like **Homeserve** or **Hometree** who are diversifying their product offering into renewable energy services.

#### Lazard VGB's 2024 outlook - InfraTech

We believe the shift to the Energy Transition will continue to dominate the InfraTech sector in 2024, with the depth of capital required to reach challenging climate goals may potentially generate positive returns for many European growth investors. Both large-scale giga-projects and enabling capital-light technologies we expect to be areas of notable funding activity. That said, many segments of ClimateTech remain in their infancy, and in our view investors will need to be selective to identify opportunities which have the appropriate business model to capture share within the rapid market formation we expect across the Energy Transition universe.



### **Enterprise Software**

Enterprise Software contributed over 20% of European Venture & Growth investment in 2022 – in 2023, this fell below 10% with US\$2.5bn of capital raised (deals >US\$25m). Venture & Growth returns have been highly levered to the secular shift to cloud computing. In 2023, the investment volume within Enterprise Software took a pause, likely suffering from lower public market multiples, and deployment shifting towards early-stage AI companies.

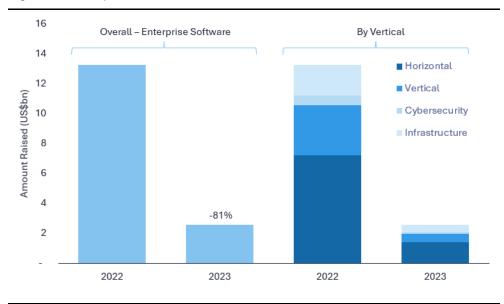


Figure 33: Enterprise Software sector overview - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc. Note: European deals > US\$25m

Each quarter in 2022 included a European funding round exceeding US\$500m (other than 4Q22), such as Relex, Personio, and ContentSquare. In 2023, fundraising from later stage software companies slowed, with companies focused on operational performance and profitability. That said, there were a number of notable growth rounds which did close in 2023 including Pigment, Quantexa and Builder AI.

### Activity across the procurement stack may have benefitted from enterprise focus on cost efficiencies

Business planning software provider **Pigment** raised US\$88m from Iconiq Growth in May-23, followed by supply-chain procurement platform **Tacto** who raised US\$54m in a series B round in Dec-23 led by Index Ventures and Sequuia Capital. Pigment aims to deliver improved collaboration and process efficiencies across core enterprise functions, while Tacto helps digitize supplier workflows and deliver gross margin expansion for SMEs. These two deals show investor focus across the procurement stack, and we believe there may be two main tailwinds. One, the increased focus on profitability for enterprise customers. And second, the high volume of SaaS products used - the chart from Ben Evans recent presentation demonstrates the second point.

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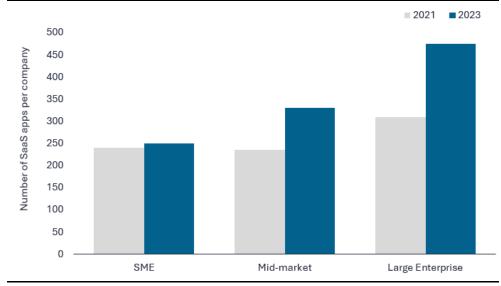


Figure 34: Average number of SaaS vendors by company size

Source: Benedict Evans

## Best-of-breed in attractive verticals able to command through-the-cycle multiples

The valuation environment across private markets – but notably within Software – became increasingly bifurcated in 2023. High quality companies within attractive verticals continued to raise through the cycle – these included firms such as **Quantexa** who raised a US\$129m series E round from GIC at a US\$1.8bn valuation in Mar-23, likely benefitting from its strong positioning within the GRC landscape. Quantexa's decision intelligence platform has now been deployed in over 70 countries, offering solutions across data management, KYC, and AML. In our view, enterprise customers increasingly view the GRC function as key to driving innovation and guiding digital transformation.

**Builder AI** – the AI powered composable software platform – closed the largest 2023 round within the sector, raising US\$250m in series D funding in May led by QIA. Builder uses AI aiming to leverage reusable code and design to develop cheaper, faster customized software applications. On the investor side, the participation of QIA seems to show the benefit of the lower cost of sovereign wealth capital in a volatile interest rate environment (like GIC who led the Quantexa round).

## Limited deal flow in vertical software but end markets remain fragmented and under-digitized

Other selected 2023 European software fundraises included **Threecolts** and **Sport Alliance** within vertical software. More broadly, we remain potentially positive about European vertical software opportunities, with many end markets yet to replicate the winner-takes-most venture-backed success stories we have seen in the US over the last decade. Our recent SUV on vertical software in Europe linked <a href="here">here</a> identifies some interesting growth-stage companies we have selected across ten vertical markets.



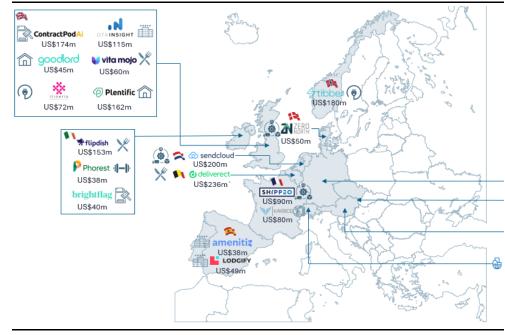


Figure 35: Selected European vertical software vendors

Source: Lazard VGB Insights, Pitchbook Data, Inc.

### HCM activity may increase in 2024 with 'Talent intelligence' integrated across business functions

Human capital management was a particularly active space through 2020-22, with the 'War for Talent' driving a growing need for better HR systems and hiring processes across both US & Europe. Through 2023, the unemployment rate remained low, but job creation slowed with a proportional slowdown in growth rounds by HCM companies. While we believe that the long-term requirement to integrate 'talent intelligence' across the enterprise is important, we might see a balanced mix of fundraising, consolidation and strategic buyouts across HCM in 2024. This continues themes we experienced in 2023, with payroll provider Immedis acquired by US-based UKG in Jun-23.

### Lazard VGB's 2024 outlook - Enterprise Software

We might expect high-quality software companies in areas of enterprise focus to continue to raise growth capital through the cycle, with tools which can rebase operating costs - including SaaS management - potentially seeing deal activity. Moreover, in our view software tools which can leverage the data repository of foundational AI models and integrate AI within core enterprise workflows could generate positive levels of investor interest.

Areas which saw more limited deal flow in 2023 may improve in 2024. For example, we believe the vertical software growth story in Europe could potentially accelerate given the under-digitized nature of many end markets, coupled with the prospect of attractive terminal year economics. Areas which have seen high levels of capital investment prior to 2023 with some cyclical exposure (such as HCM) could potentially rebound through a balanced mix of capital raising, consolidation or strategic exits.



#### Healthcare

Healthcare was a story of resilience in 2023 with over US\$5bn of capital raised in Europe. This represented a -19% YoY decline which outperformed the broader market decline of nearer 50%. Life Sciences was the key driver contributing over three-quarters of total funding, with Digital Health and MedTech deals more selectively funded. Digital Health was particularly weak compared to 2022, falling by almost 80% YoY.

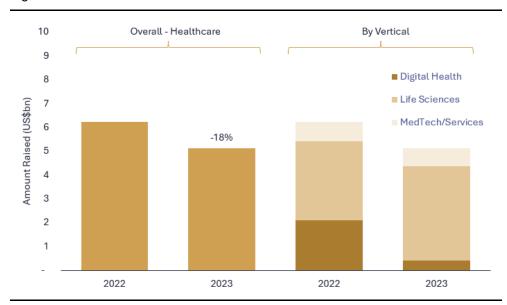


Figure 36: Healthcare sector overview - 2023

Source: Lazard VGB Insights, Pitchbook Data, Inc.

Note: European deals > US\$25m

### Life Sciences contributed three-quarters of Healthcare funding in 2023

Within Life Sciences, we saw large raises for oncology-focused companies including **ITM Isotopen Technologien Munchen**, who raised US\$277m in a round led by Temasek to develop its pipeline and improve commercial readiness for the lead candidate (currently in Phase 3 trials). In the UK, **Ellipses Pharma** raised US\$139m from West Coast Capital. Ellipses currently has one oncology candidate in Phase 2 trials and three candidates in Phase 1 trials, treating diseases including leukaemia and breast cancer.

**Apollo Therapeutics** raised US\$227m from Patient Square Capital and M&G to further build out its portfolio of over 20 programs. The business has partnerships with 5 leading research universities from which it sources its candidates for development. Within the adjacent services space, **Ascend Gene and Cell Therapies** raised US\$133m led by Abingworth and Petrichor. Ascend provides manufacturing capacity for gene and cell therapy developers, and has acquired an array of chemistry, manufacturing and control (CMC) units that it offers as a service. The company was originally founded by Monograph Capital in response to the increased outsourcing of manufacturing.



#### MedTech and Digital Health Funding was more selectively funded

Within MedTech, there was notable activity in the surgical robotics space, with 3 rounds >US\$50m during the year. The largest round was the US\$165m internal round raised by the UK's **CMR Surgical**, with the company simultaneously announcing its Versius system had completed 15,000 procedures globally. Switzerland's **Distalmotion** raised US\$150m (also from internal investors), whilst France's **Moon Surgical** raised US\$55m from Sofinnova Partners and Nvidia's NVentures.

Digital Health endured a difficult year in line with the broader software sector, but there were pockets of activity. Playing into the AI theme, **Corti** raised US\$60m for its AI co-pilot, offering real-time guidance to doctors during patient interactions and emergency calls. **Ocuco** raised US\$65m for its eyecare software solutions, which it sells into independent stores, chains and laboratories.

#### Lazard VGB's 2024 outlook - Healthcare

In our opinion, the Life Sciences funding environment could remain robust if there is appetite from strategic players and specialist Life Sciences investors that have dominated rounds in 2023. Of the 27 Life Sciences rounds to disclose lead investors, 23 were led by specialist investors. Exit optionality has also remained highly liquid market for successful drug development, which has likely helped support continued funding of early-stage Life Sciences projects.

Interest in Digital Health may remain tied to investors' appetite for the broader software sector.

Lazard

### Conclusion

2023 was a period of reset for the European Venture & Growth markets. We believe the performance of the 2024 European fundraising market may be driven by the profile of the central bank easing cycle and the nature of continued technological innovation. A positive change in risk sentiment could potentially create an improved backdrop for higher risk assets, with greater IPO volumes and exit liquidity supporting the primary fundraising environment for venture-backed companies.

We believe that there is growing evidence of a shift towards the funding of 'hard technology,' demonstrating growing investor appetite within AI, Energy Transition, Life Sciences, Quantum Computing, Robotics, Semiconductors and SpaceTech. Moreover, funding within the subdued FinTech and Enterprise Software sectors may also be set to potentially rebound given recent operational changes, reduced debt availability, and avoidance of down-valuations. Both these factors are likely needed to drive a broad-based recovery in 2024.

