

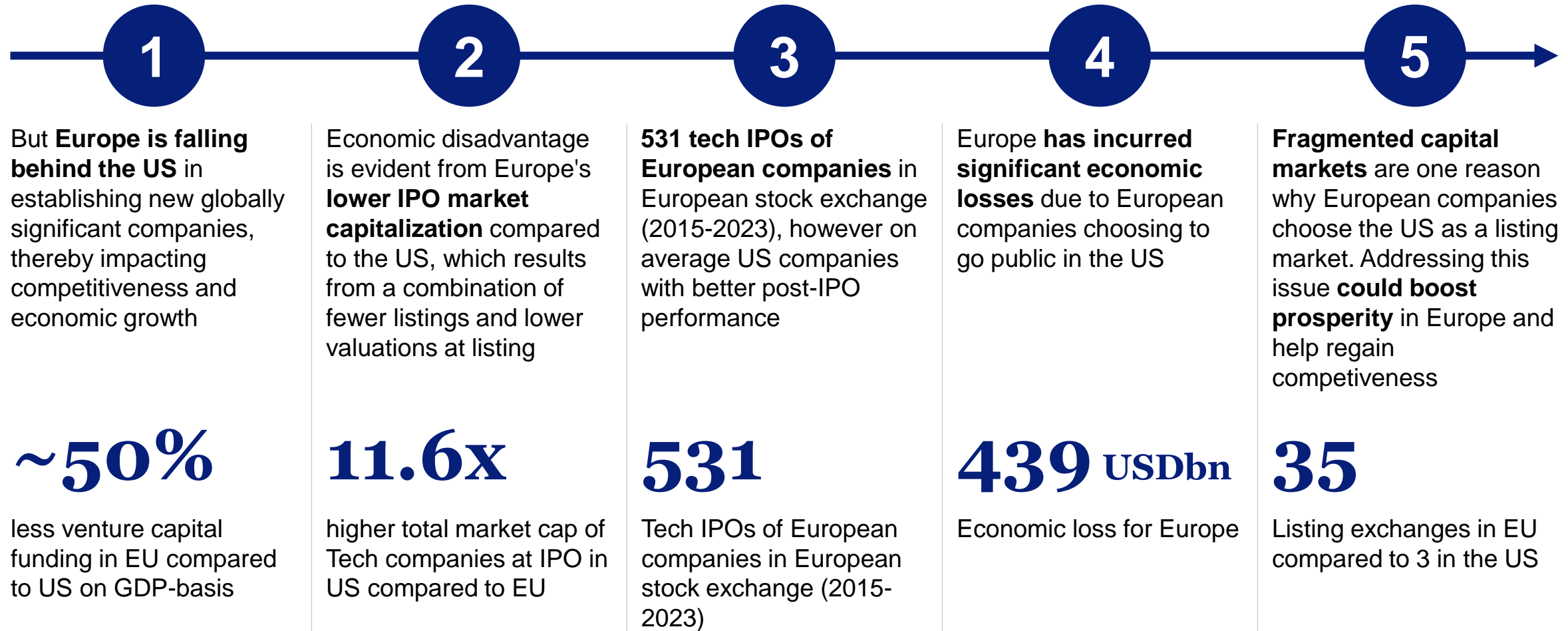
Overcoming the European Tech IPO Challenge

Leveraging Europe's Innovation Capabilities

July 2024



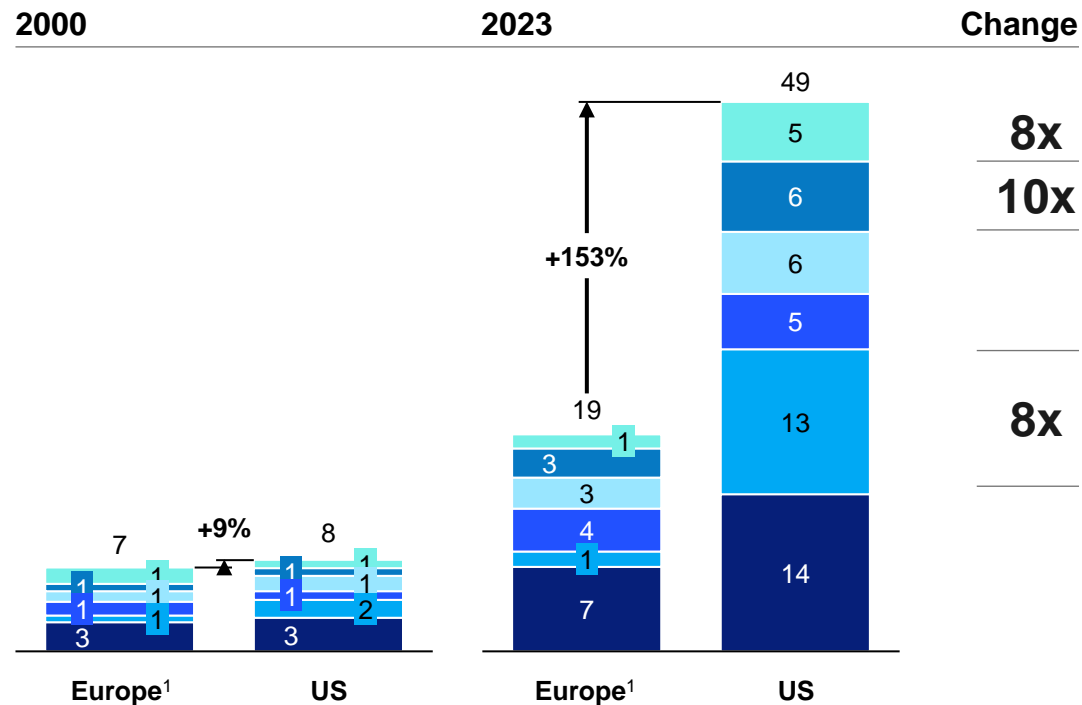
Executive Summary – European Tech IPO Opportunity



1. Bridging the Prosperity Gap: Leveraging Europe's Innovation Capabilities

■ Communication Services
 ■ Consumer Discretionary
 ■ Health Care
 ■ Industrials
 ■ Information Technology
 ■ Others

Economic value gap mainly driven by tech companies;
 enterprise value of listed companies², USD tn



1. EU27, UK, Switzerland, and Norway
 2. Companies with revenue above USD 1bn

Source: IMF, World Bank Database, US Bureau of the Census, US Bureau of Economic Analysis,

...caused by leaving key innovation fields to others

EXAMPLARY



Next-level automation

USD 1 bn VC funding on robotics in Europe vs. USD 5 bn in the US, 2015-20



Future of programming

10% top low-code/ no-code platforms from Europe vs. 75% from United States, 2020



Bio revolution

United States has 2x approved biotech drugs vs. Europe, 2018-20



Distributed infrastructure

2% revenue of European companies from cloud, vs. 73% in United States, 2021



U.S. dominance in digital infrastructure

Strong presence of leading digital companies, incl. Google, Meta, Amazon, Apple, etc.



U.S. dominance in payment infrastructure

Leading payment players such as Visa, PayPal, American Express or Mastercard

1. Growth and VC proves to be an attractive asset class as a key driver for economic growth

Venture capital historically shows attractive long-term returns

Global fund performance by equity strategy, 2000-2020, %

Job Creation

47%

of newly created jobs are generated by start-ups

Growth catalysator

4.7

Jobs are created in the community for every job created within the start-up

GDP contribution

9x

more contribute start-ups to GDP compared to the % of the population they employ

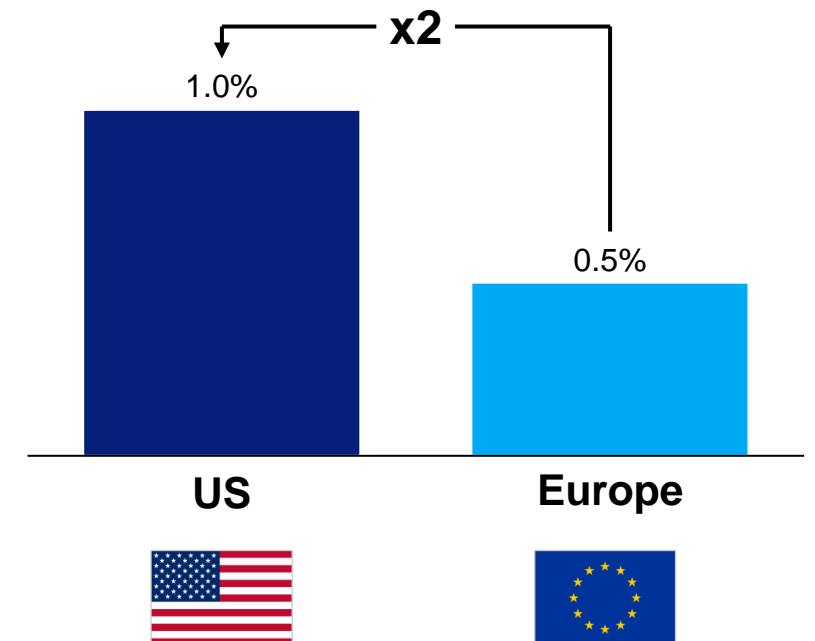
Innovation

82%

of all US patents granted in last years are attributable to start-ups

Venture Capital in Europe is largely underdeveloped compared to US

Venture Capital funding¹, % of GDP



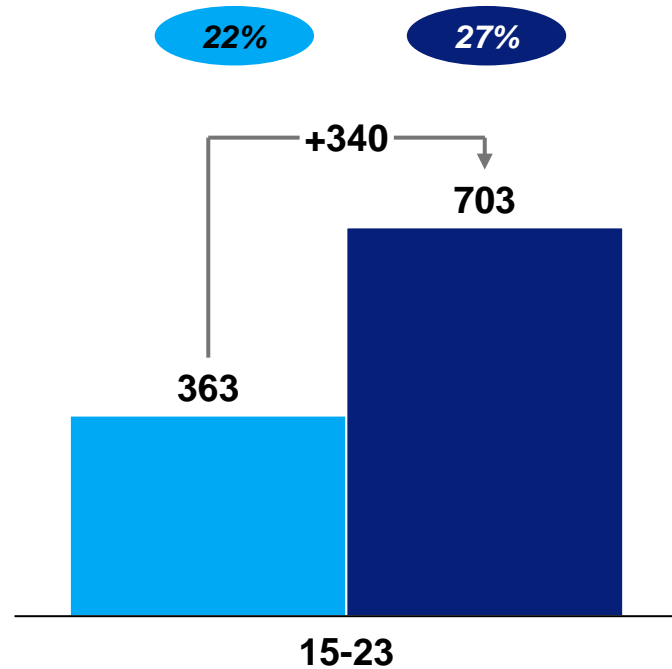
1. Includes early stage and later stage VC

2. From 2015 to 2023, IPOs in the US raised ~340 billion USD more than those in Europe

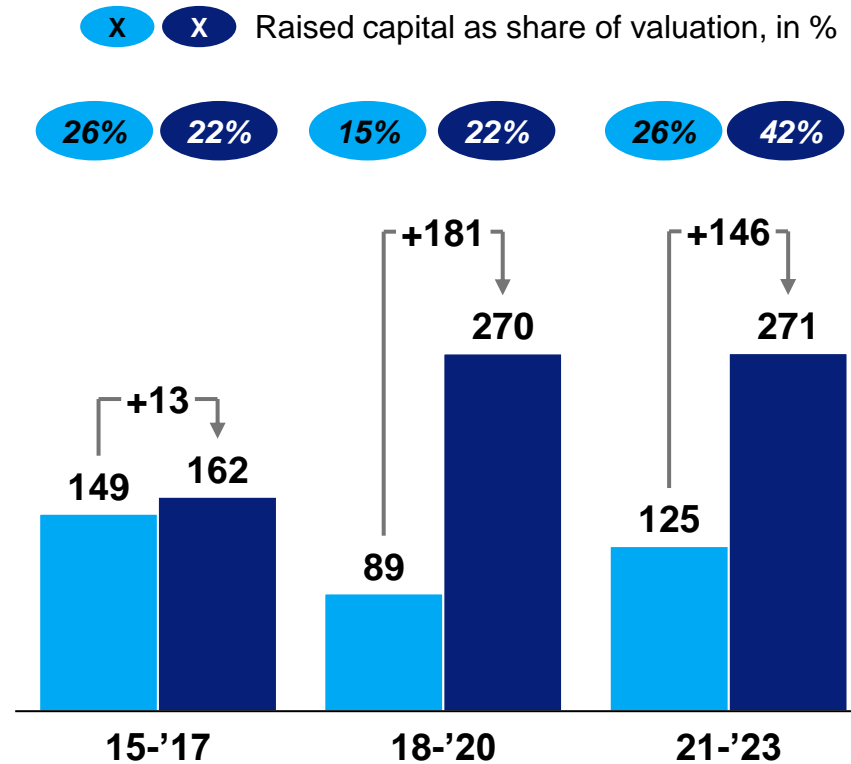
Tech IPOs All IPOs Capital raised Market cap

Europe US

Total capital raised through IPOs (tech & non-tech), in USD bn



Total capital raised through IPOs (tech & non-tech) per 3-year period, in USD bn



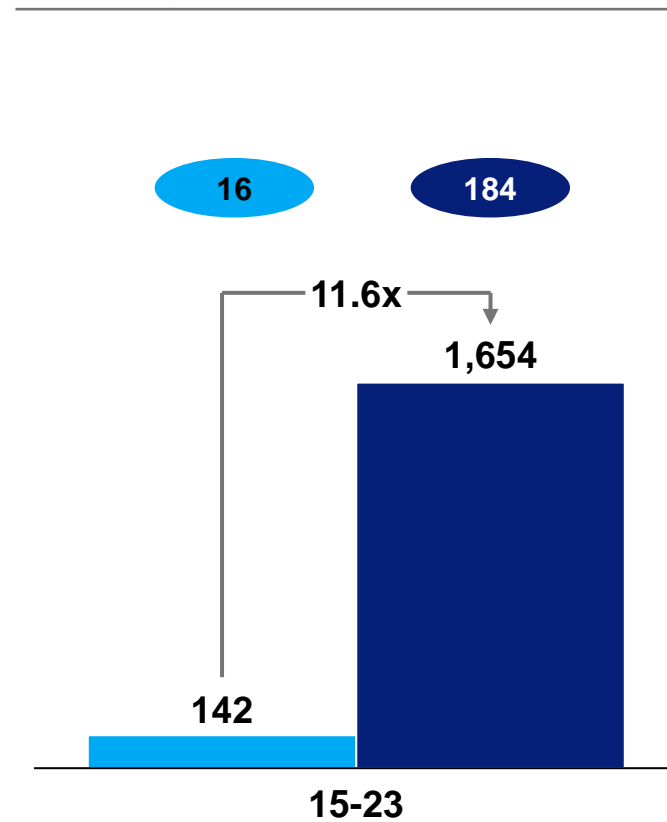
Key findings

- Total IPO investments in Europe are ~52% lower than those in the US
- From 2015 to 2017, IPO investments in Europe were nearly on par with those in the US; however, from 2018 the US withdrew
- European companies typically raise a smaller proportion of their total valuation through IPOs (22% compared to 27% in the US)

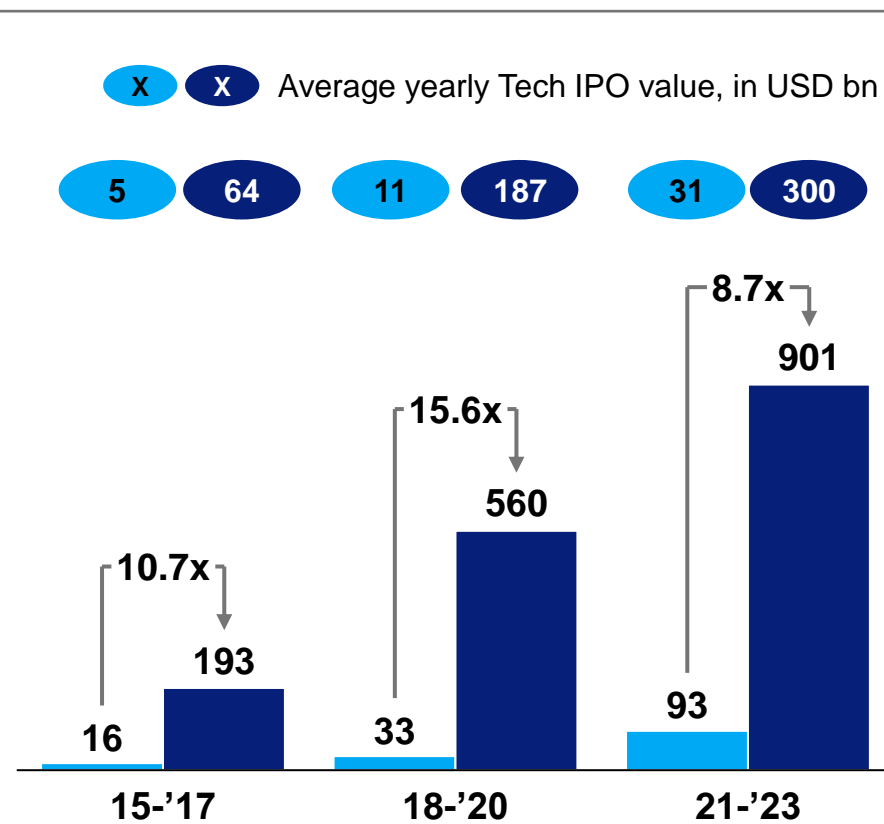
2. The total IPO value differential was particularly high in the tech sector with 11.6x

Tech IPOs All IPOs Capital raised Market cap Europe US

Market cap of Tech IPOs from 2015-23, in USD bn



Market cap of Tech IPOs per 3-year period, in USD bn

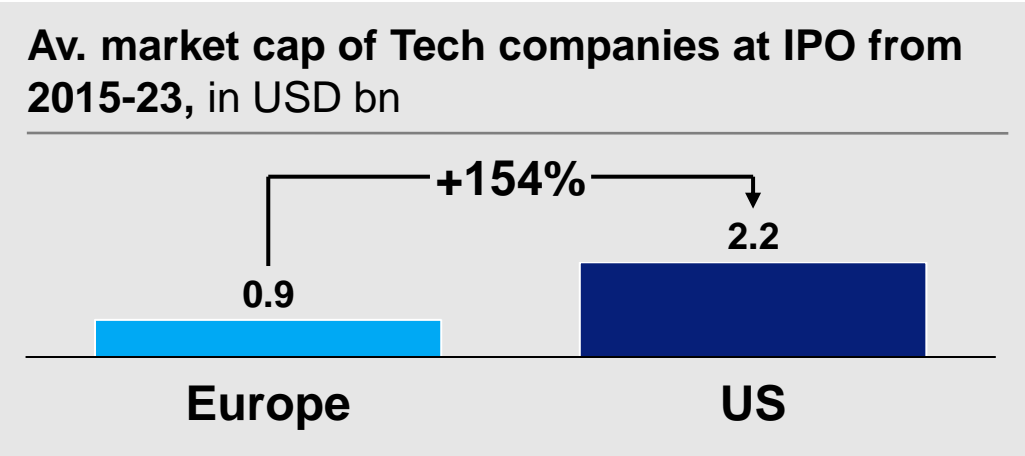
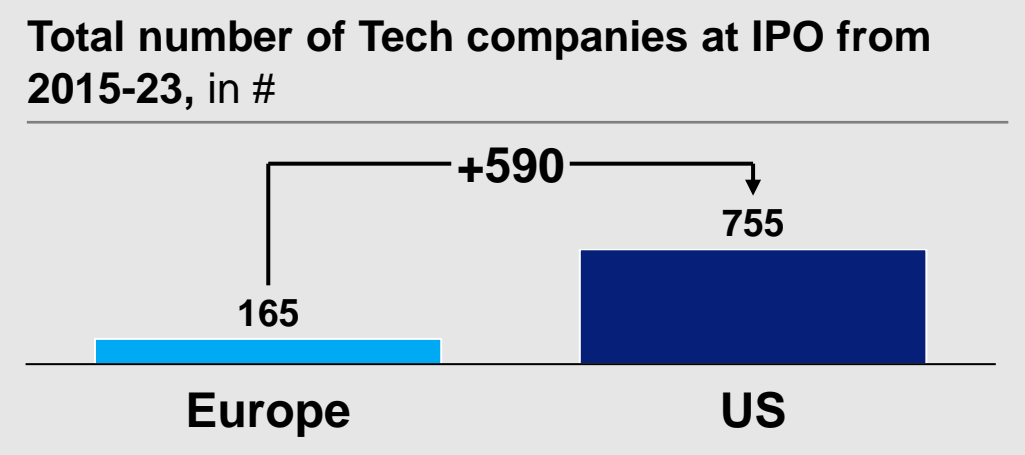
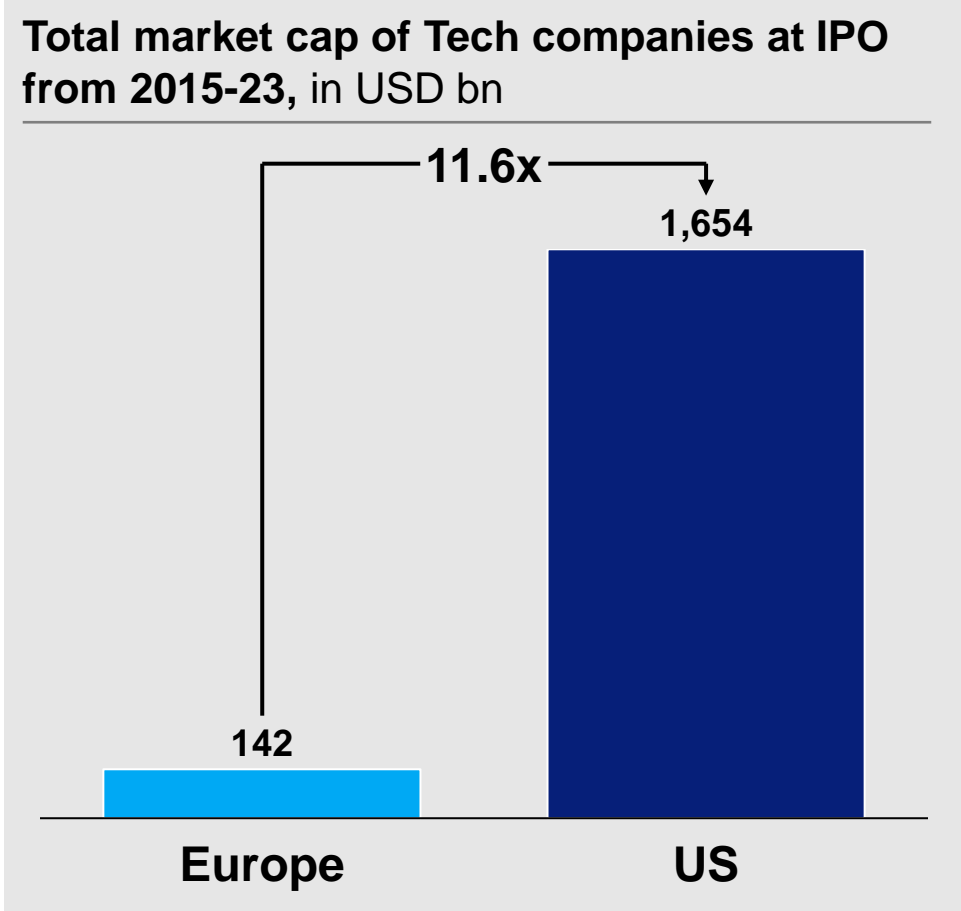


Key findings

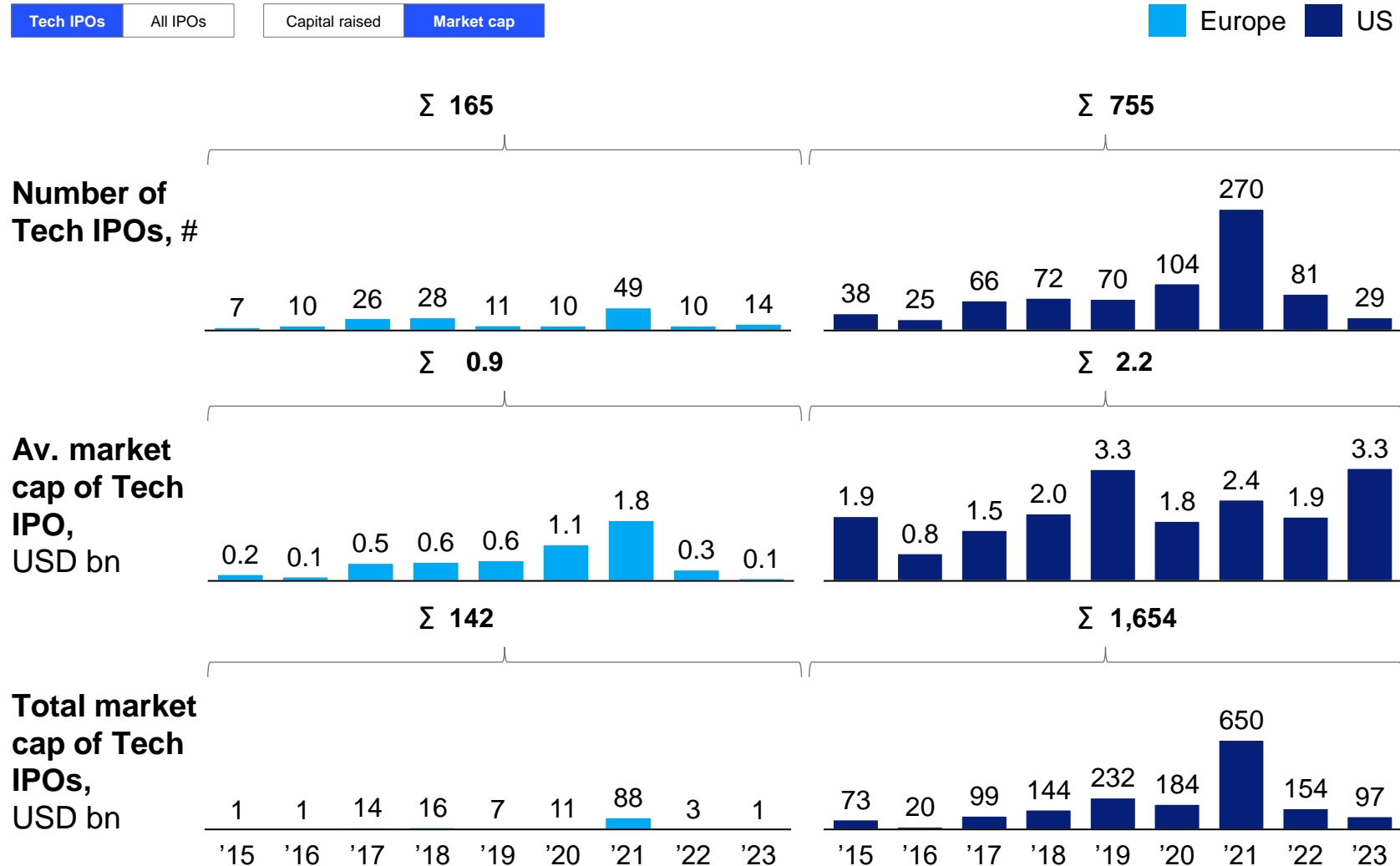
- Across all time horizons, market cap of companies going public in the **US significantly exceeds the market cap of companies in Europe**
- **Largest discrepancy occurred between 2018 and 2020**, with US tech IPOs having 15.6 times higher market cap
- US and Europe **both saw a peak in Tech IPOs** from 2021 to 2023, with a total valuation of 901 USD bn in the US and 93 USD bn in Europe

2. Lower IPO market cap of Tech companies in Europe is driven by lower valuations and lower number of IPOs

Tech IPOs All IPOs Capital raised Market cap



2. The US and Europe both recorded the highest number of Tech IPOs in 2021



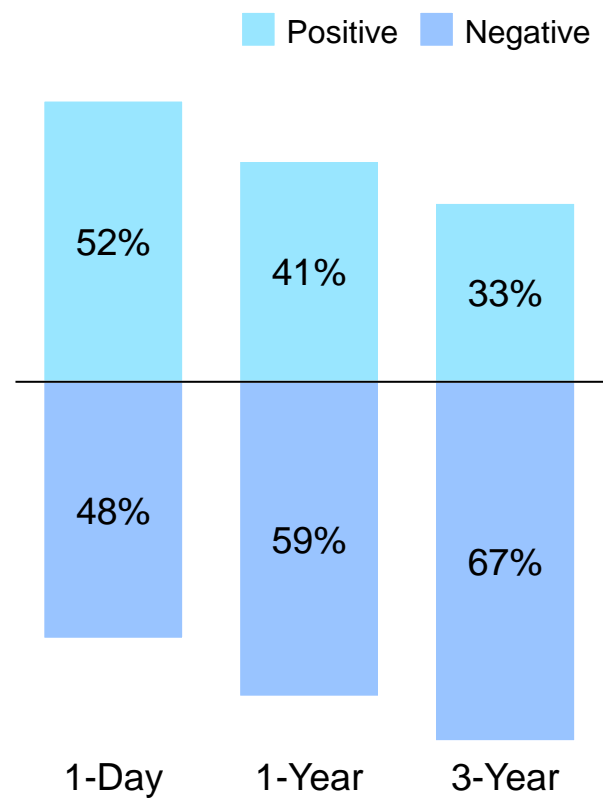
Key findings

- In '21, the US experienced **more Tech IPOs than Europe** did over the entire period from '15 to '23
- Average valuation of companies going public in **Europe increased from '16-'21**, followed by a sharp decline in '22
- Despite fluctuations, the **US market has shown more resilience** in IPOs
- **Annual market cap** from IPOs in the US between '18 and '22 **exceeded Europe's total market cap** from 2015 to 2023

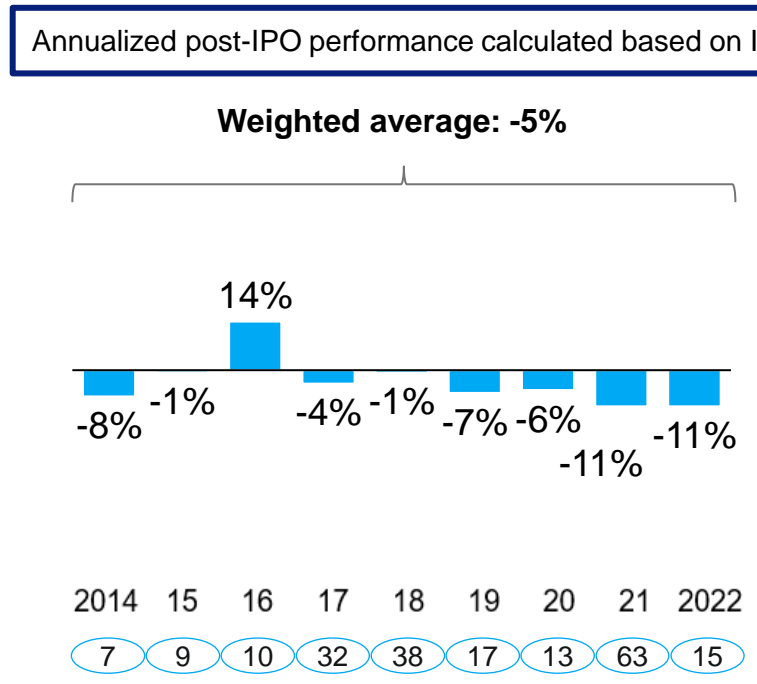
3. On average US performance is comparable to EU performance – perception often driven by few prominent cases

Tech IPOs All IPOs Capital raised Market cap Tech IPOs All IPOs Capital raised Market cap Sample N Europe US

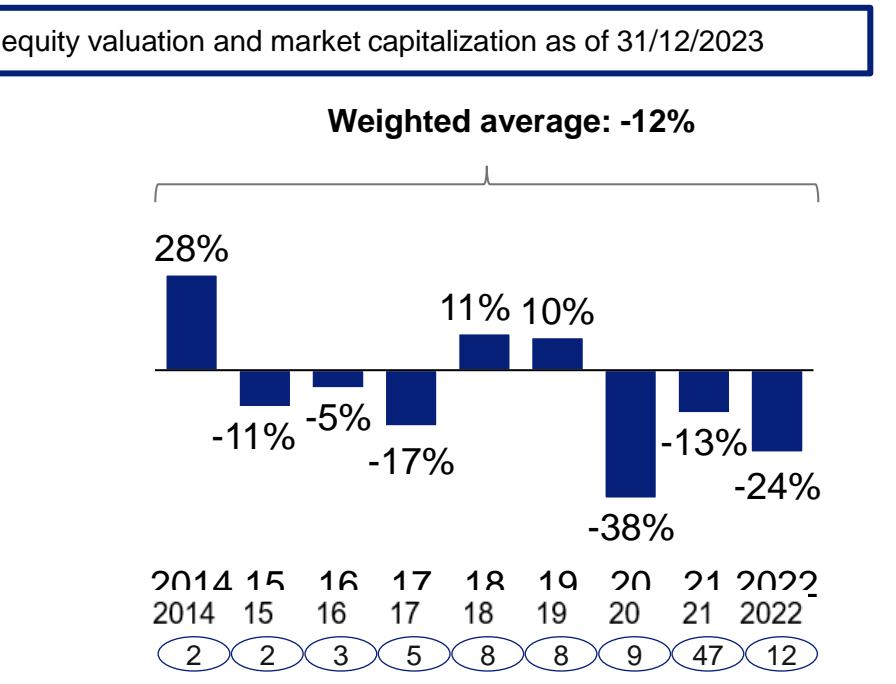
US: Distribution of post-IPO returns, in % of total IPOs



Europe: Annualized post-IPO performance¹, per IPO year cohort in %



European IPOs in US: Annualized post-IPO performance¹, per IPO year cohort in %



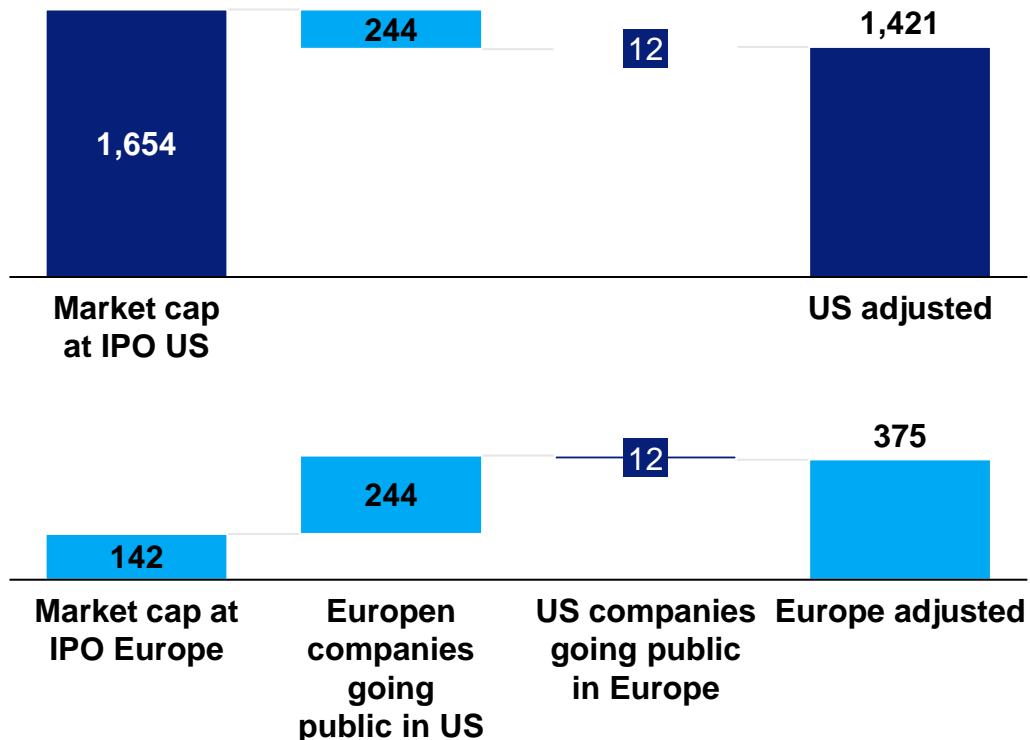
! Average return is often driven by a few significant outliers, e.g., European IPOs in US in 2022 included Gorilla (-87%), Virax Biolabs (-88%), TC BioPharm (-89%), Selina (-97%)

1. Annualized post-IPO performance calculated based on IPO equity valuation and market capitalization as of 31/12/2023

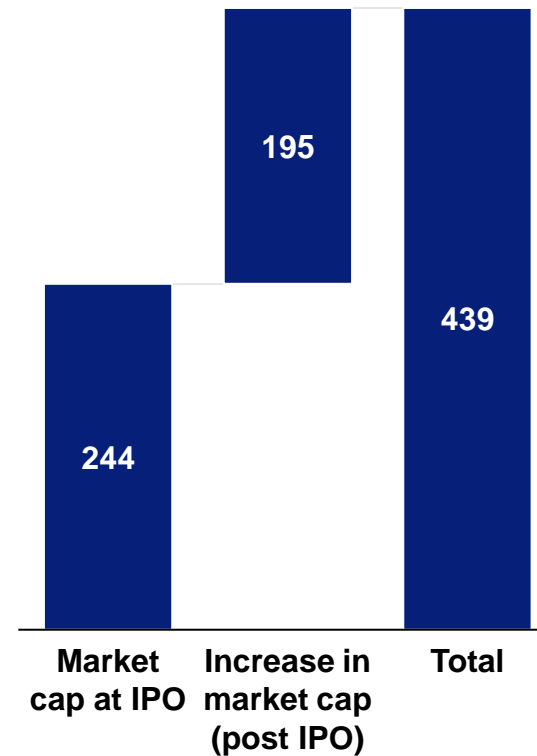
4. Europe's engagement with the US IPO market

Tech IPOs All IPOs Capital raised Market cap

Adj. total market caps for Europe and US at IPO, '15-'23, in USD bn



Economic loss for Europe¹, '15-'23, in USD bn



Further insights

439 USD bn loss equal to:

~26%

of current DAX40 market cap (1.675 USD bn)

1. Economic loss defined as market cap at IO plus increase in market cap

5. European stock market is more fragmented than US one and without clear tech-focused exchange



European stock market structure

35

Listing
exchanges

41

Trading
exchanges

18

Central clearing
houses

- Many smaller listing exchanges
- No dedicated “European Tech company hub”
- Fragmented and complex landscape
- Less international investors, high regional focus
- Lack of unified database



US stock market structure

3

Listing
exchanges

16

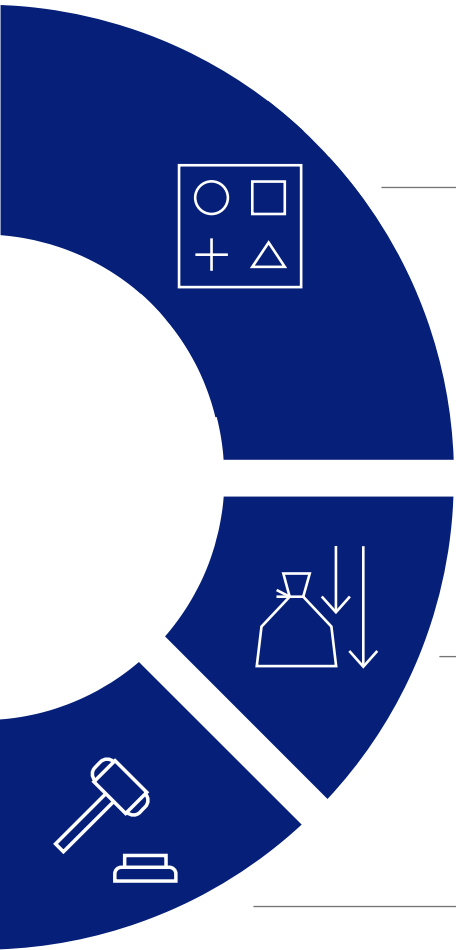
Trading
exchanges

1

Central clearing
houses

- Few large listing exchanges
- NASDAQ as “Global Tech company hub”
- Unified and standardized landscape
- Prevalence of international investors, global focus
- Consolidated Tape

5. If the European stock market were to address 3 challenges it could increase competitiveness



Challenge	Root cause	Importance
1 Fragmented, decentralized landscape	<p>Absence of a centralized "European Tech company hub" and the potential home bias of regional investors lead to tech IPOs being dispersed across various European exchanges</p> <p>The presence of 35 different exchanges in Europe, compared to three major ones in the US, indeed introduces a level of complexity and diminishes transparency for institutional investors.</p>	<p>A unified, standardized landscape could be a foundation for a virtuous cycle:</p> <ul style="list-style-type: none">• Increased visibility where high-quality companies contribute to a stronger community of analysts, investors, and banks capable of book building• More investors and book building banks could lead to greater capital, more liquidity, and higher valuations, encouraging more top-tier companies to pursue IPOs in Europe
2 Lack of late-stage funding	<p>9 out of 10 most active Late-Stage VC Investors in Europe are non-European, resulting in smaller liquidity pools</p>	<p>Domestic investors play a crucial role because (i) European capital tends to favor European IPOs over US ones, and (ii) the performance of the IPO book improves when investors stay engaged post-IPO</p>
3 Complex layered regulatory landscape	<p>Fragmented regulatory landscape in Europe (EU and national regulation) gives rise to complexity</p>	<p>While regulation is a factor, it is not the decisive reason for choosing the US over Europe for listings</p>