

APOLLO

# Outlook for private markets

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**Apollo Global Management**

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Unless otherwise noted, information as of October 2023.

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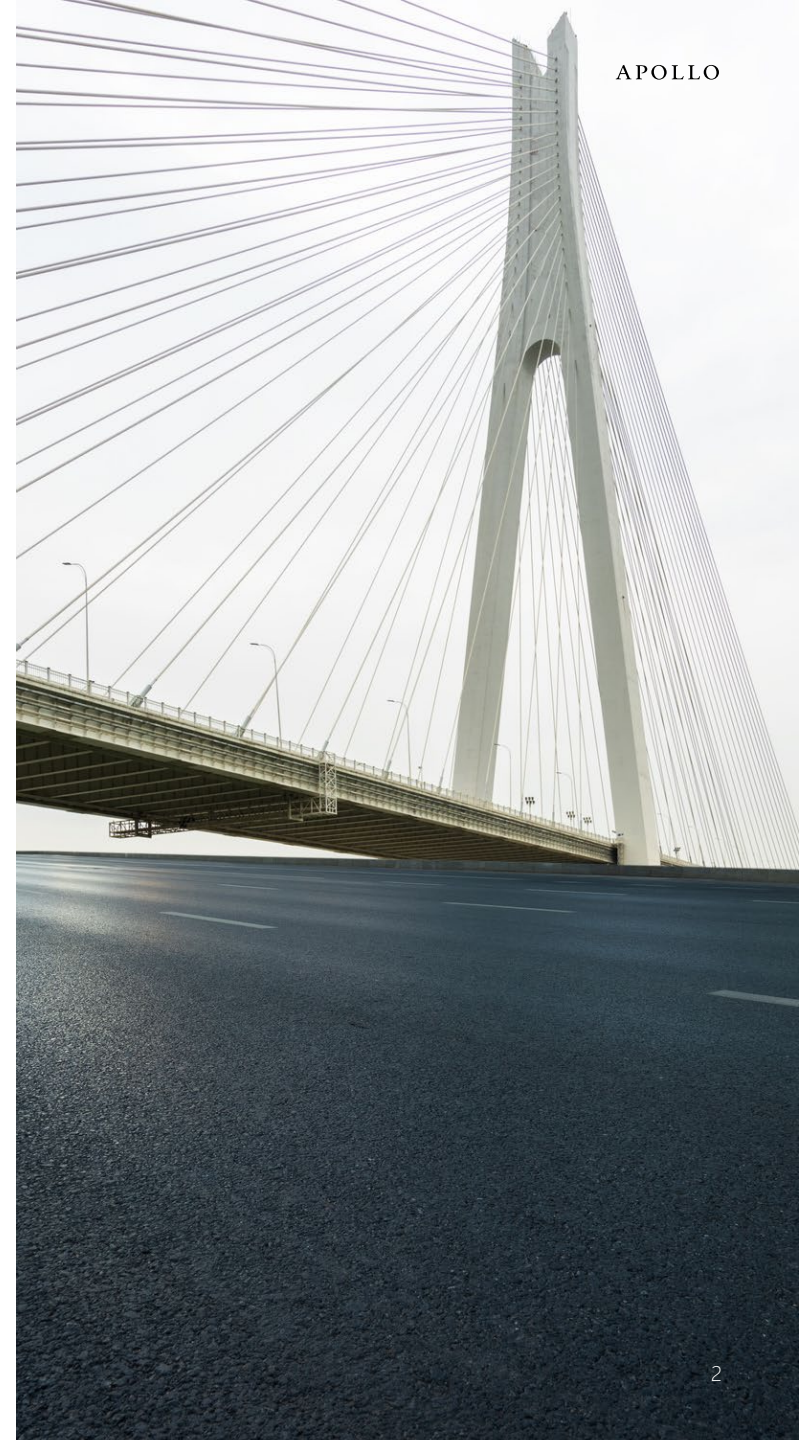
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# Overview

# Comparing public and private markets

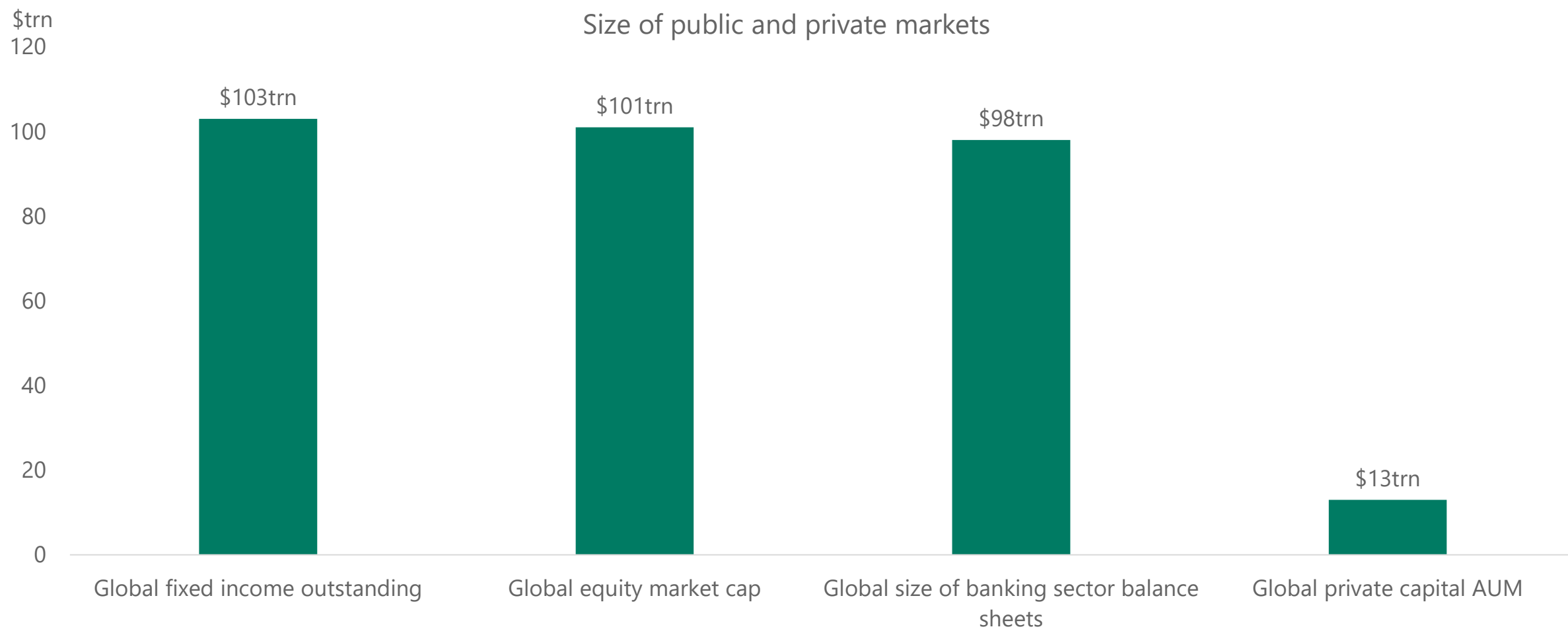
- Global private capital AUM: \$13trn (Source: Pitchbook)
- Global fixed income outstanding: \$130trn (Source: SIFMA)
- Global equity market cap: \$101trn (Source: SIFMA)
- Global size of banking sector balance sheets: \$98trn (Source: BIS)

## **Private capital makes up less than 5% of global financing markets**

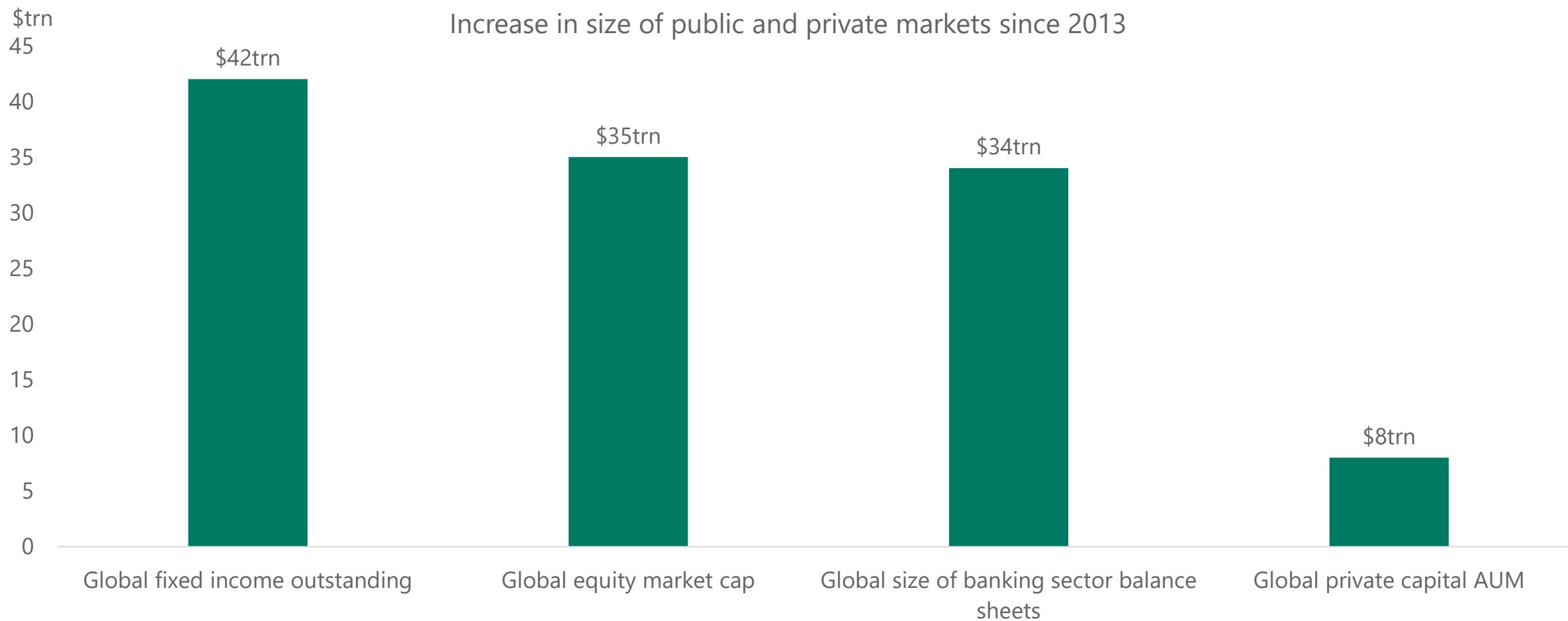
- Increase in the size of global private markets AUM over the past decade: \$8trn
- Increase in the size of global fixed income markets over the past decade: \$42trn
- Increase in the size of global equity market cap over the past decade: \$35trn
- Increase in the size of global banking sector balance sheets over the past decade: \$34trn

## **Private capital has over the past decade grown much slower than global financing markets**

# Comparing public and private markets

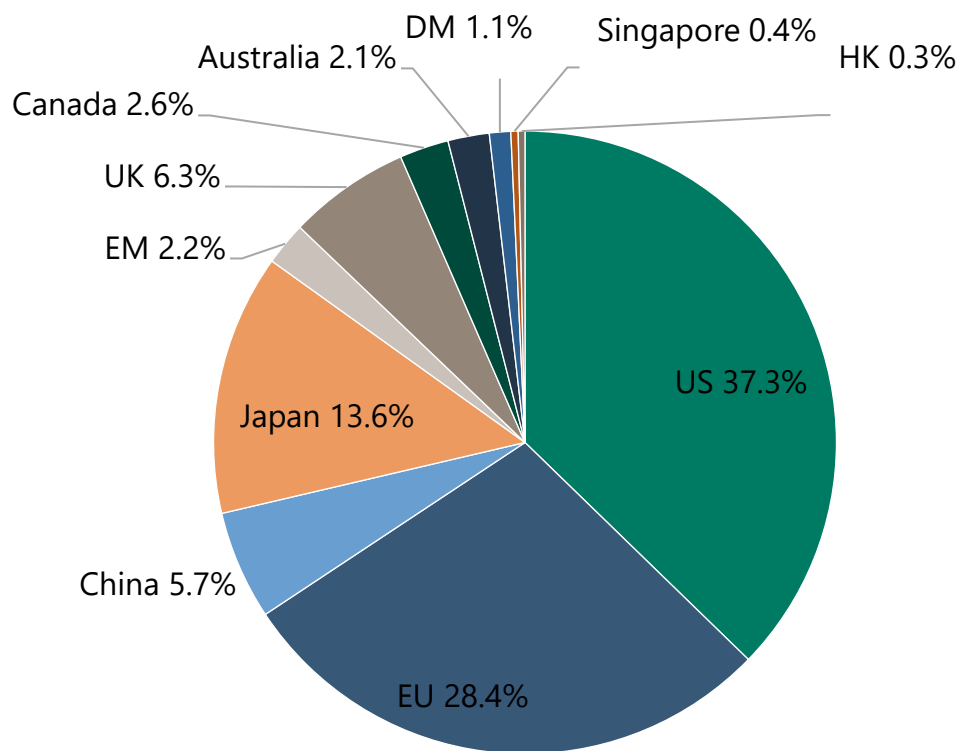


# Comparing growth in public and private markets over the past decade

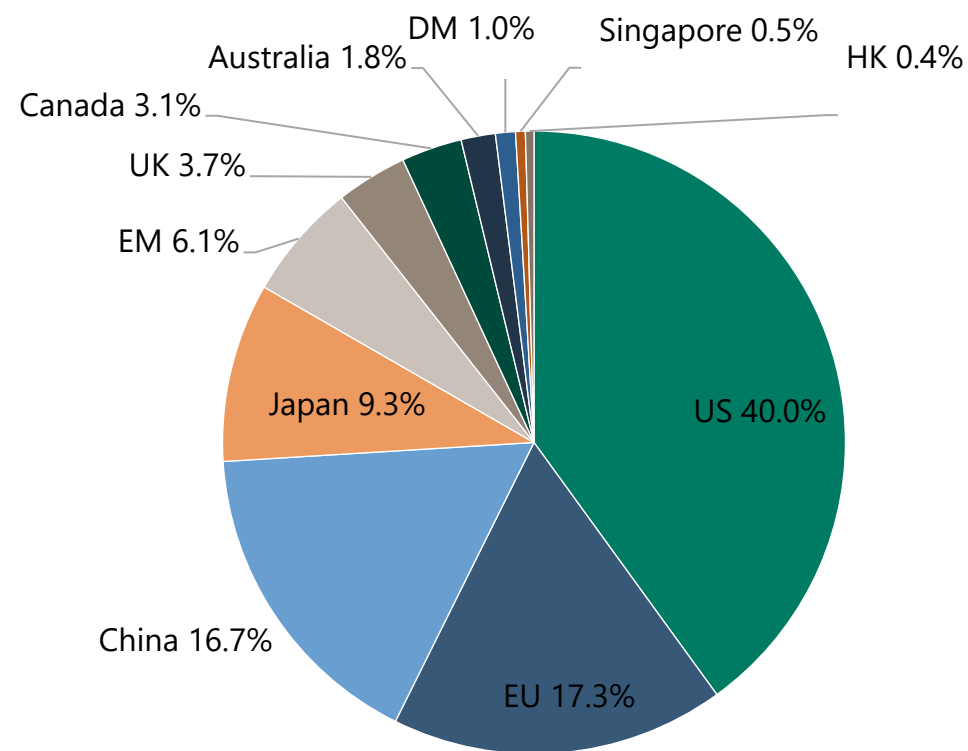


# Global fixed income markets have grown \$42trn over the past decade

**Global fixed income outstanding  
2013: \$87.8trn**



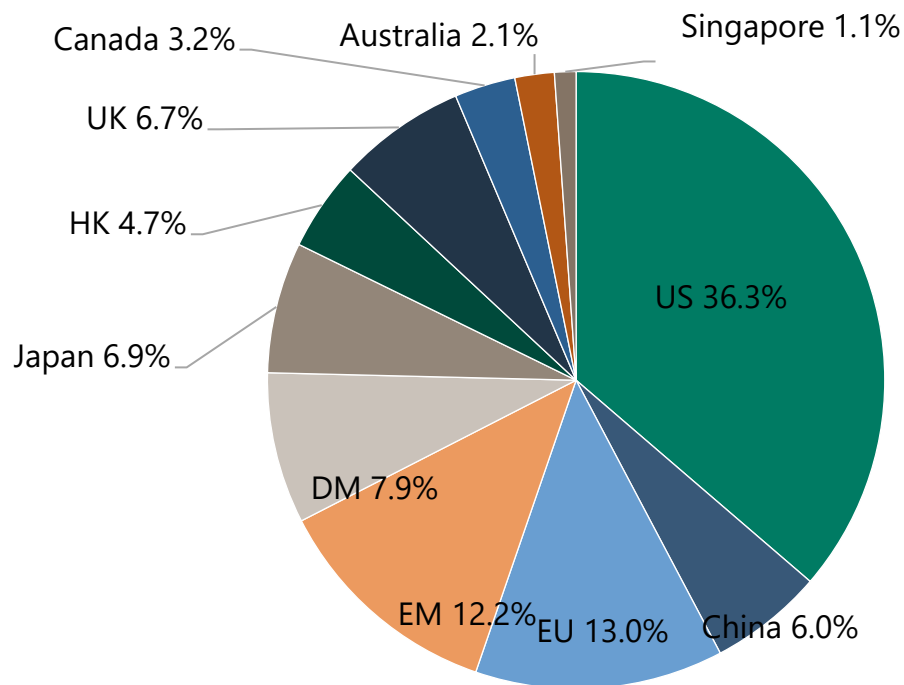
**Global fixed income outstanding  
2022: \$129.8trn**



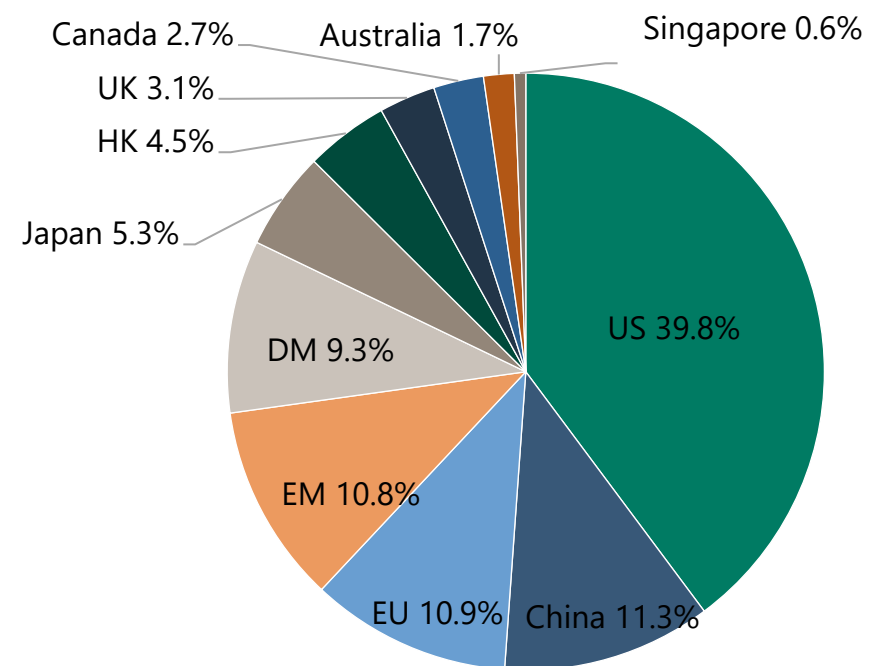


# Global equity markets have grown \$35trn over the past decade

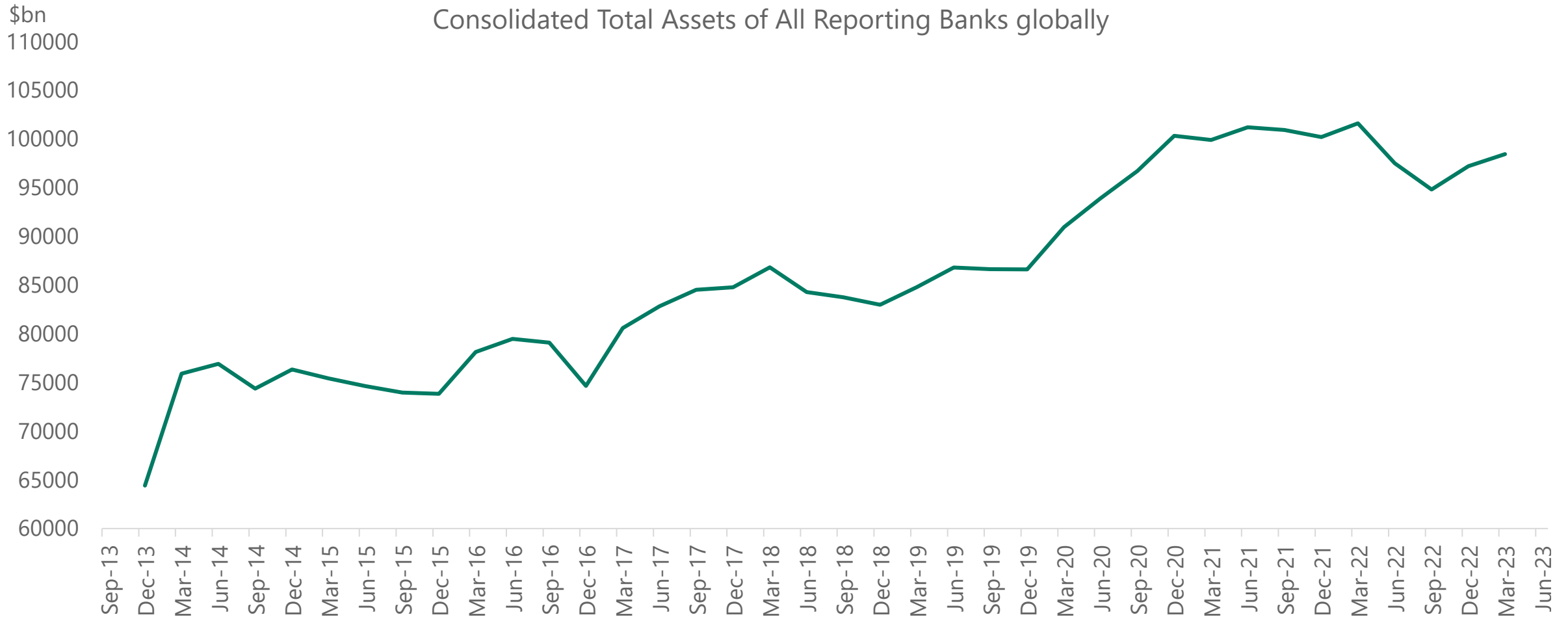
**Global equity market cap  
2013: \$66.2trn**



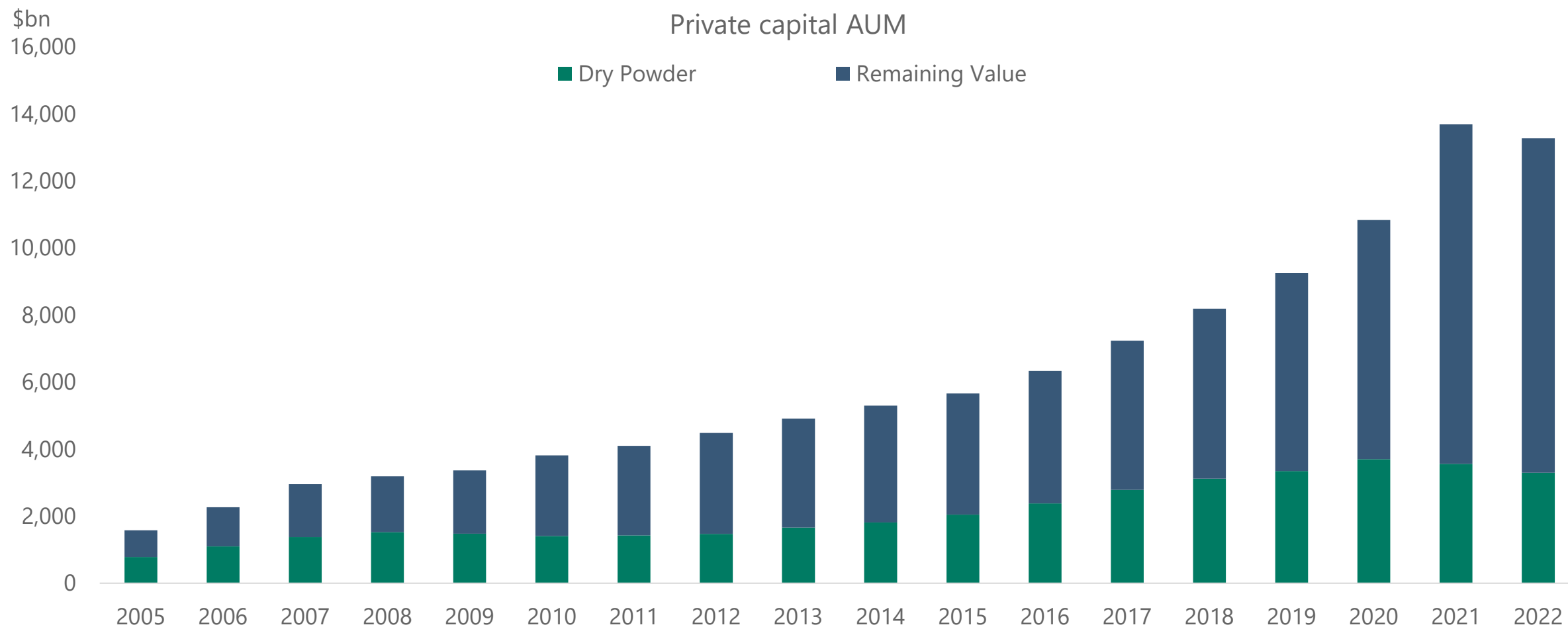
**Global equity market cap  
2022: \$101.2T**



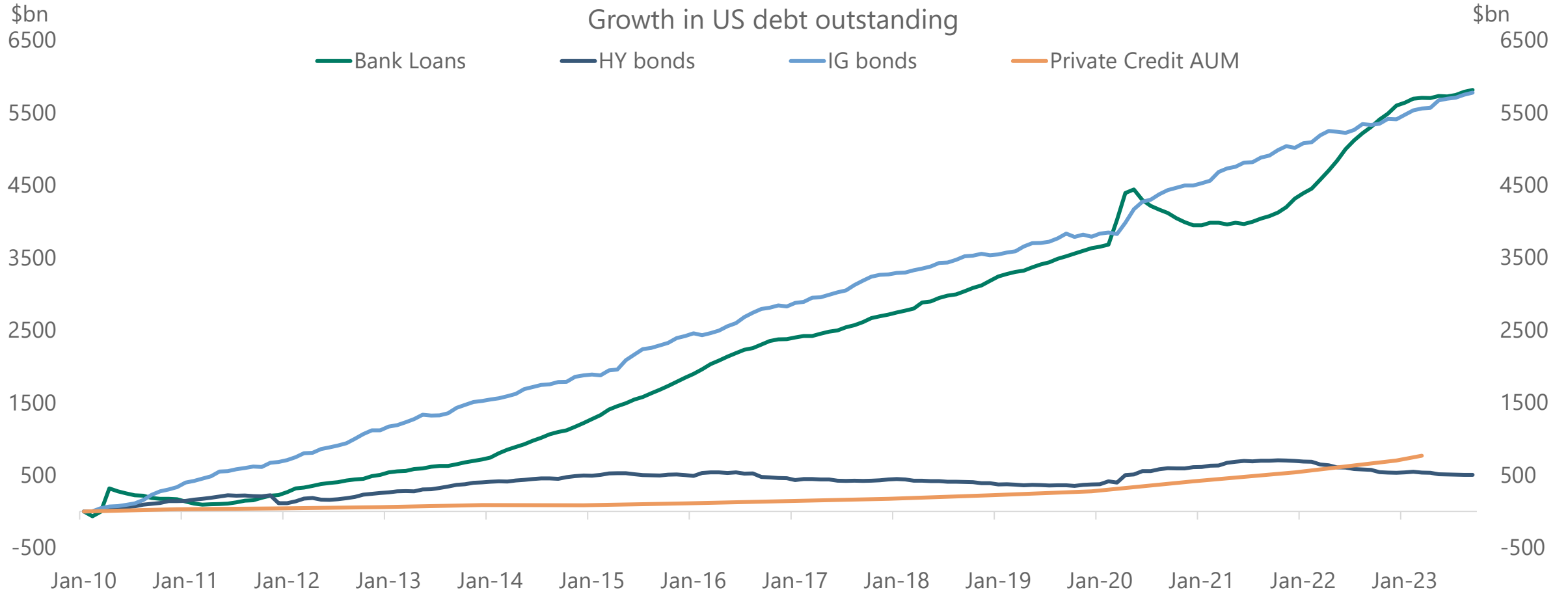
# Total assets in the global banking sector have grown \$34trn over the past decade



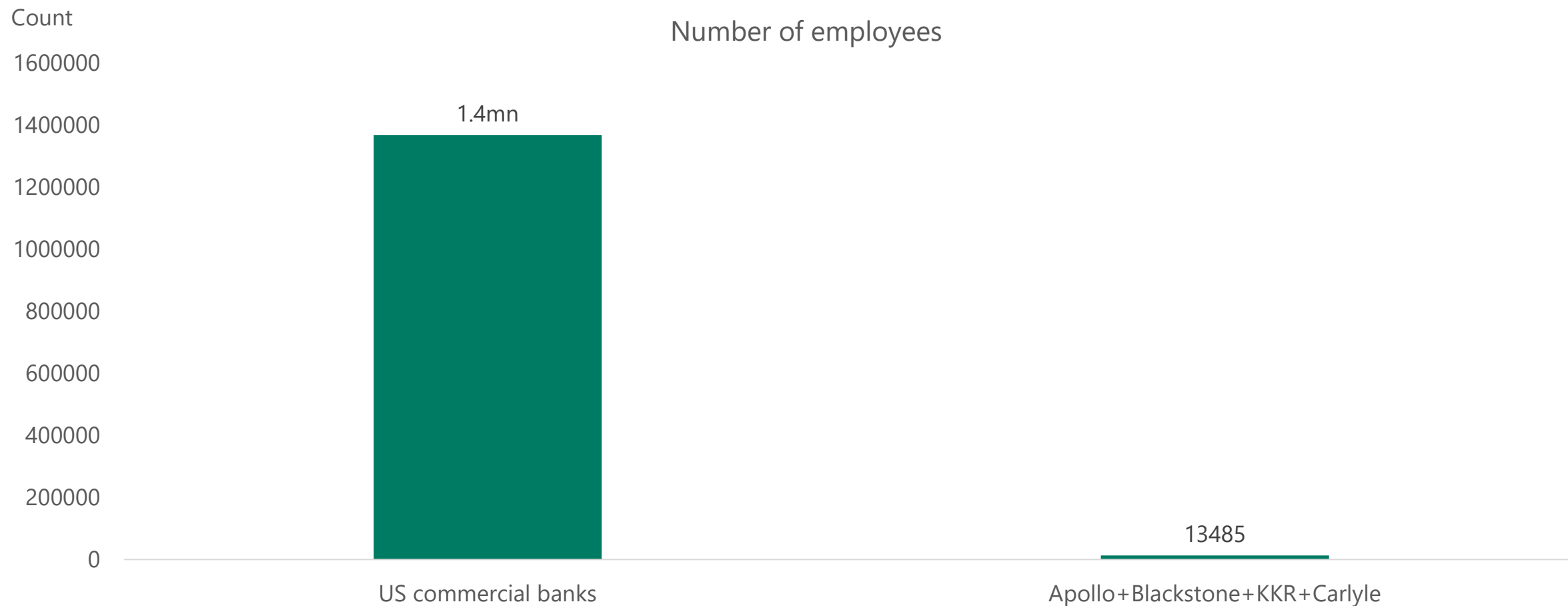
# Global private capital markets have grown \$8trn over the past decade



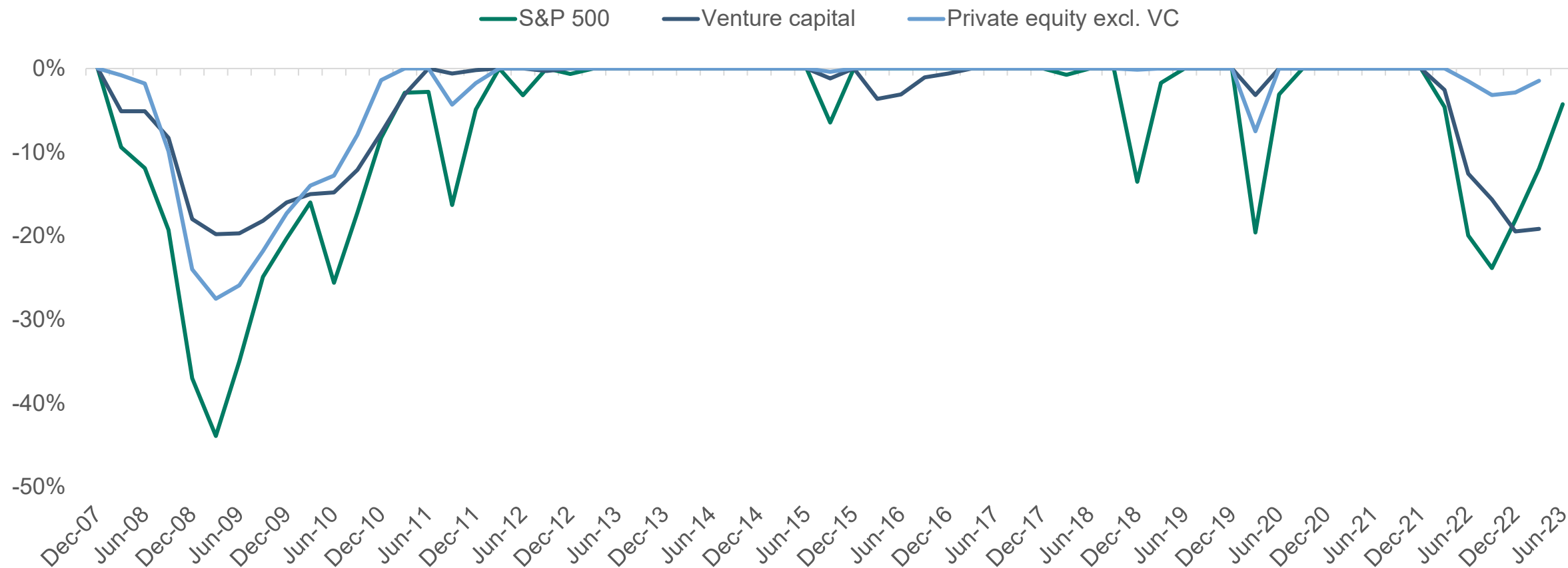
Since 2010, lending by banks has increased by \$5.5trn, IG markets have grown \$5.5trn, HY markets have grown \$500bn, and private credit AUM has increased by \$1trn



# Total employment in US commercial banks: 1.4mn



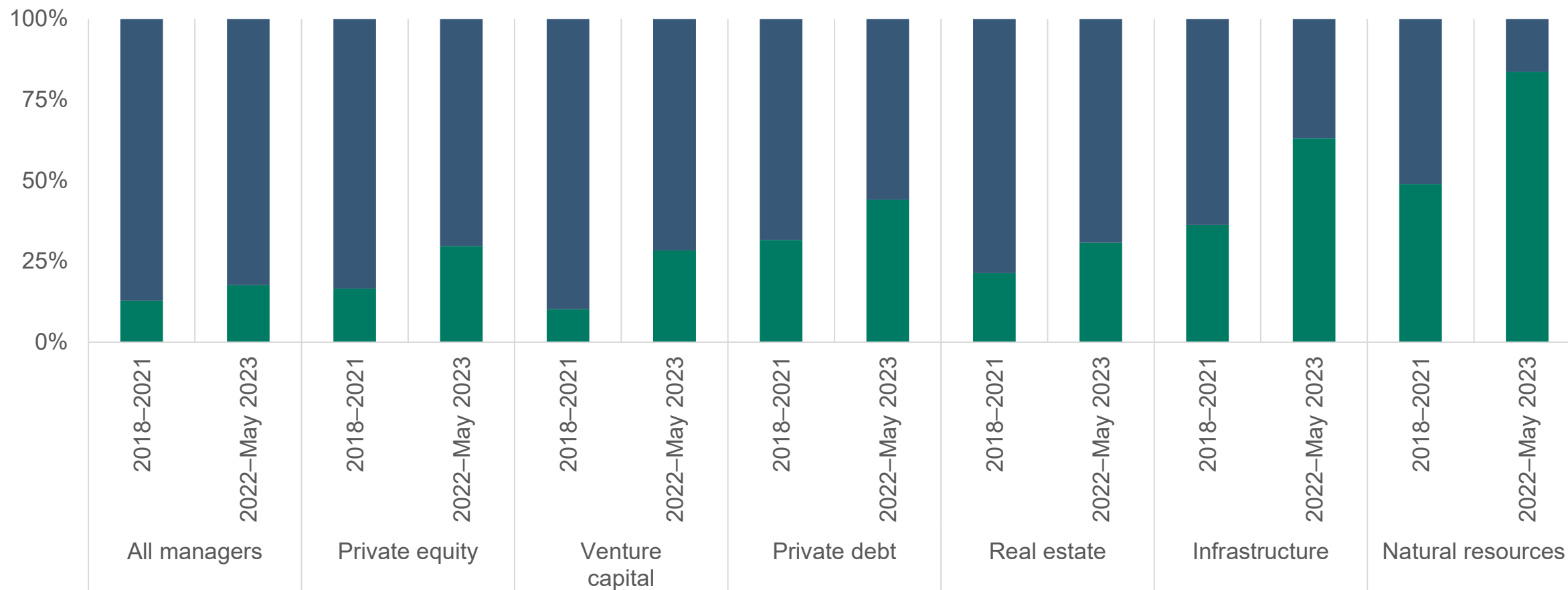
# Public and private market drawdown periods, since GFC



# Percentage of private capital funds raised by the 10 largest managers

% of funds raised

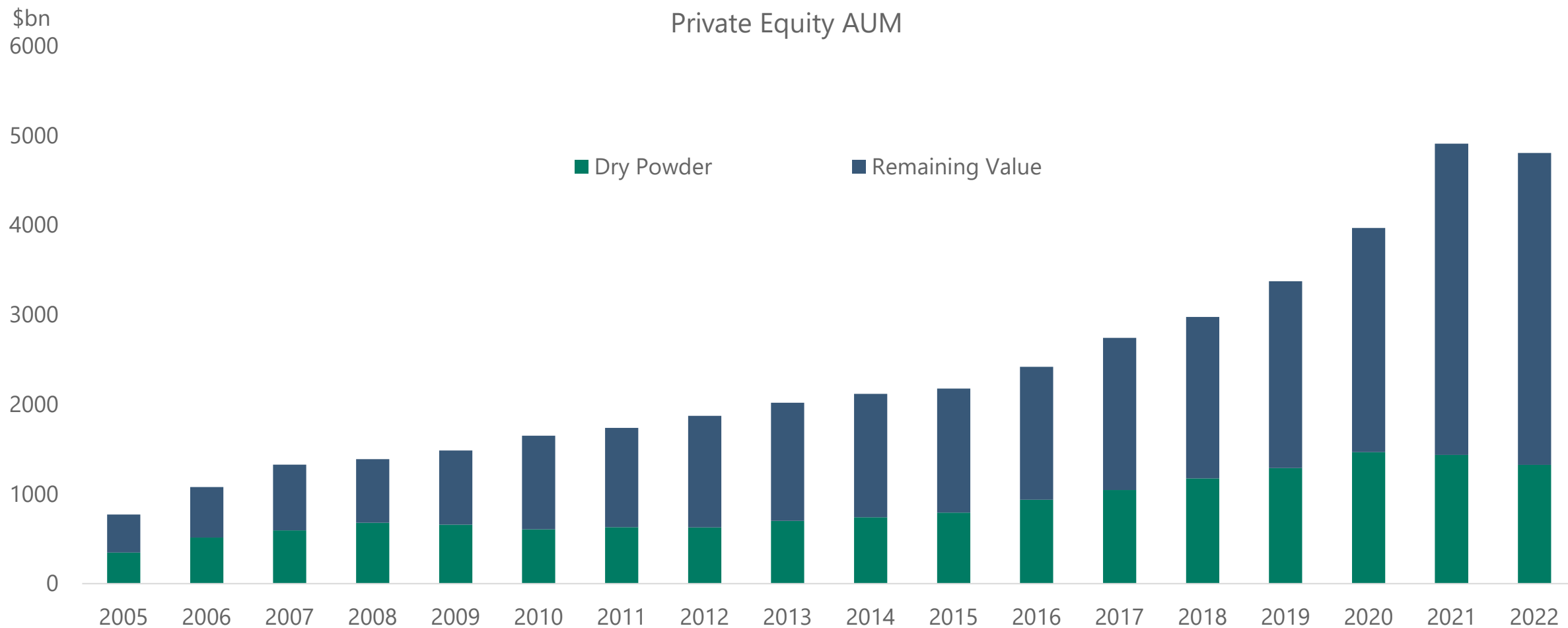
■ 10 largest managers ■ Other managers



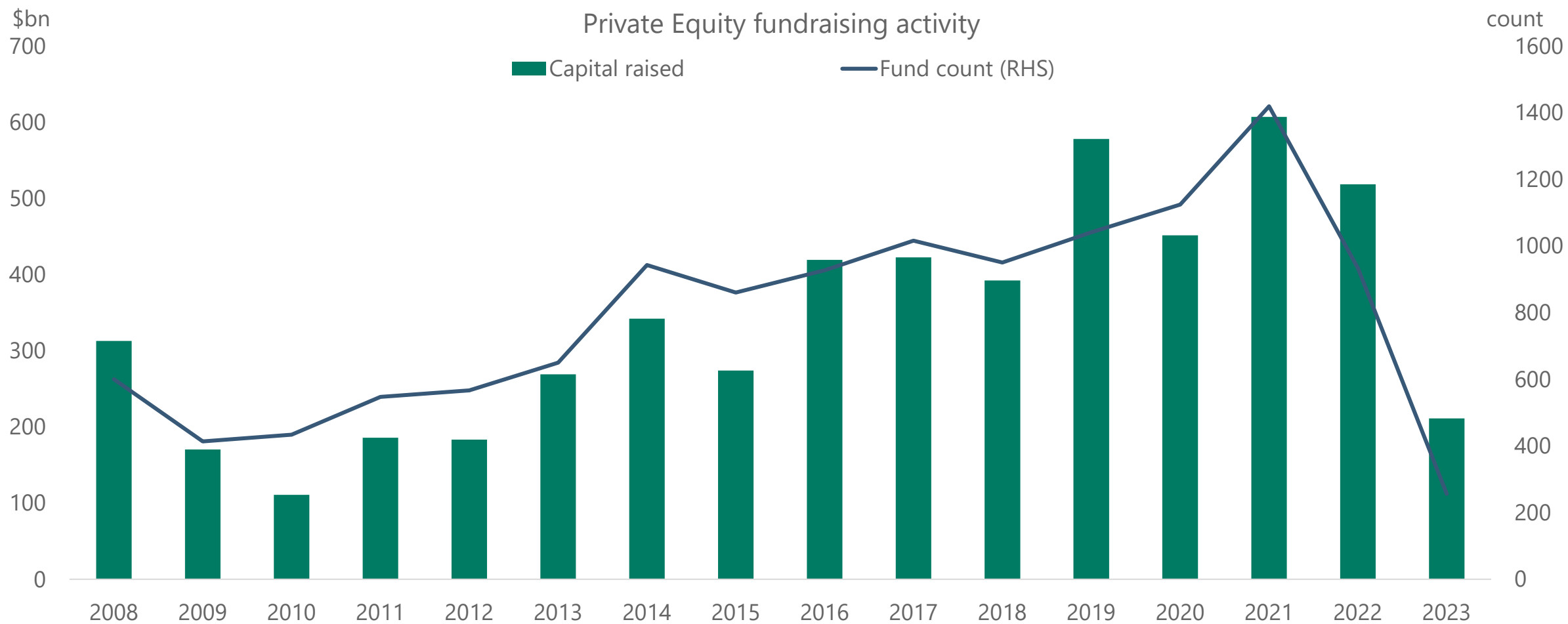
Private equity



# Global private equity AUM is around \$5trn

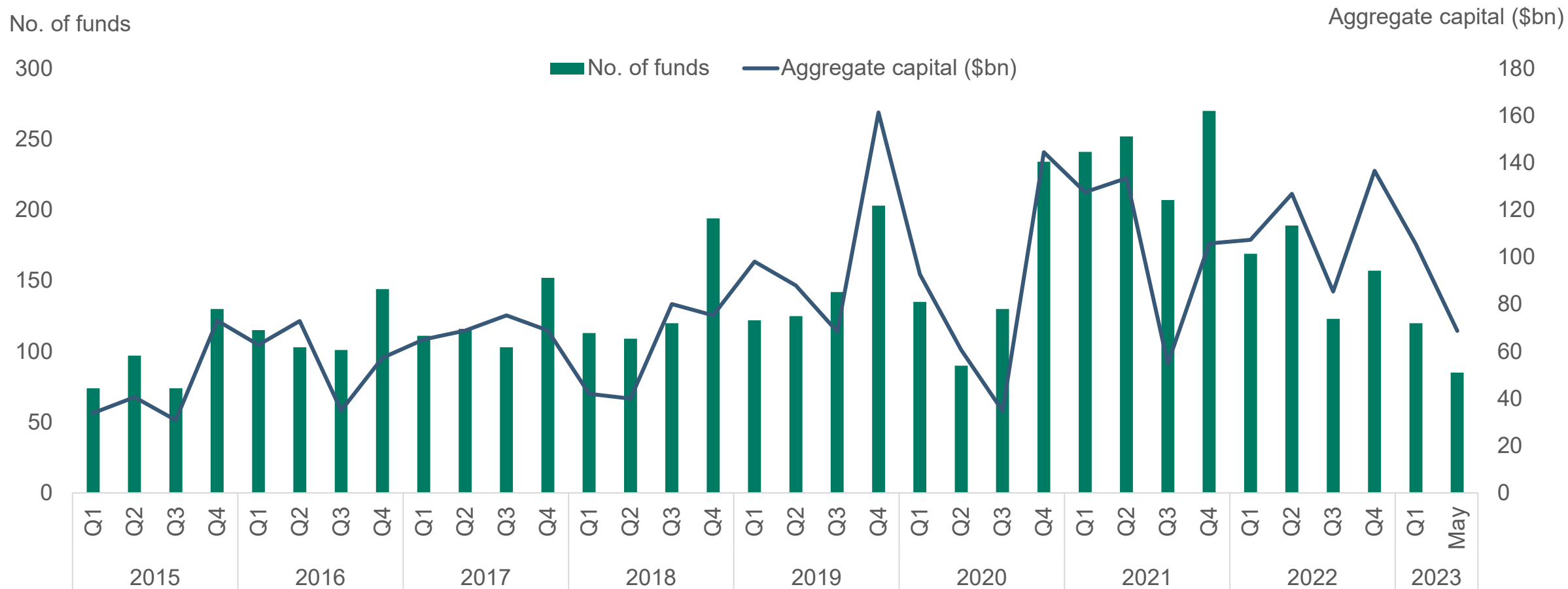


# Fundraising activity

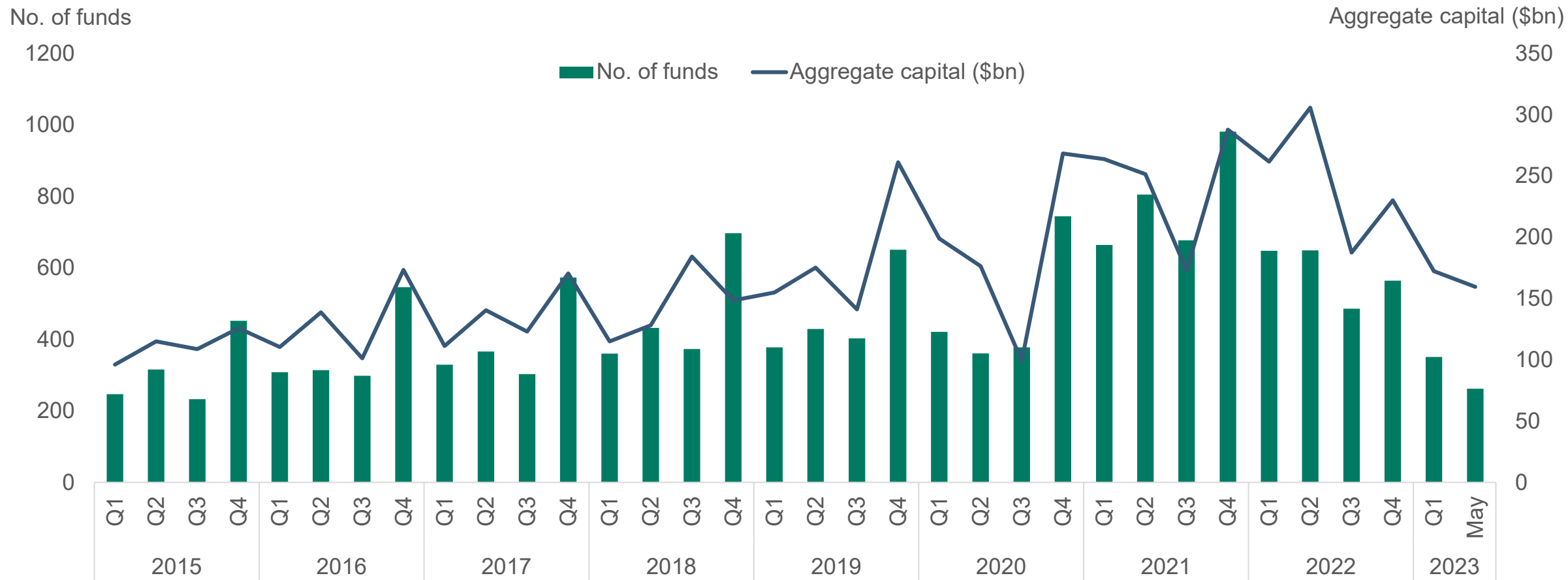


Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

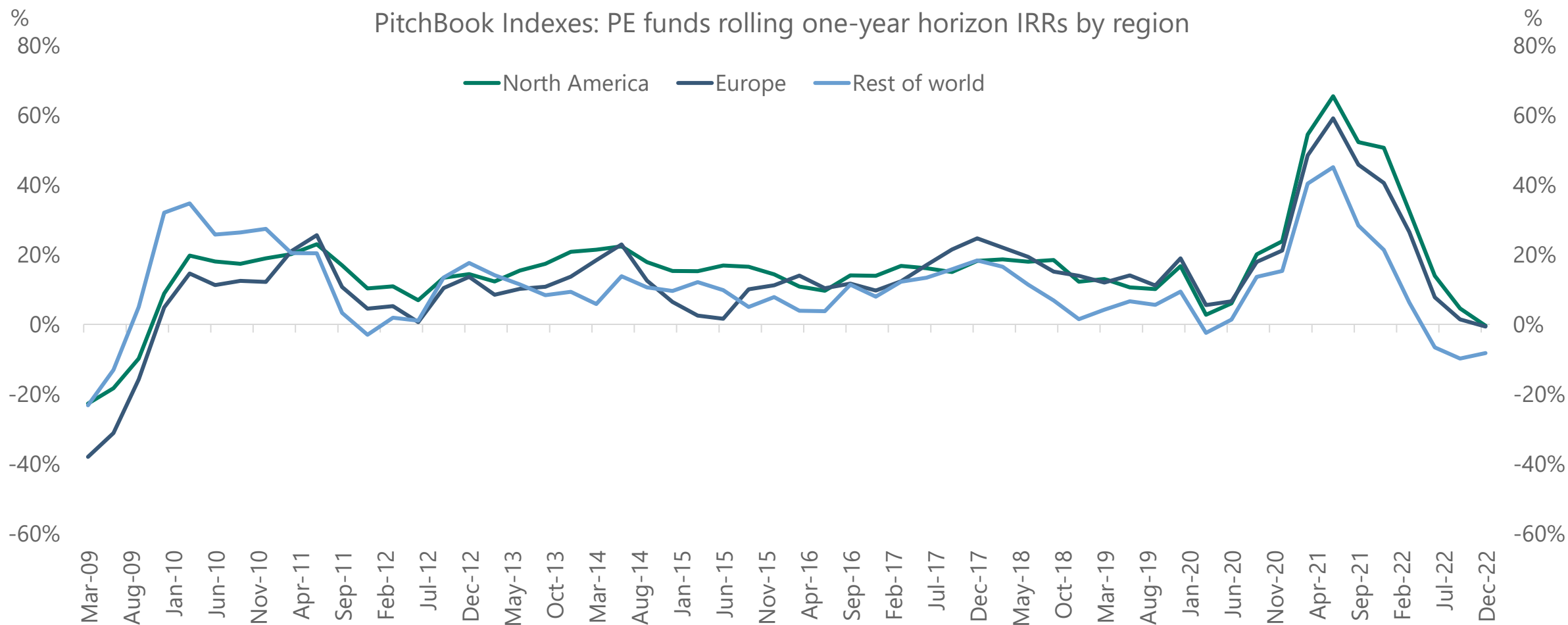
# North America private equity more concentrated



# Fundraising trending lower

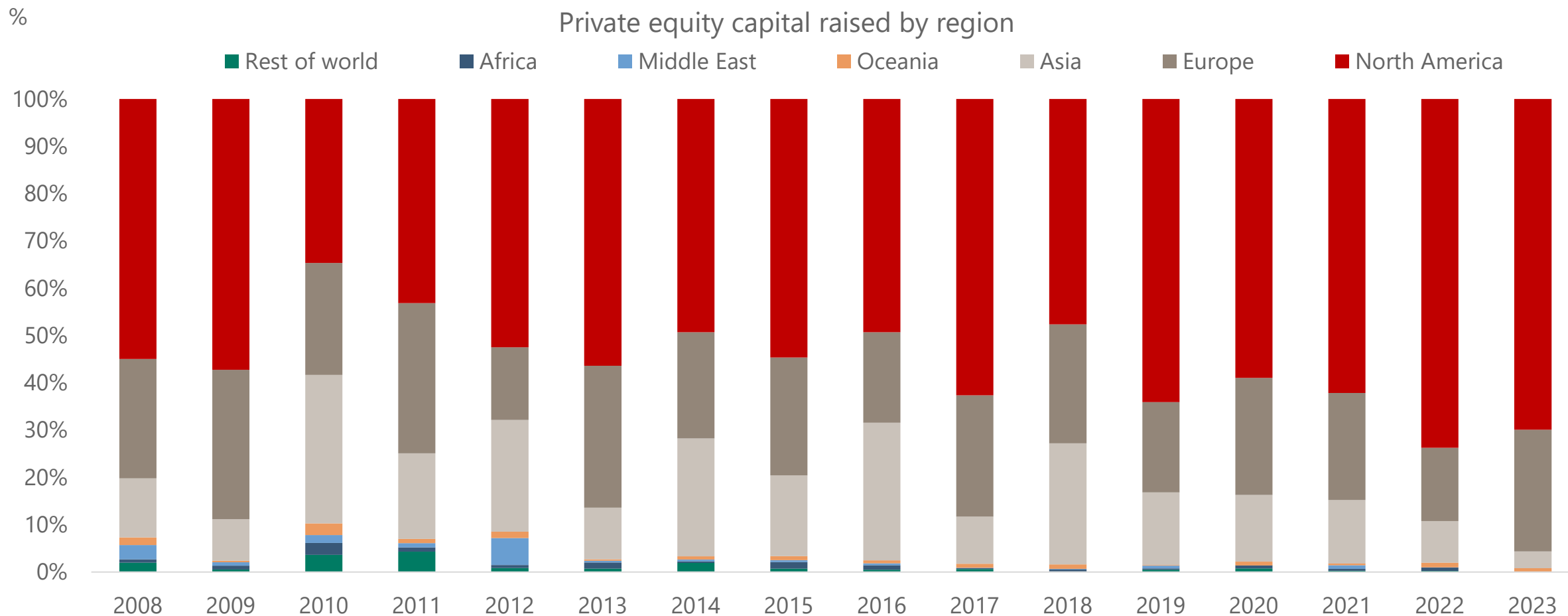


# Private Equity returns, by region



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 31st December 2022

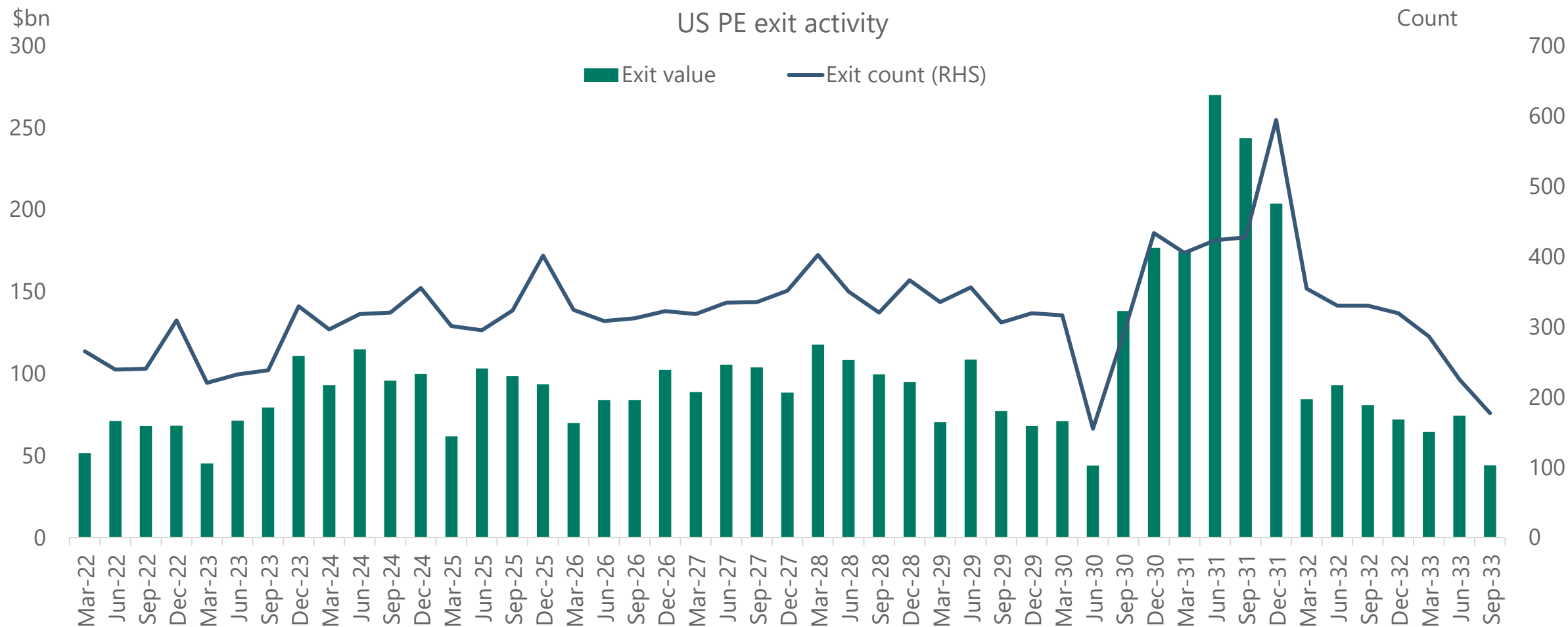
# 70% of global private equity capital is raised in North America



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

PE deal activity

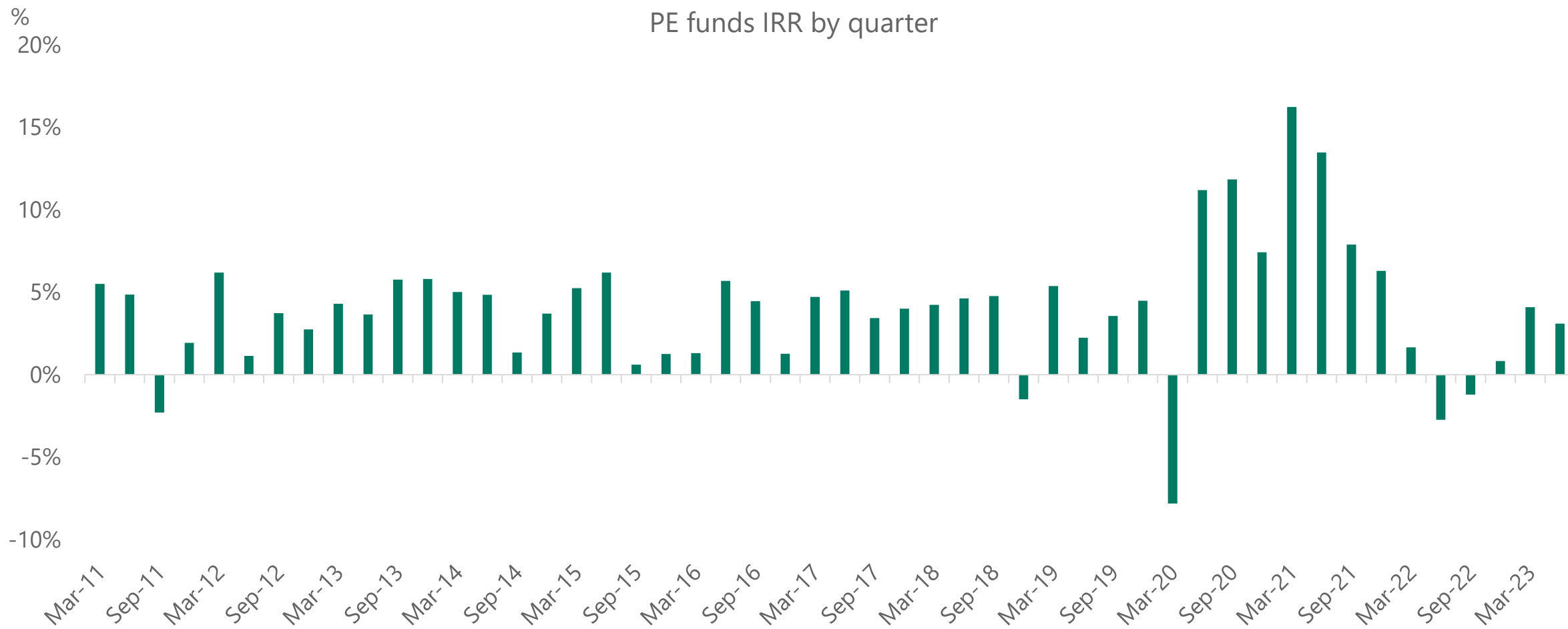
# PE exit activity falling



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> September 2023

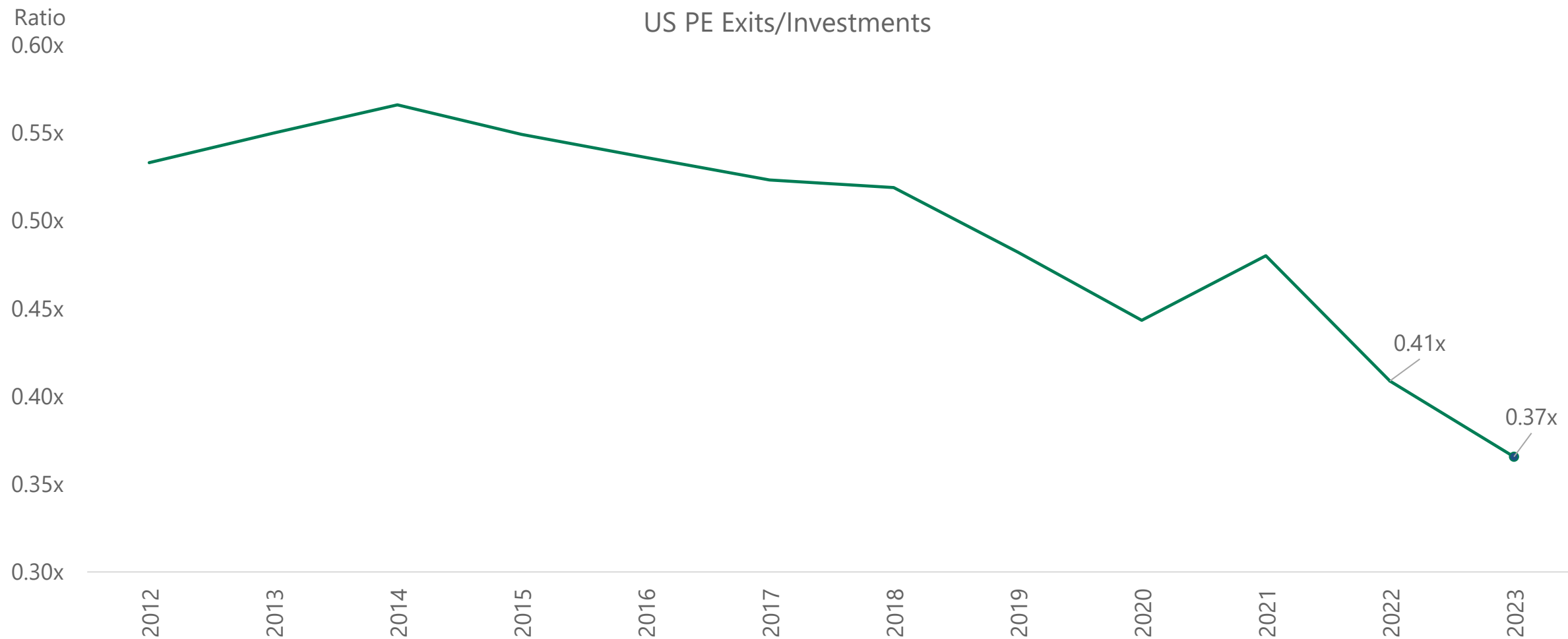


# PE funds IRR

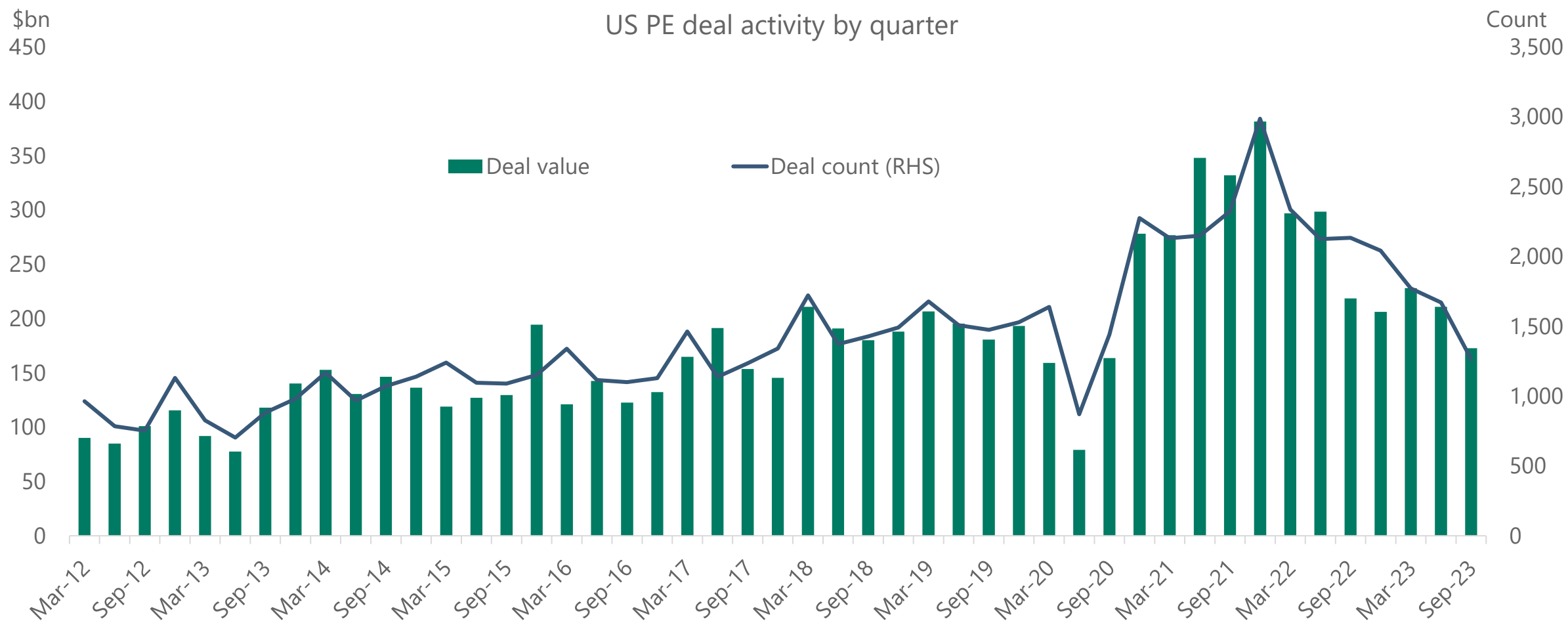


Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

# The exits to investments ratio is declining

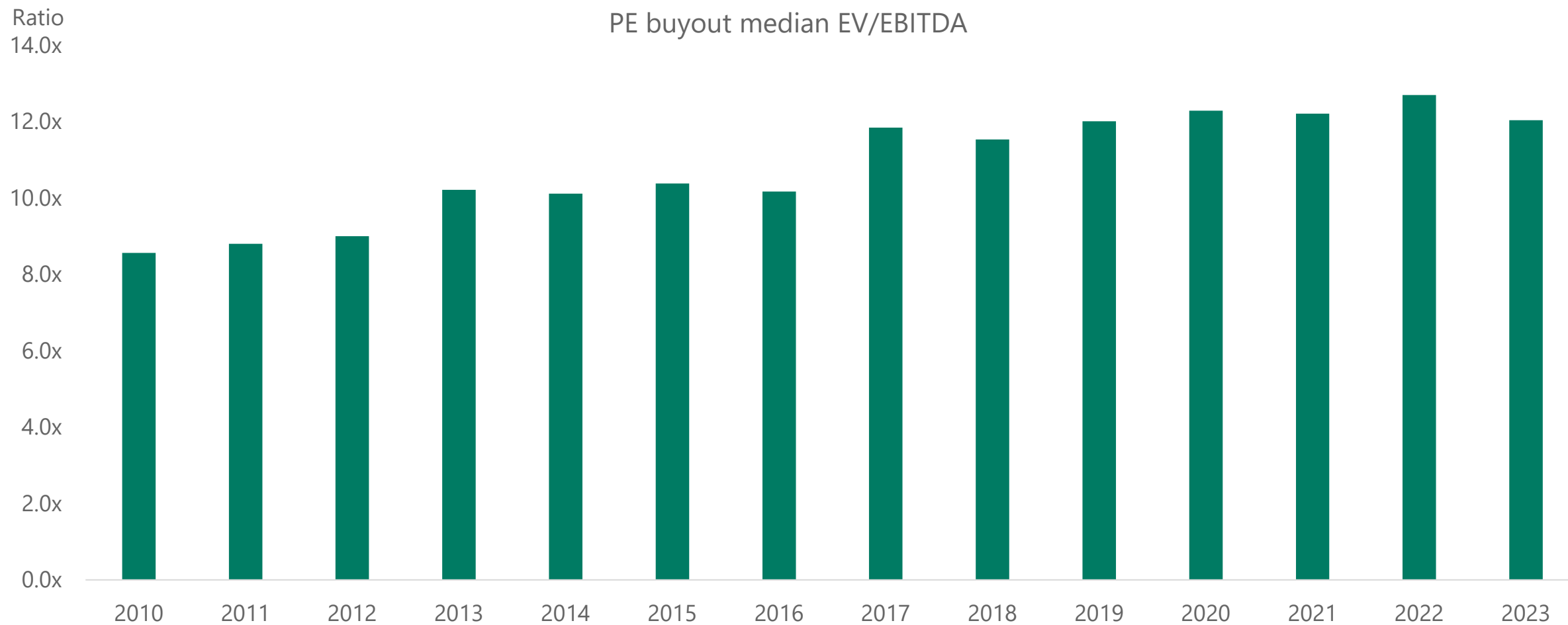


# US PE deal activity

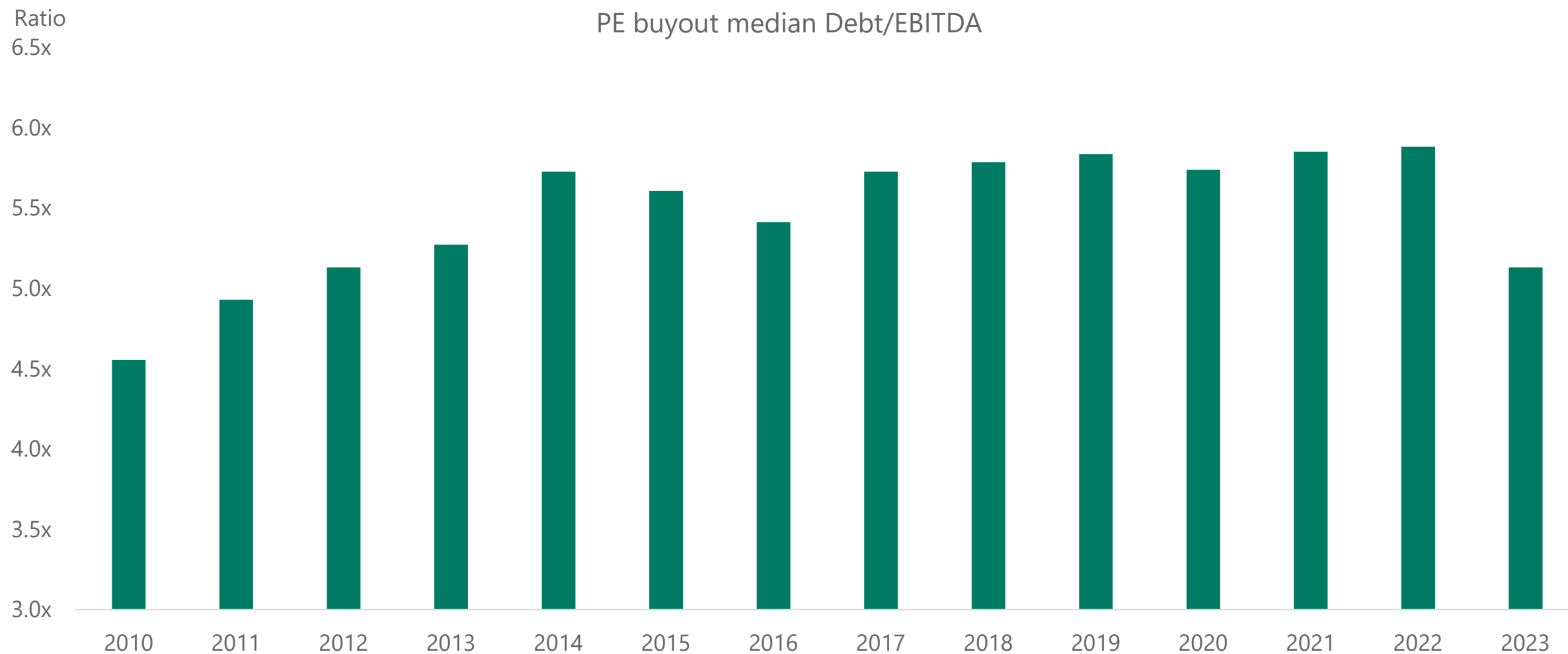


Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> September 2023

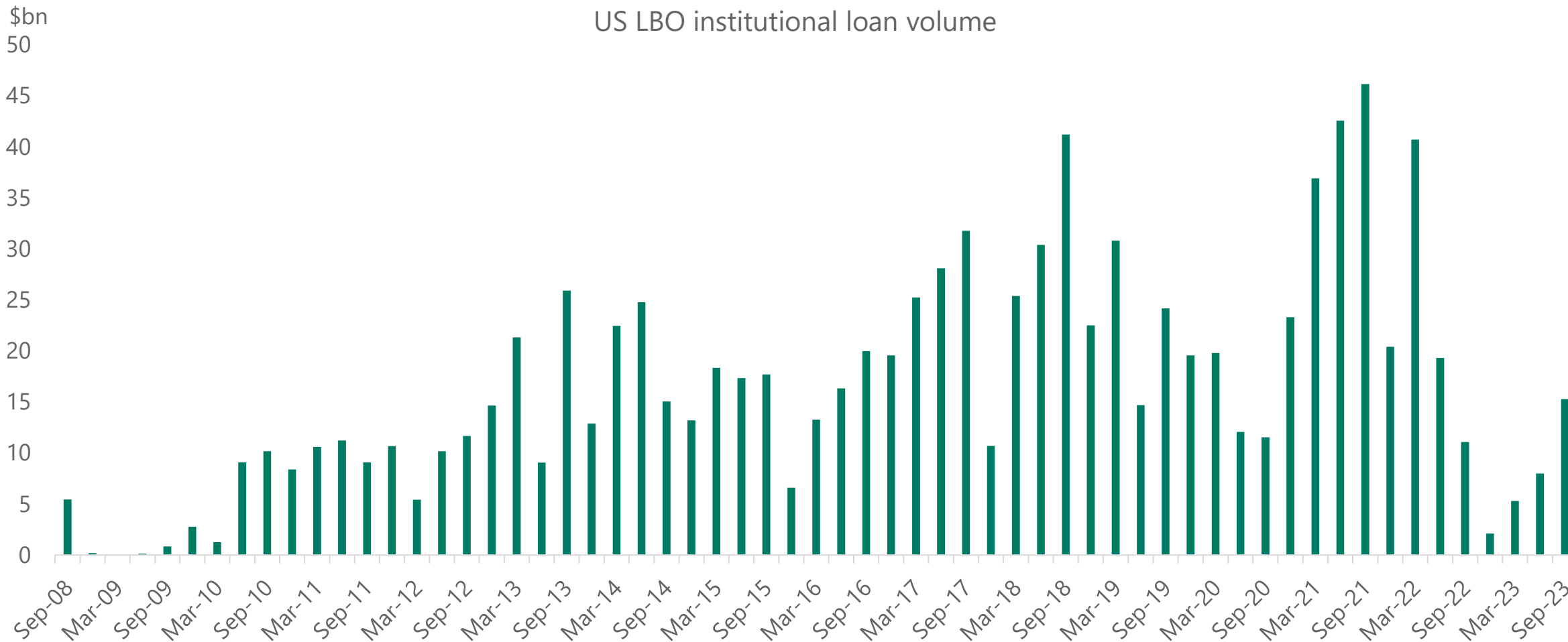
# Median EV/EBITDA ratio



# Median Debt/EBITDA has fallen in 2023



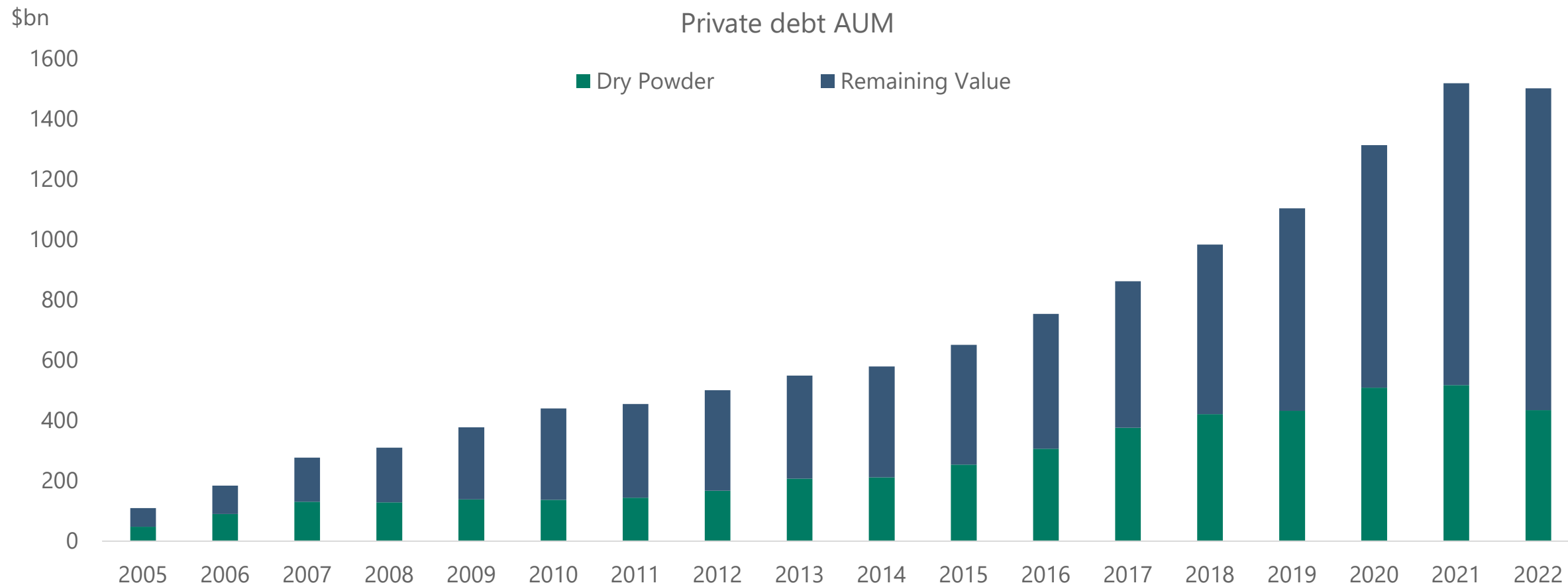
# LBO loan volume



Source: Pitchbook, LCD Apollo Chief Economist. Note: Data as of 30<sup>th</sup> September 2023

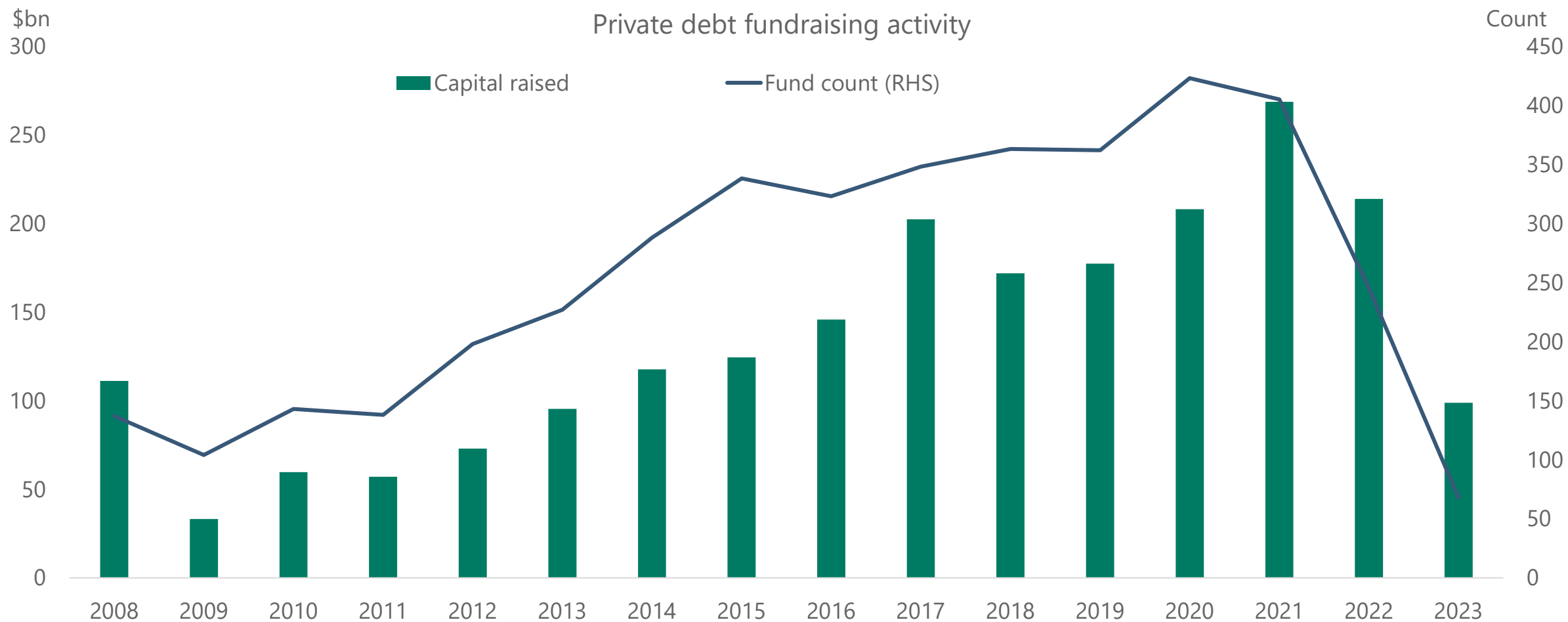
# Private credit

# About \$1.5trn in private credit globally, of which \$400bn is dry powder



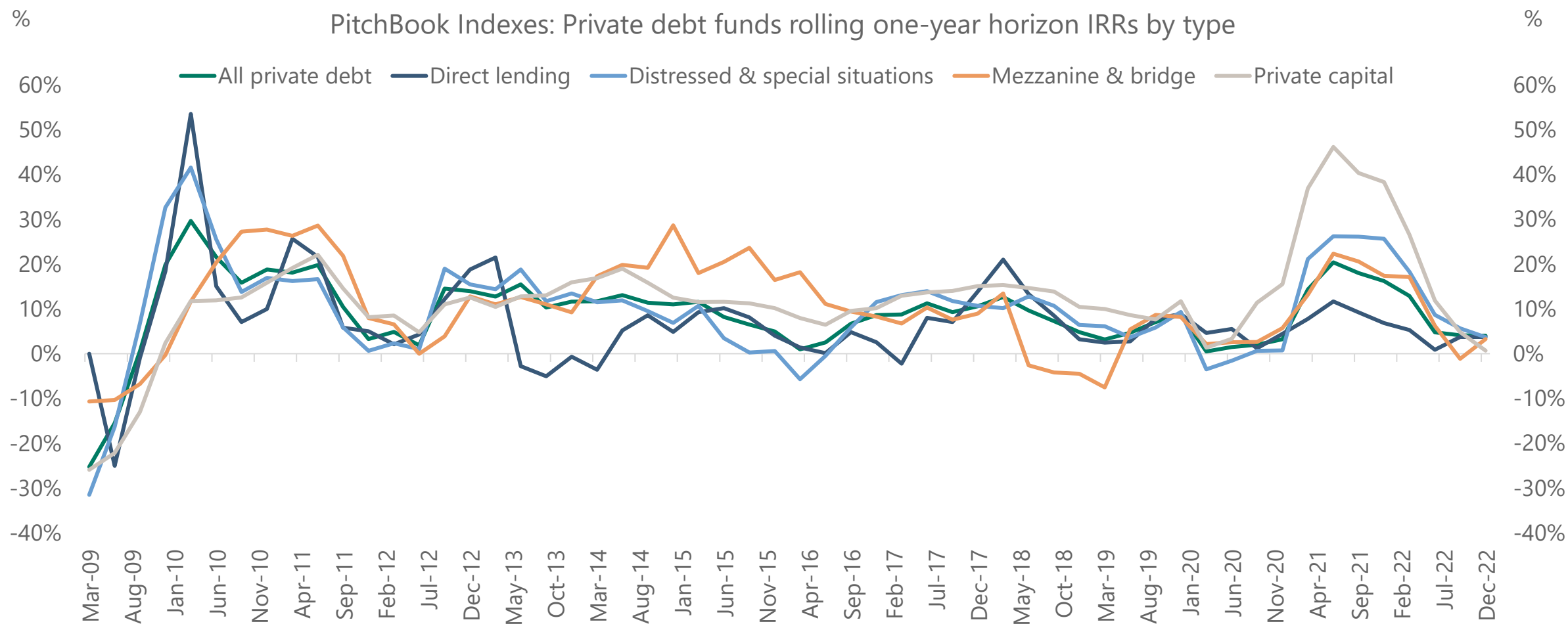


# Private debt fundraising



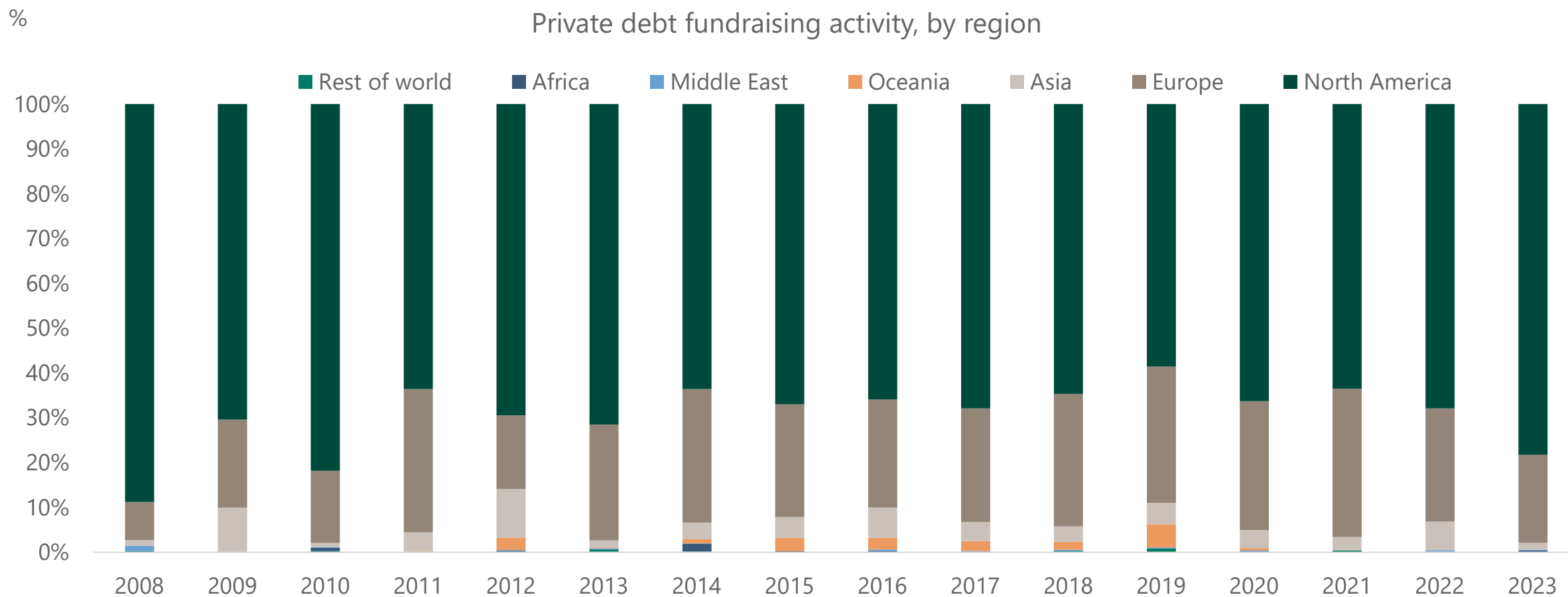
Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

# Private debt returns by strategy

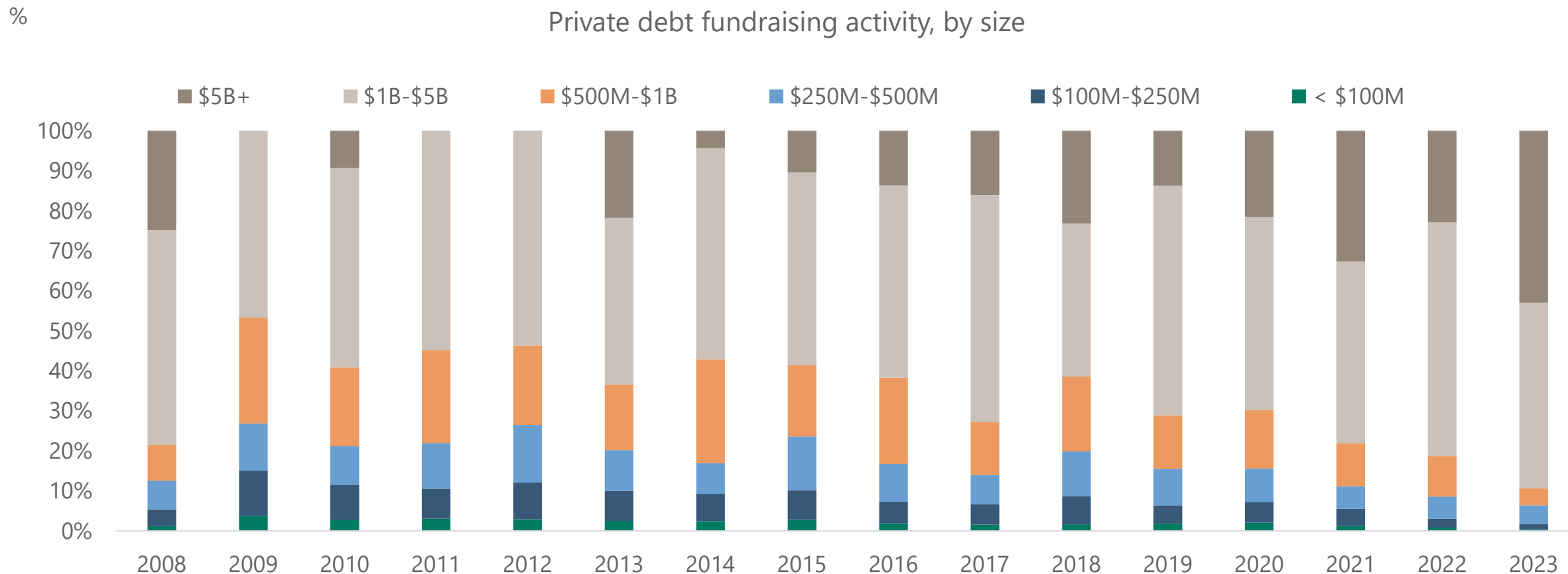


Source: Pitchbook, Apollo Chief Economist. Note: Data as of 31st December 2022

# Private debt fundraising activity, by region

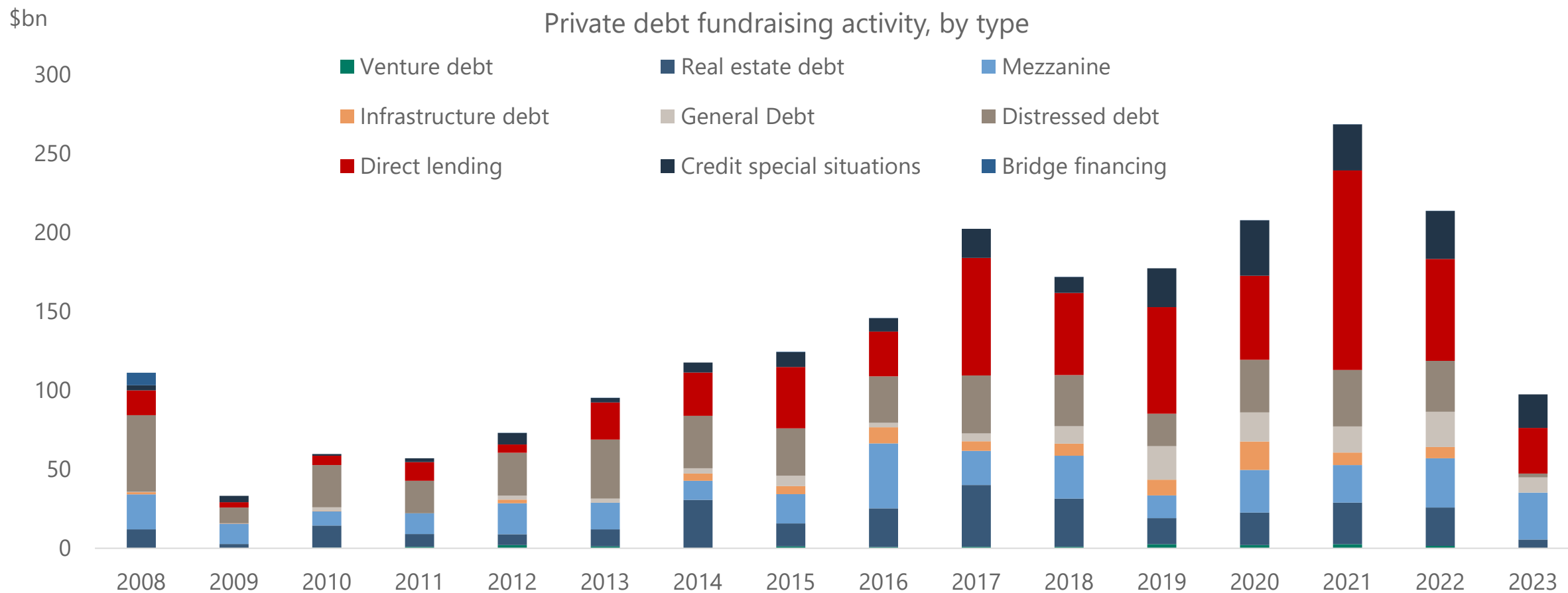


# Private debt fundraising activity, by size



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

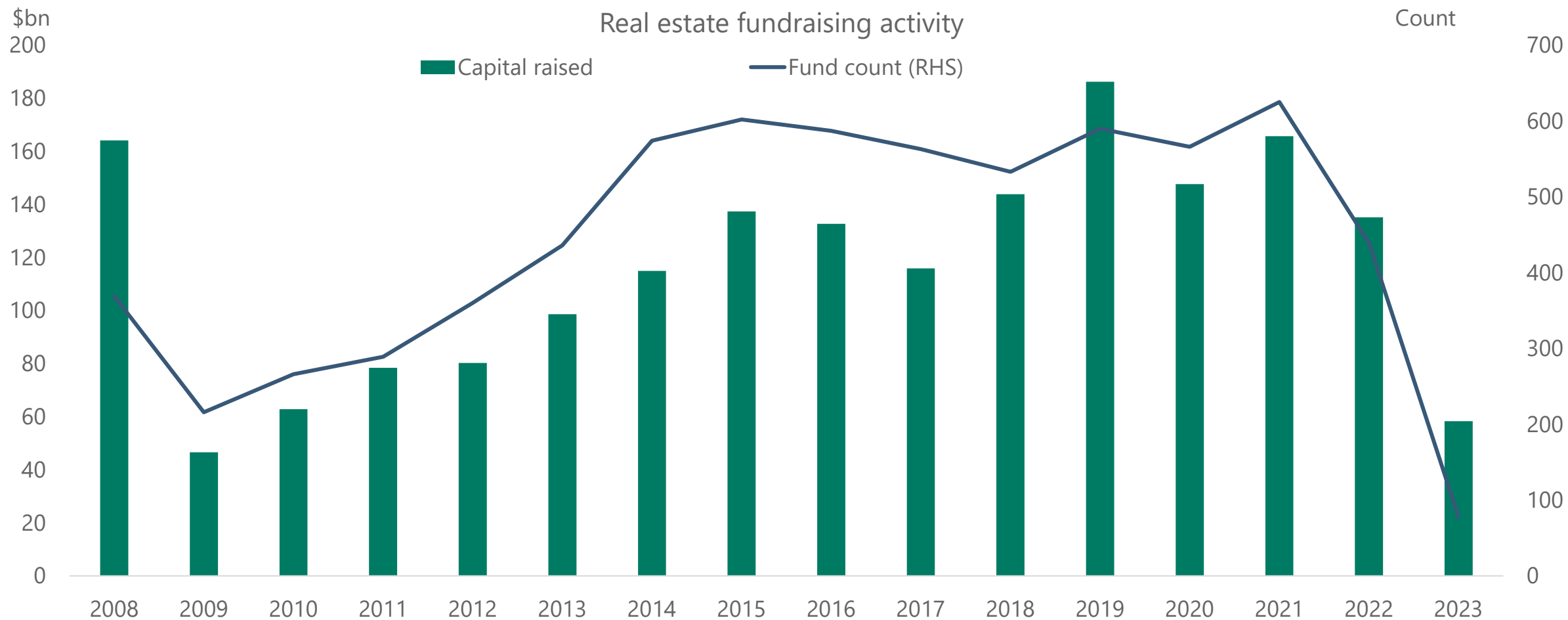
# Private debt fundraising activity, by type



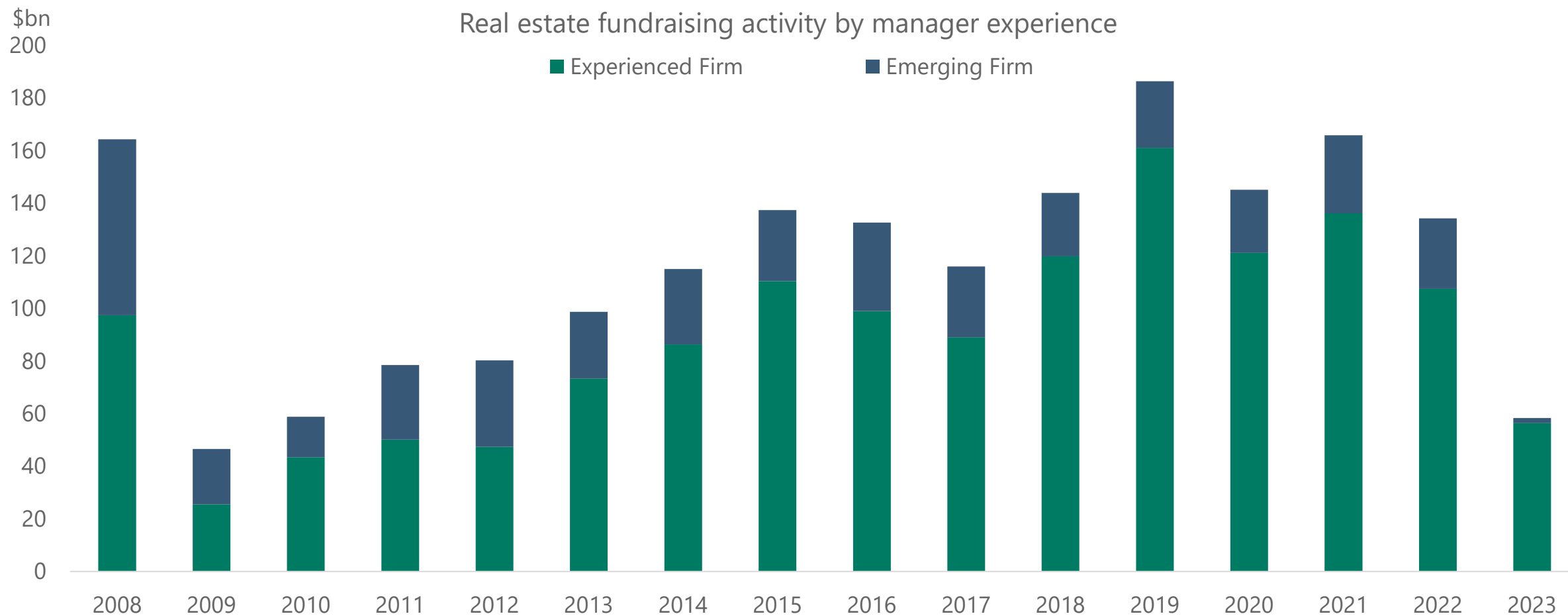
Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

Real estate

# Real estate fundraising activity

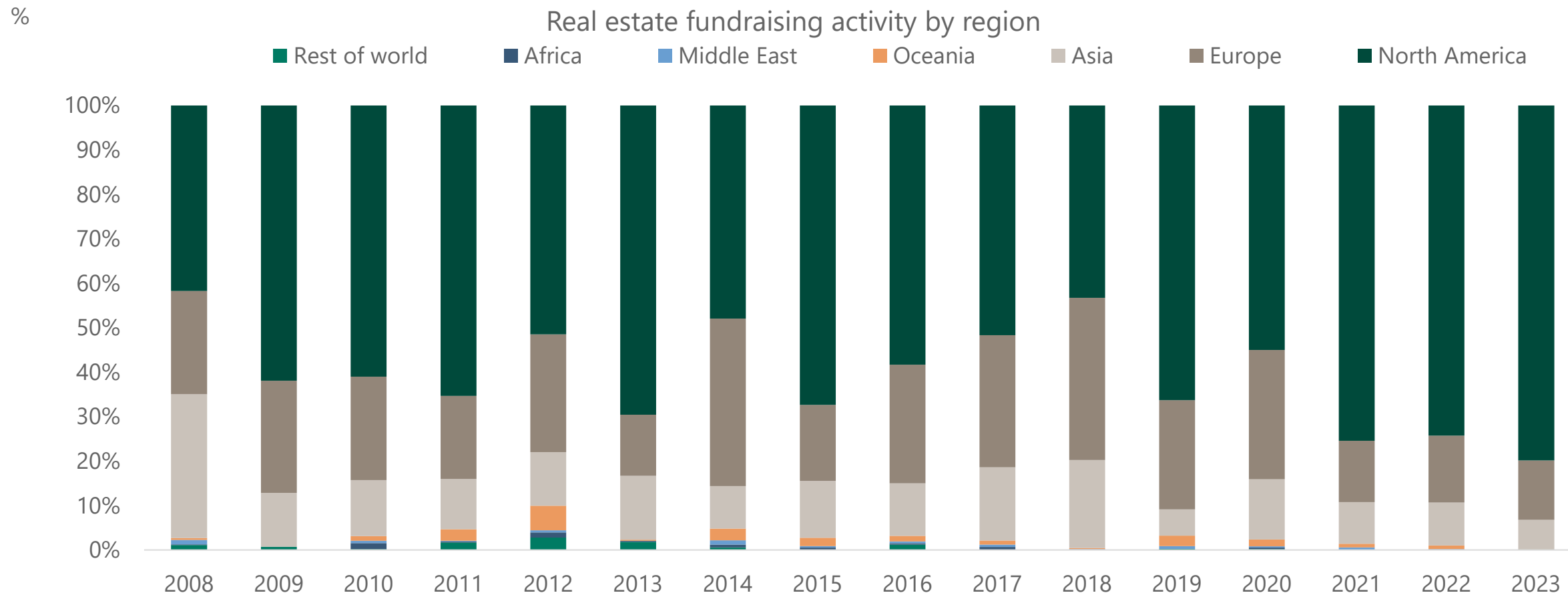


# Real estate fundraising led by experienced firms



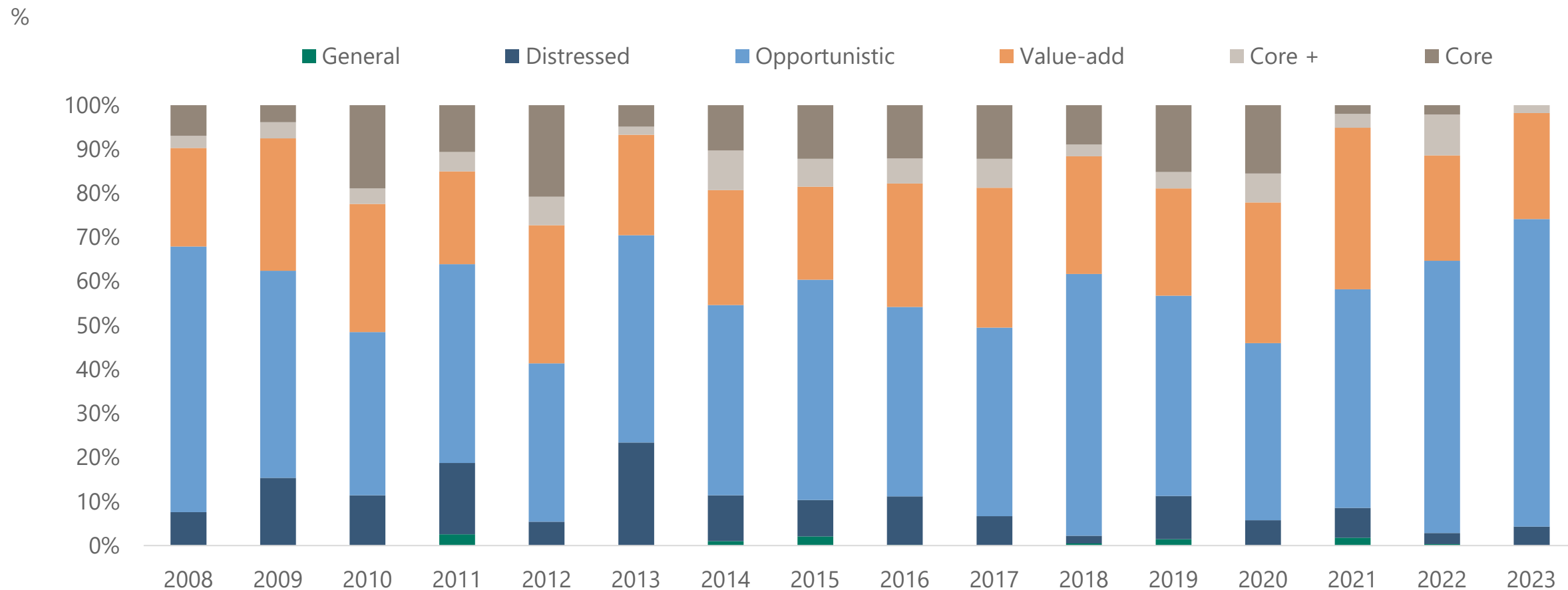


# 80% of real estate fundraising is in North America



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

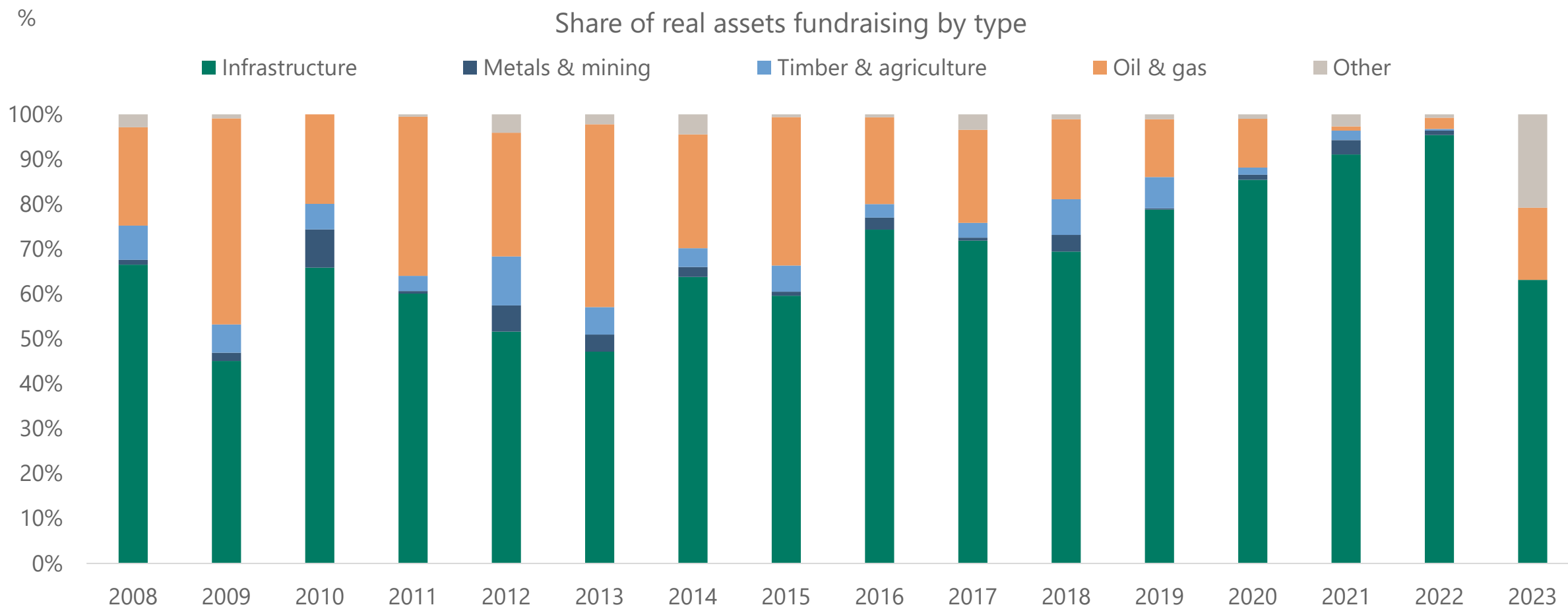
# Real estate fundraising activity by type



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

Real assets

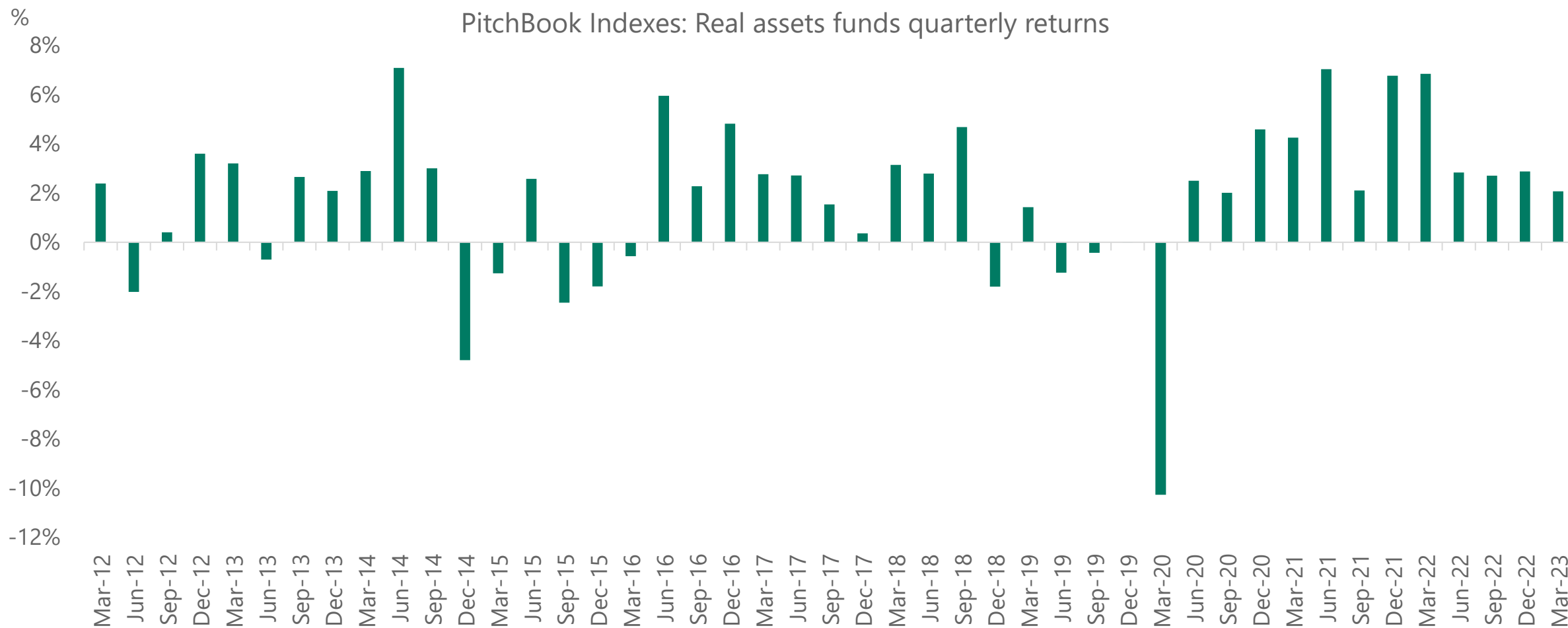
# Real assets is mainly infrastructure



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

# Real assets performance

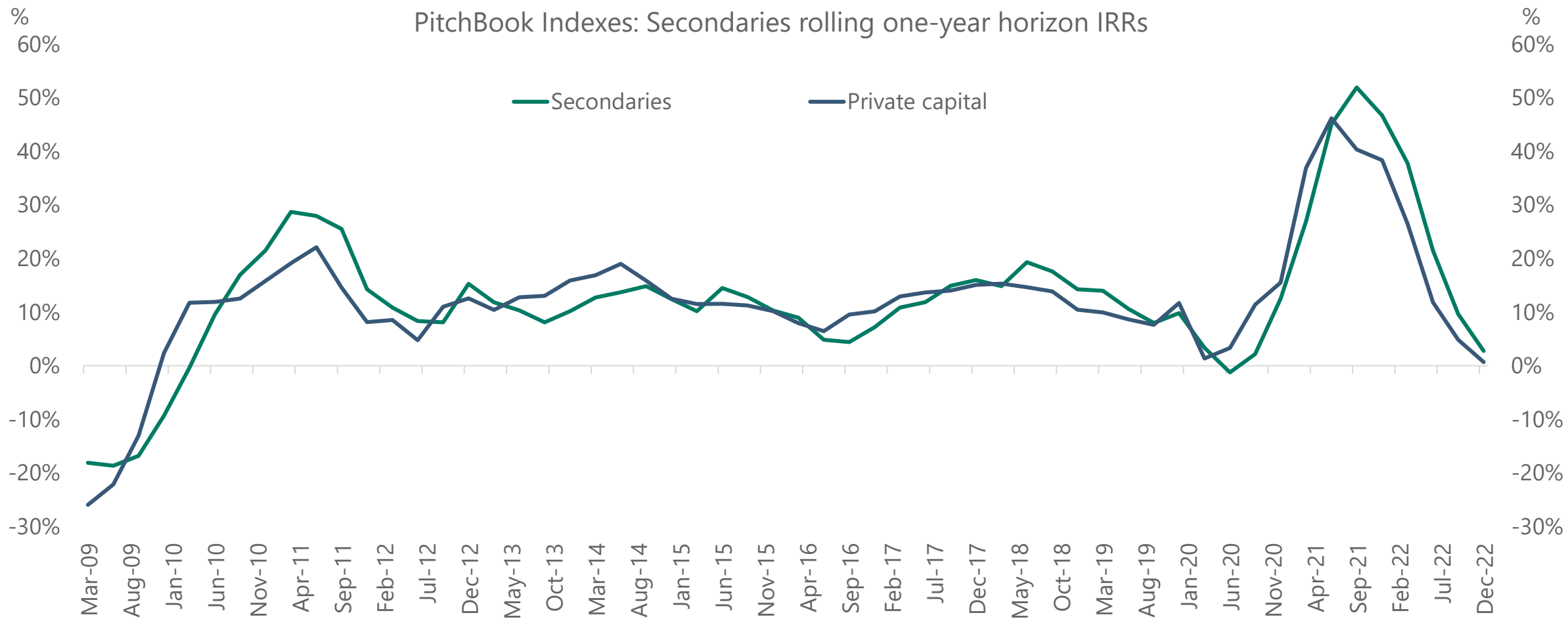
PitchBook Indexes: Real assets funds quarterly returns



Source: Pitchbook, Apollo Chief Economist. Note: Q12023 preliminary figure

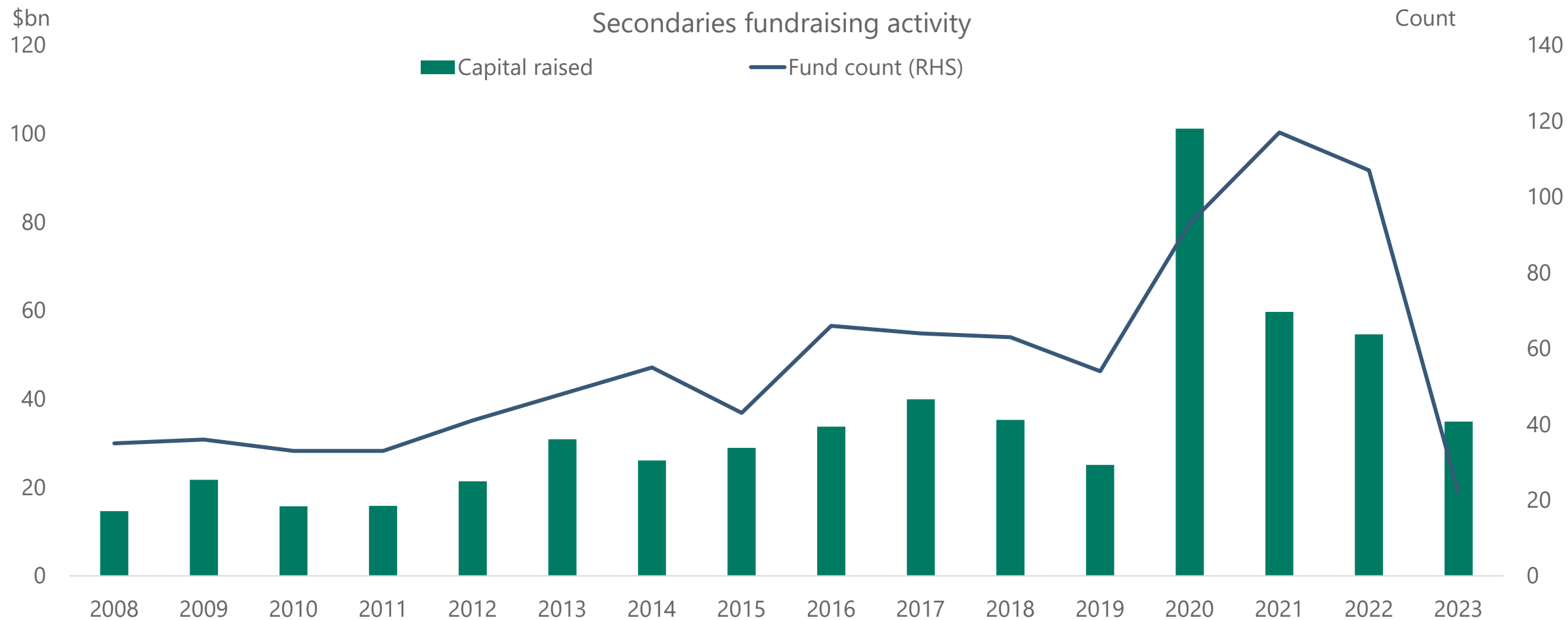
# Secondaries

# Secondaries performance



Source: Pitchbook, Apollo Chief Economist.

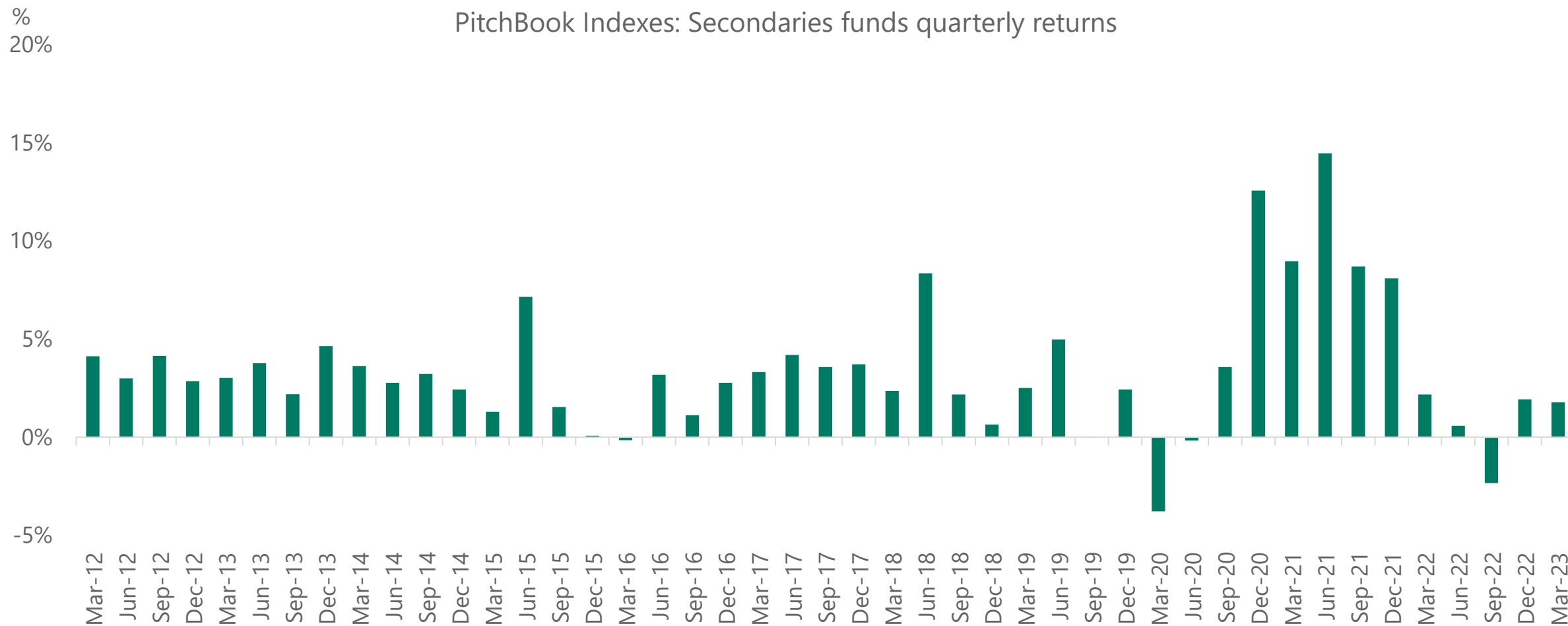
# Secondaries fundraising activity



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

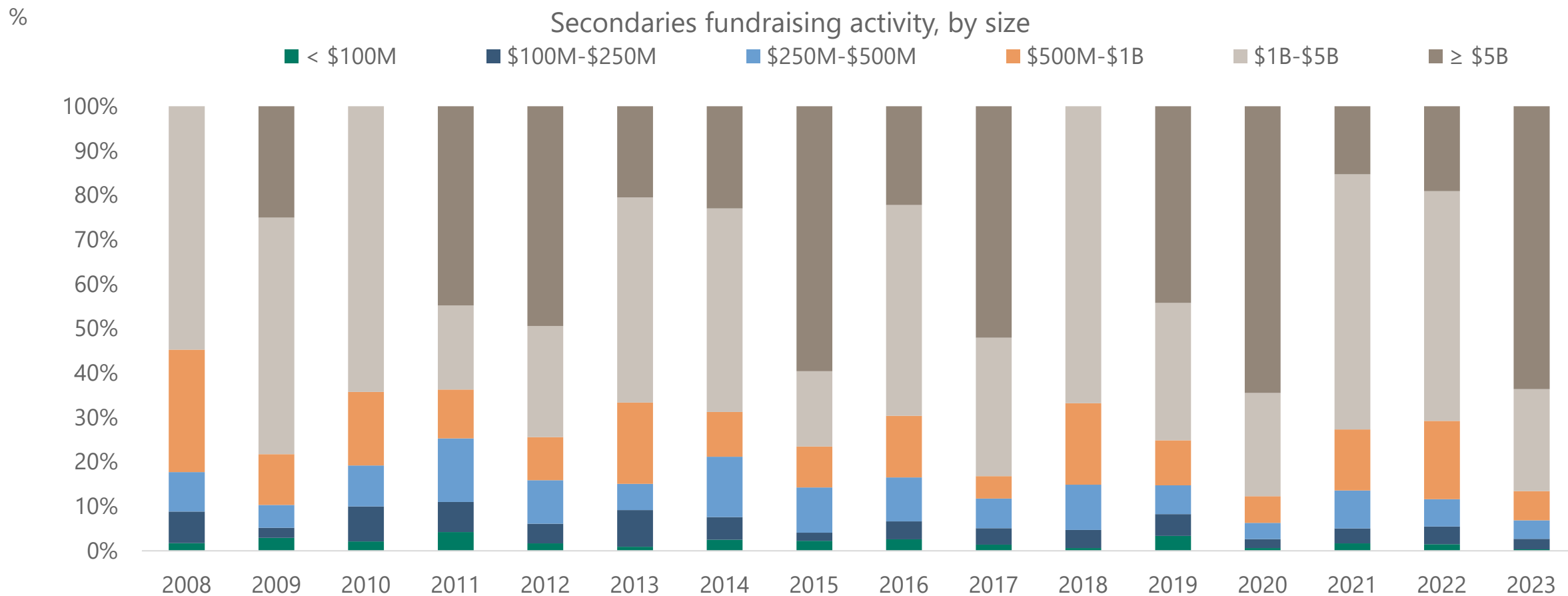


# Secondaries quarterly returns



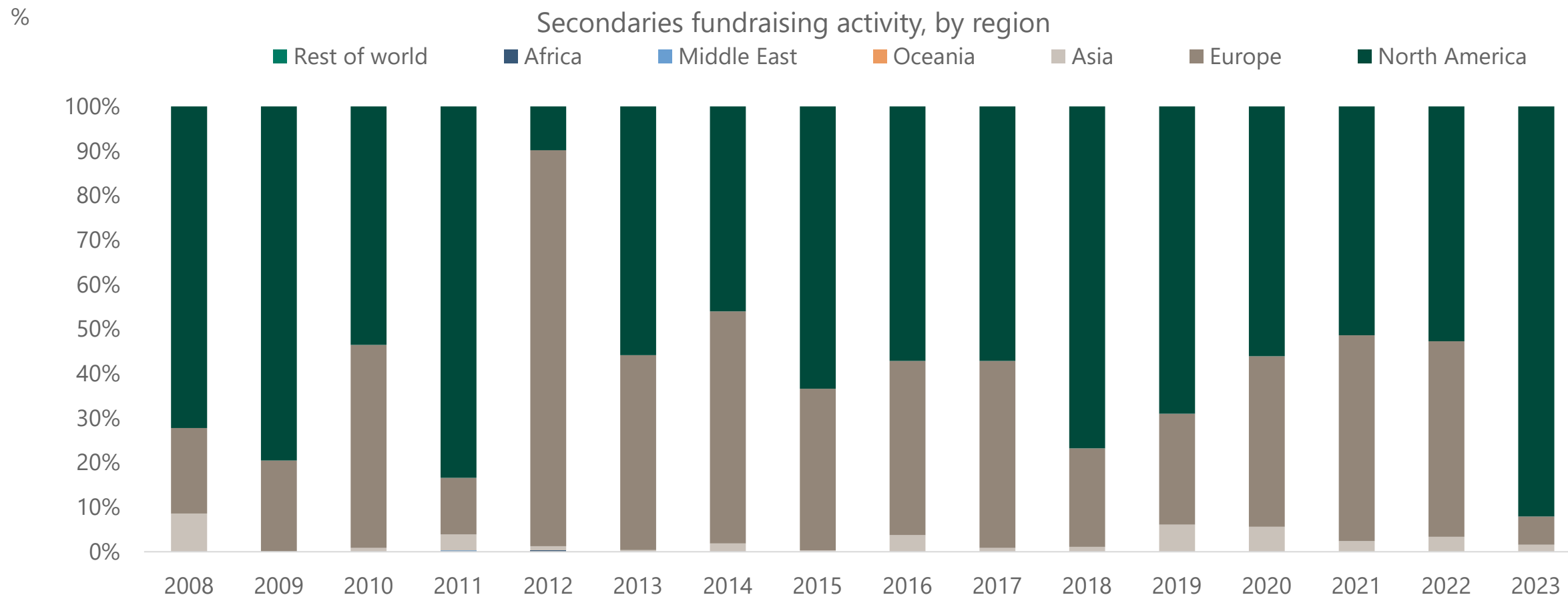
Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

# Secondaries fundraising activity, by size



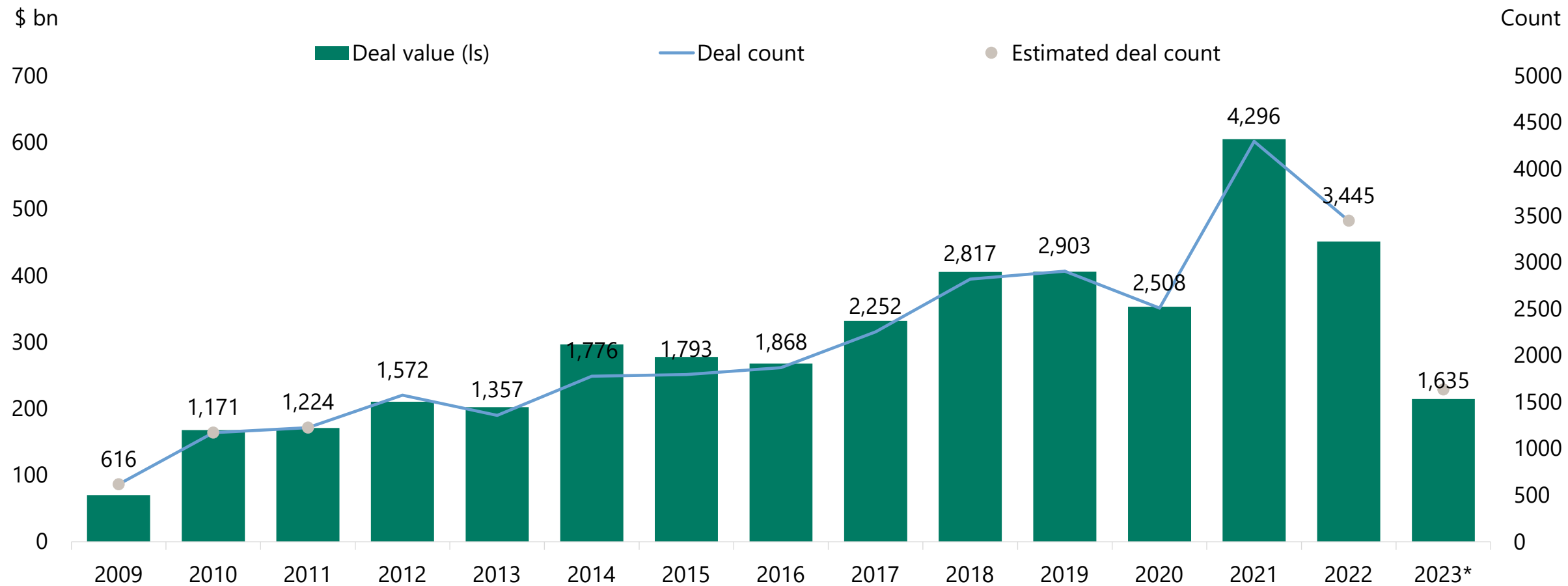
Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30<sup>th</sup> June 2023

# Secondaries fundraising activity, by region



# Middle Market

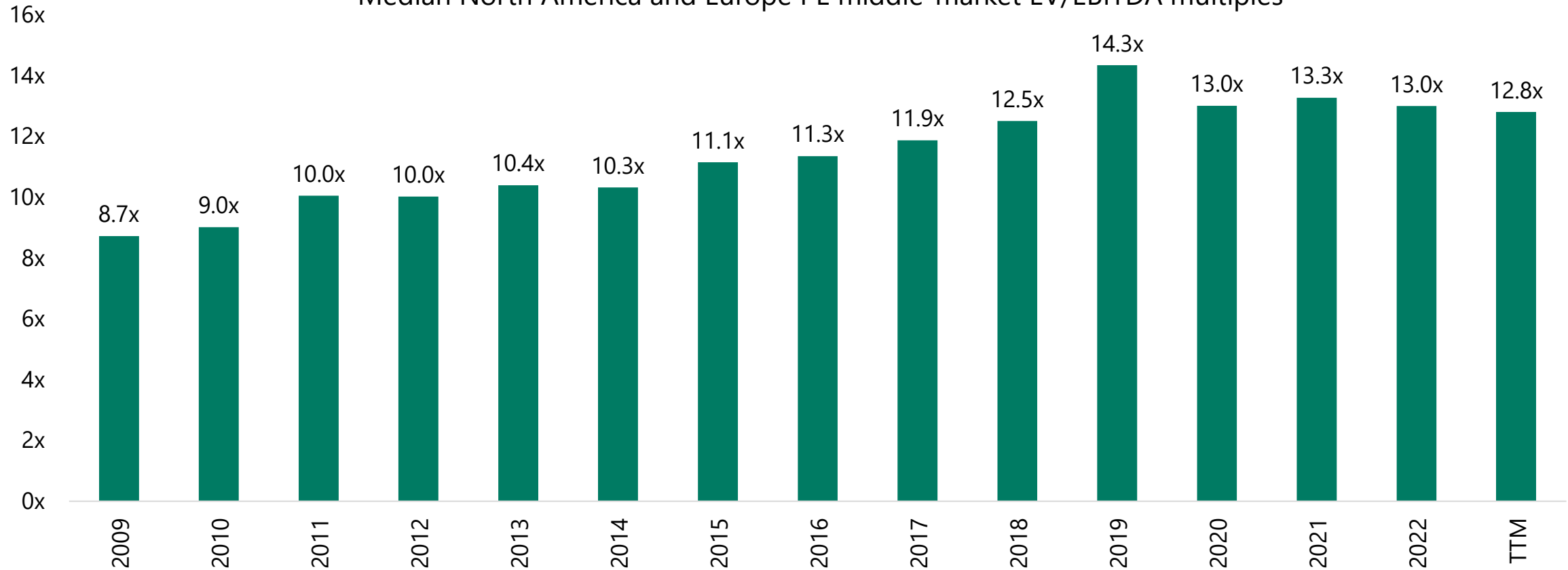
# US PE middle market deal activity



Source: Pitchbook, Apollo Chief Economist

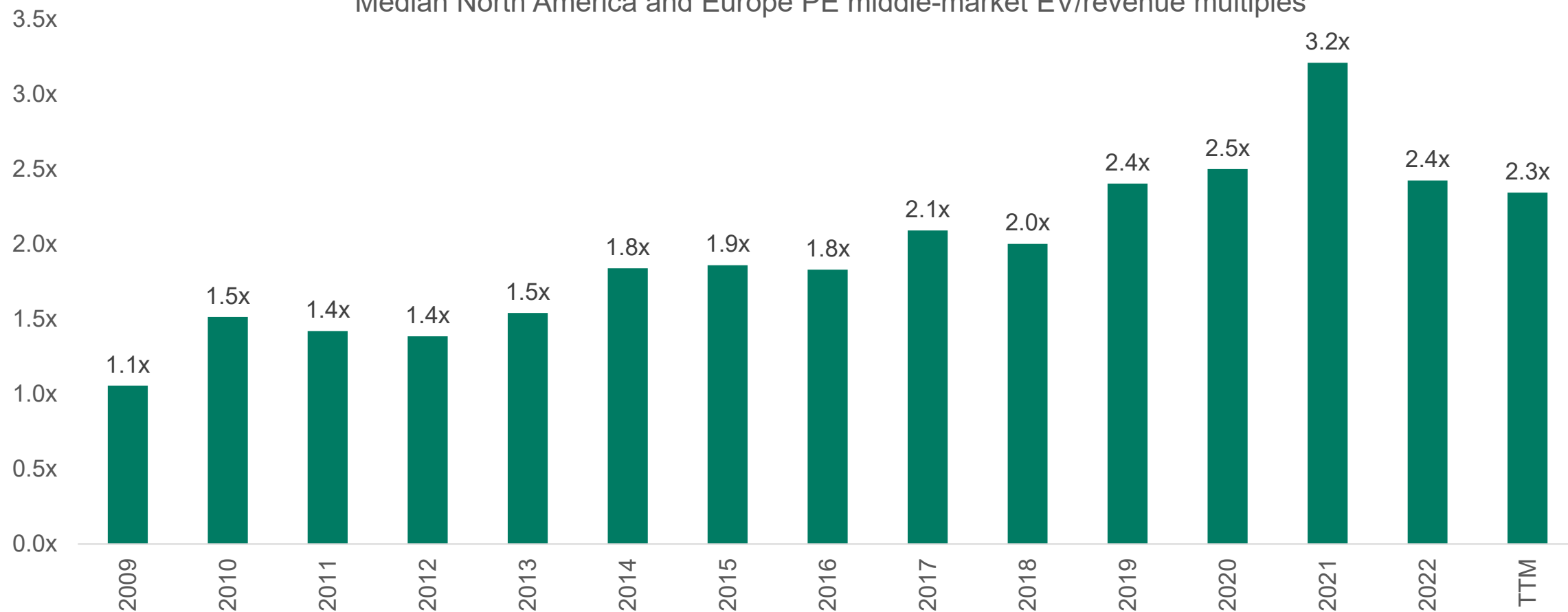
# Median North America and Europe PE middle-market EV/EBITDA multiples

Median North America and Europe PE middle-market EV/EBITDA multiples

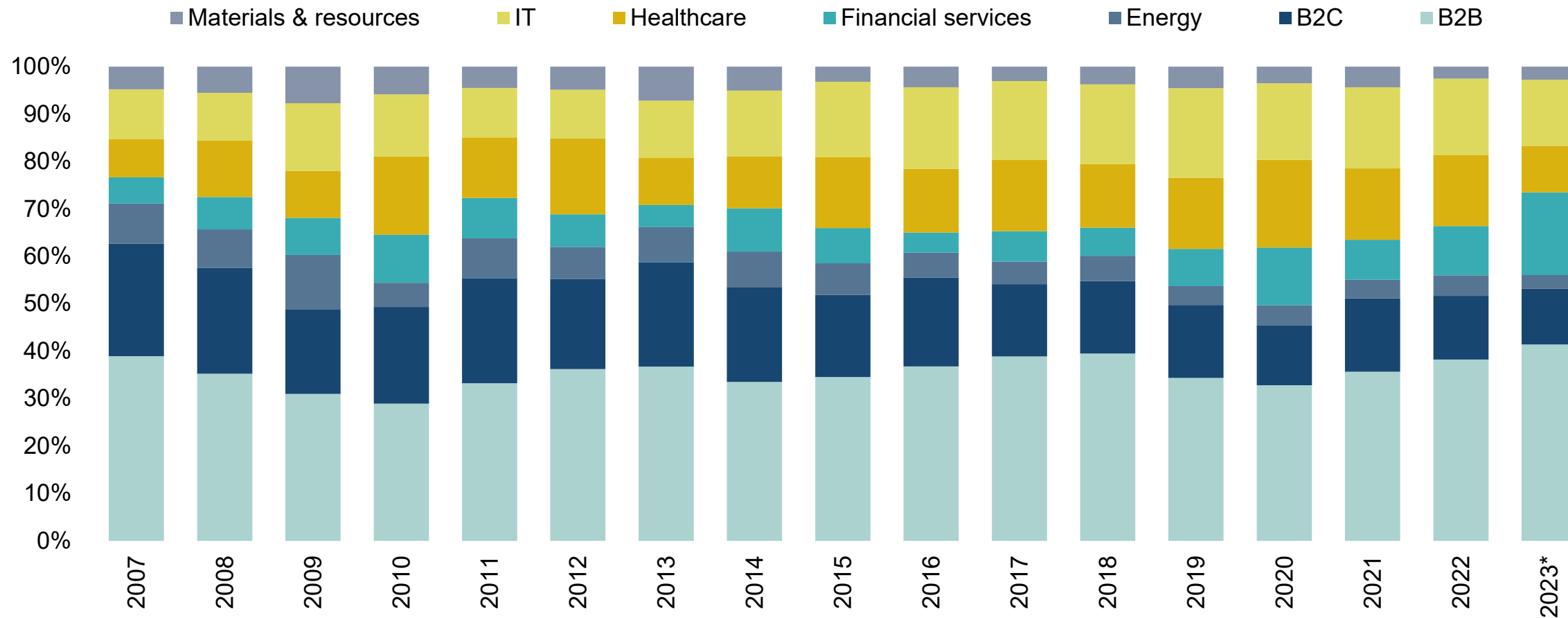


# Median North America and Europe PE middle-market EV/revenue multiples

Median North America and Europe PE middle-market EV/revenue multiples

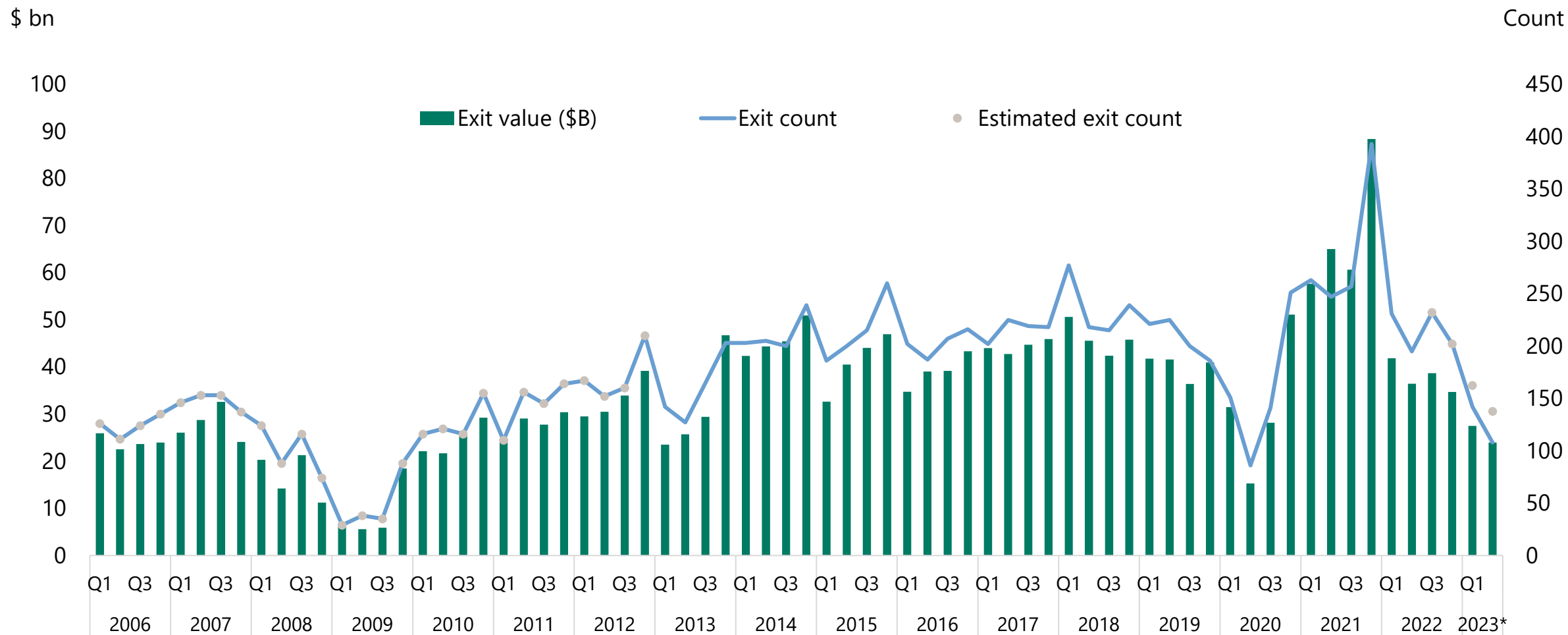


# Share of US PE middle-market deal value by sector

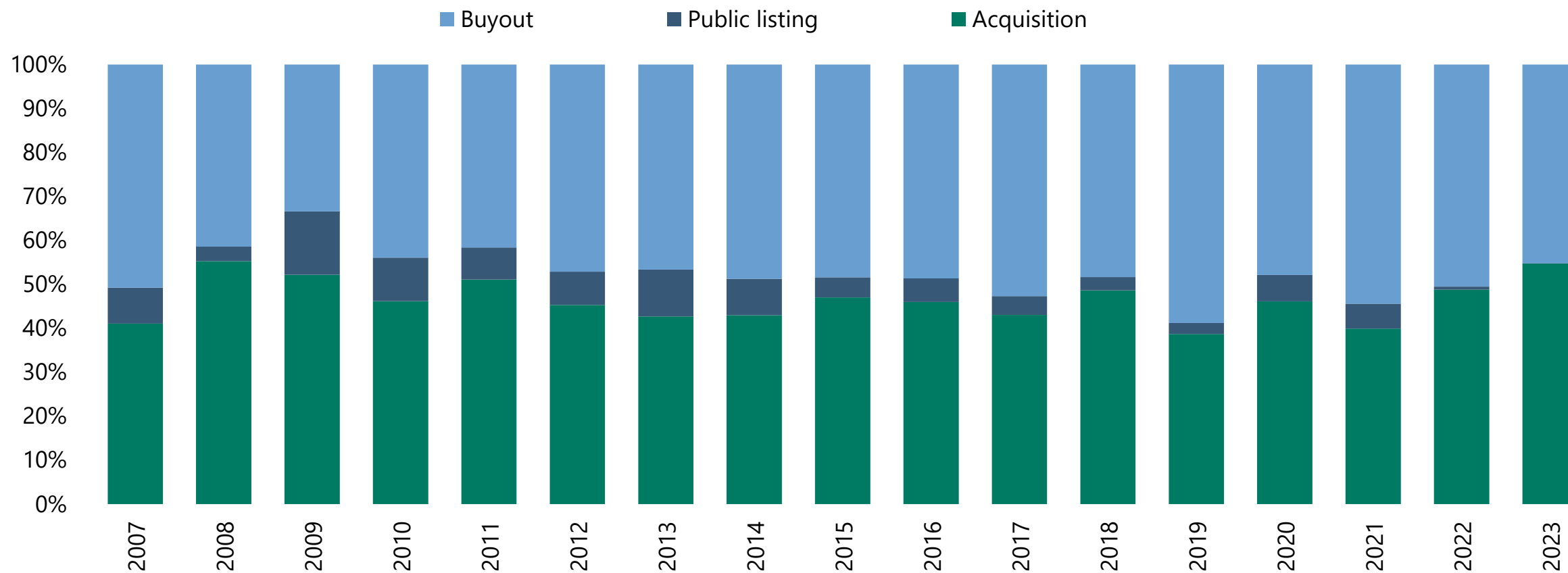




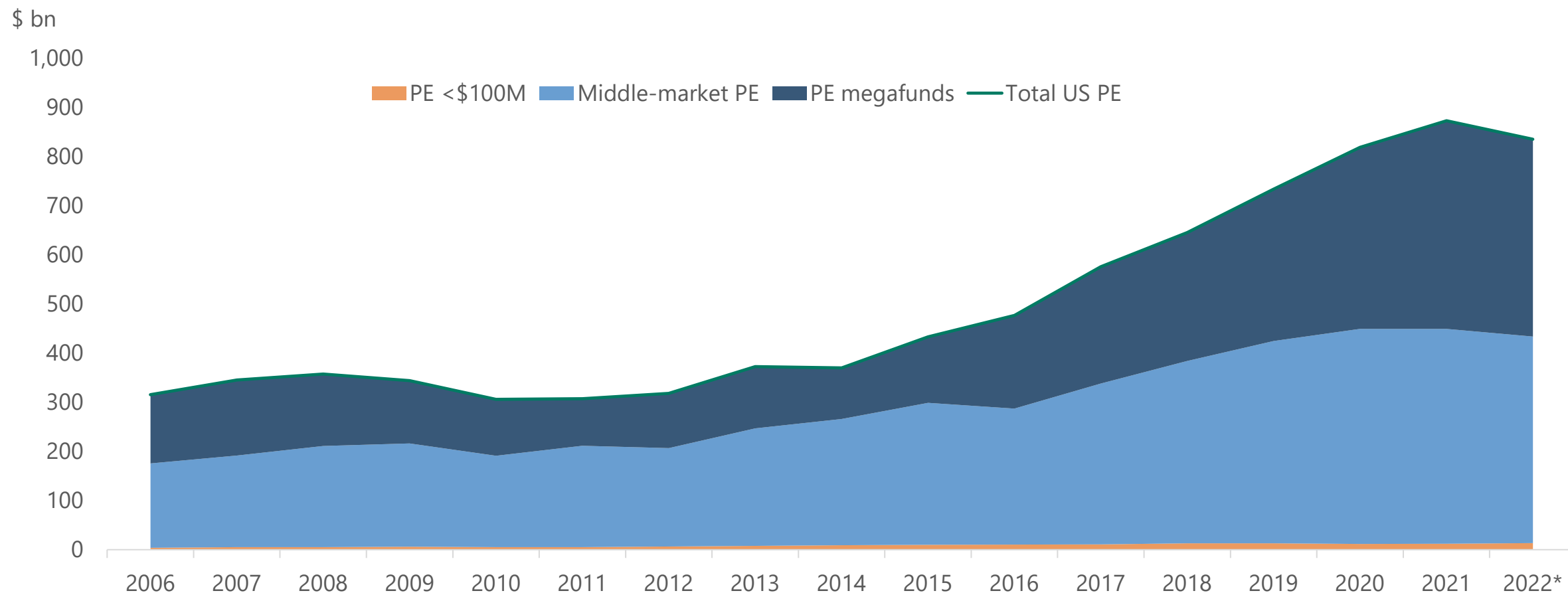
# US PE middle-market exit activity by quarter



# US PE middle-market exit value by type

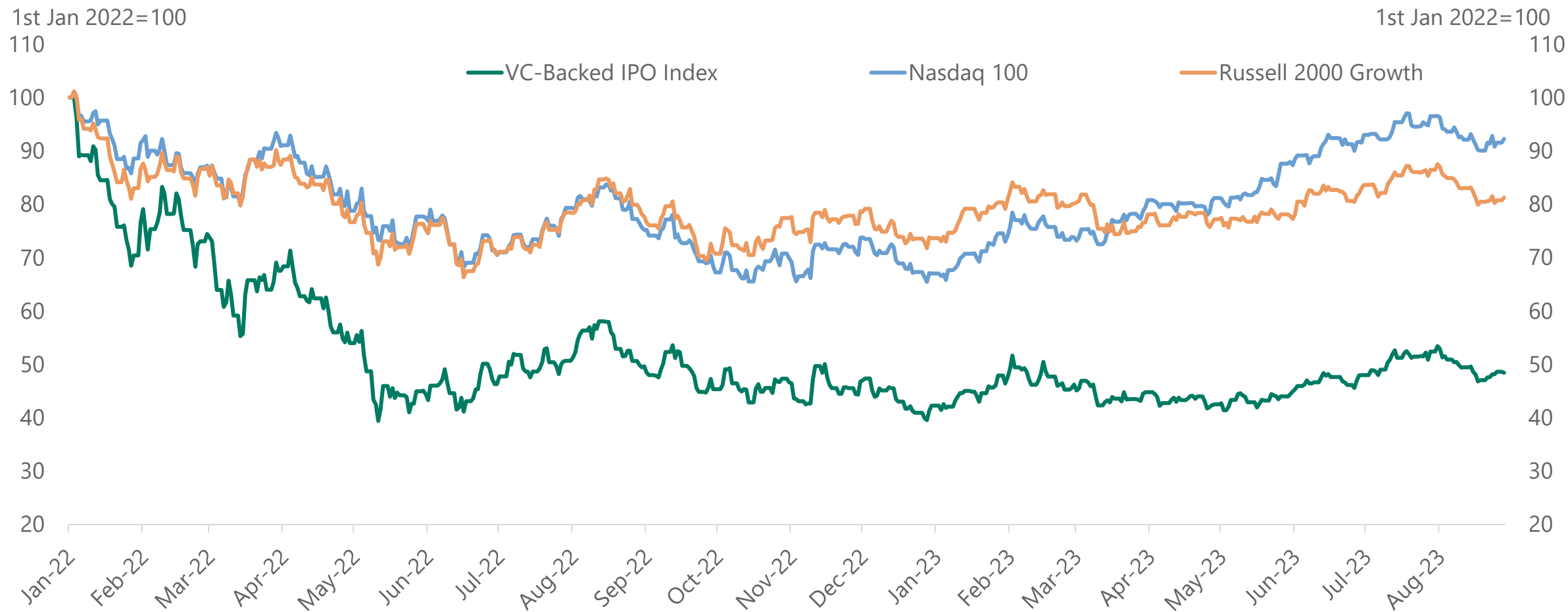


# The composition of PE dry powder

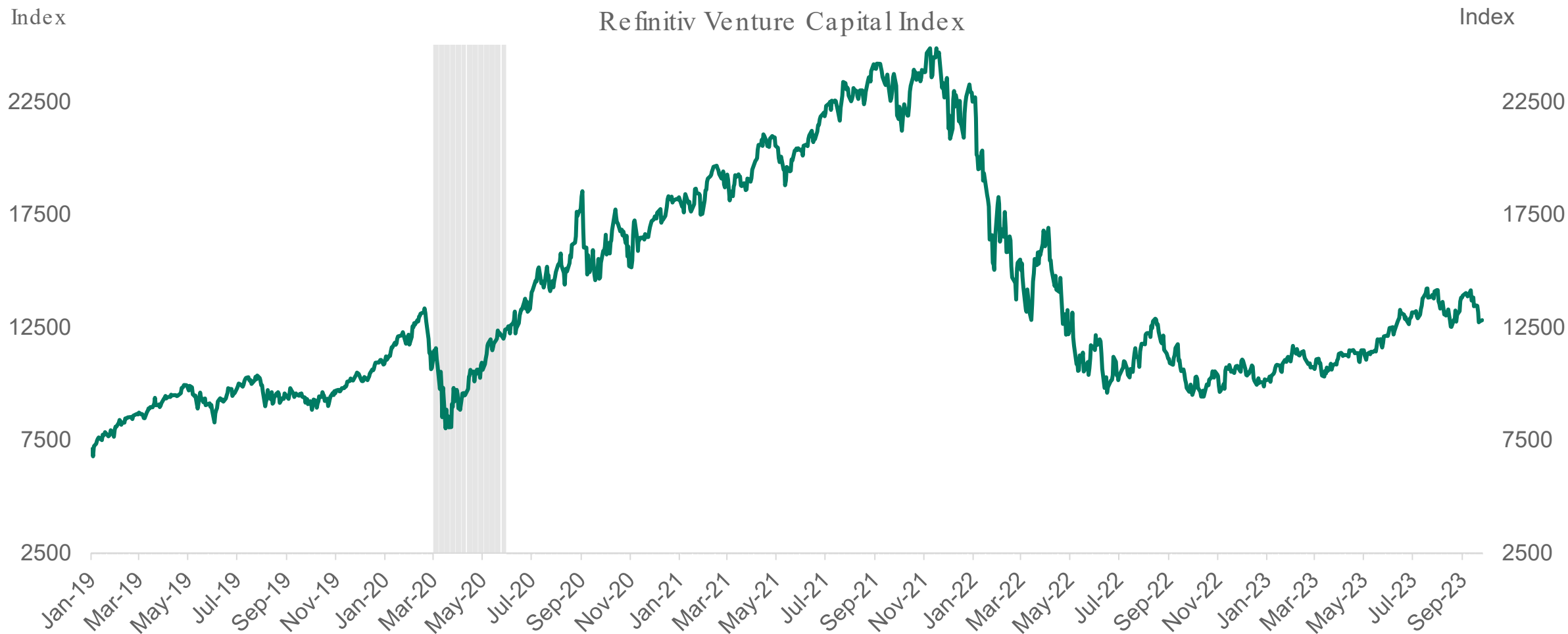


# Venture Capital

# VC-backed IPOs are down 50%

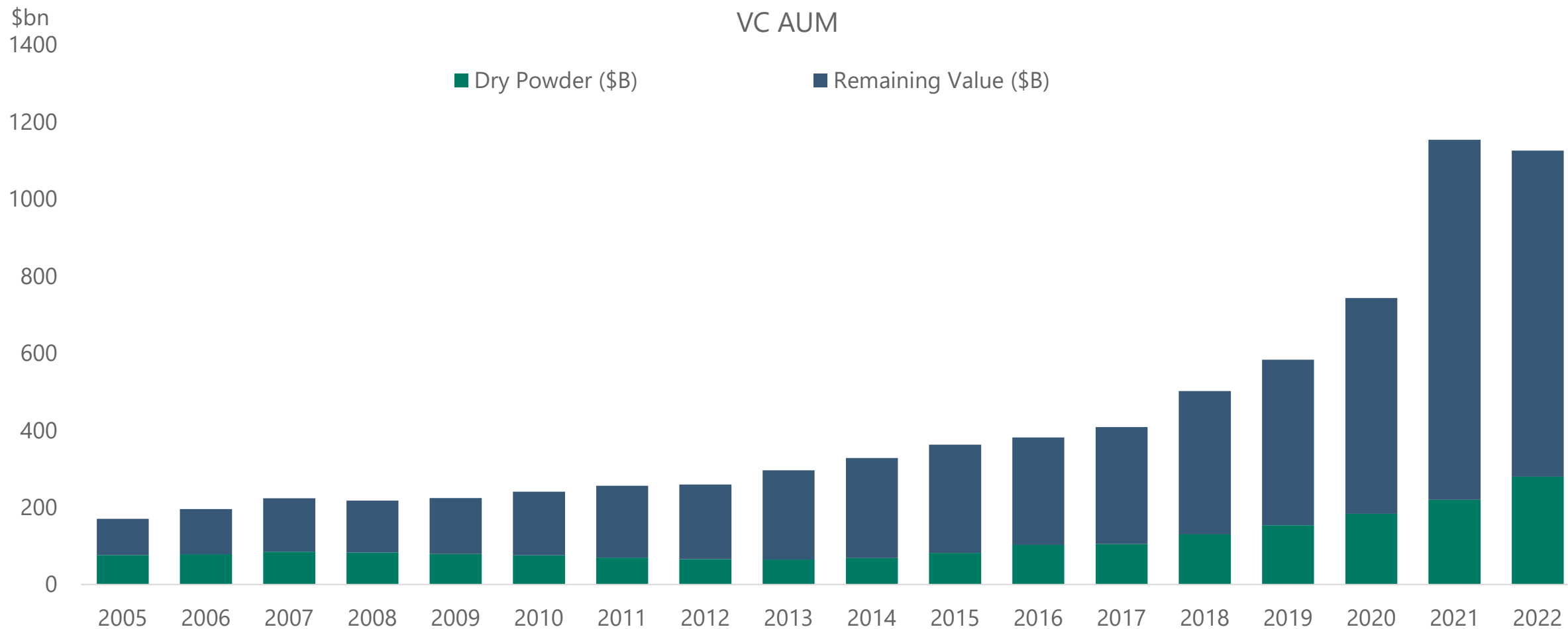


# US venture capital valuations down 50% from the peak



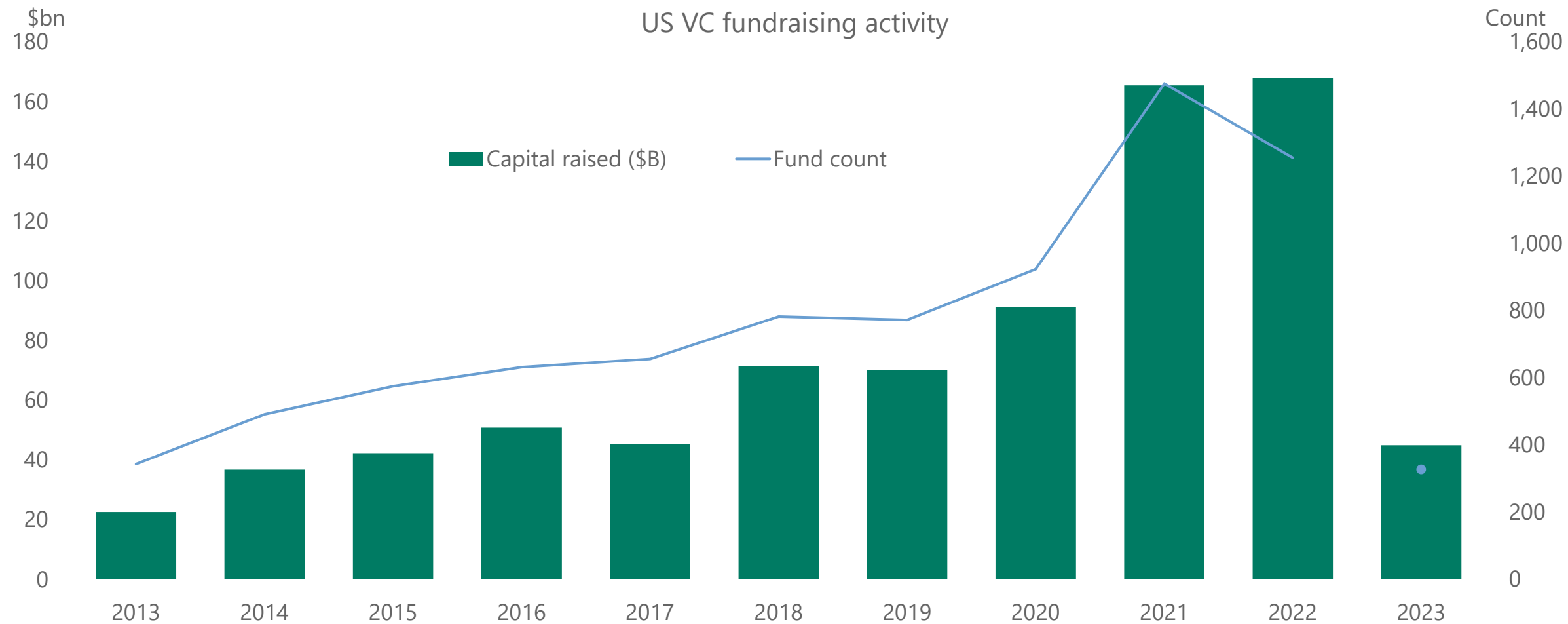
Source: Bloomberg, Apollo Chief Economist. Note: The Thomson Reuters Venture Capital Index is designed to measure the value of the US-based venture capital private company universe in which venture capital funds invest.

# VC assets under management



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 31/12/2022

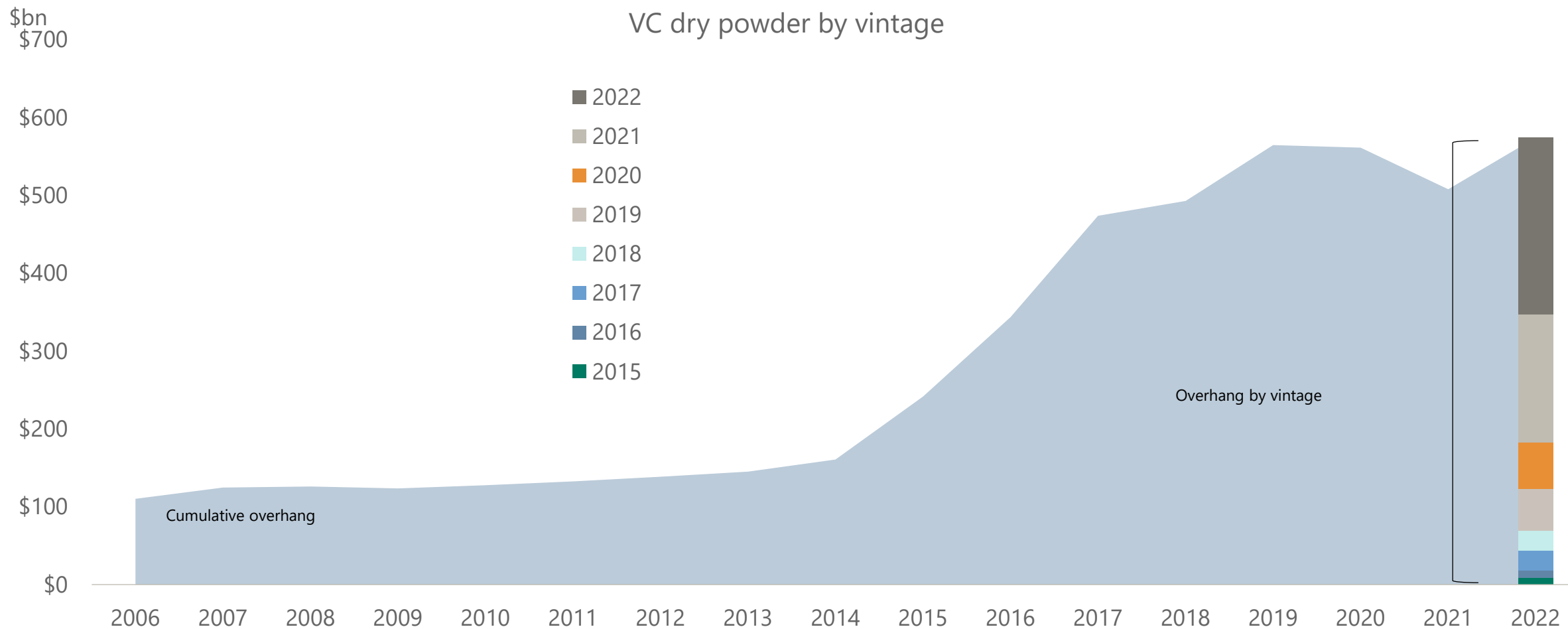
# VC fundraising activity very weak



Source: Pitchbook, Apollo Chief Economist. Note: Data as of 30/6/2023

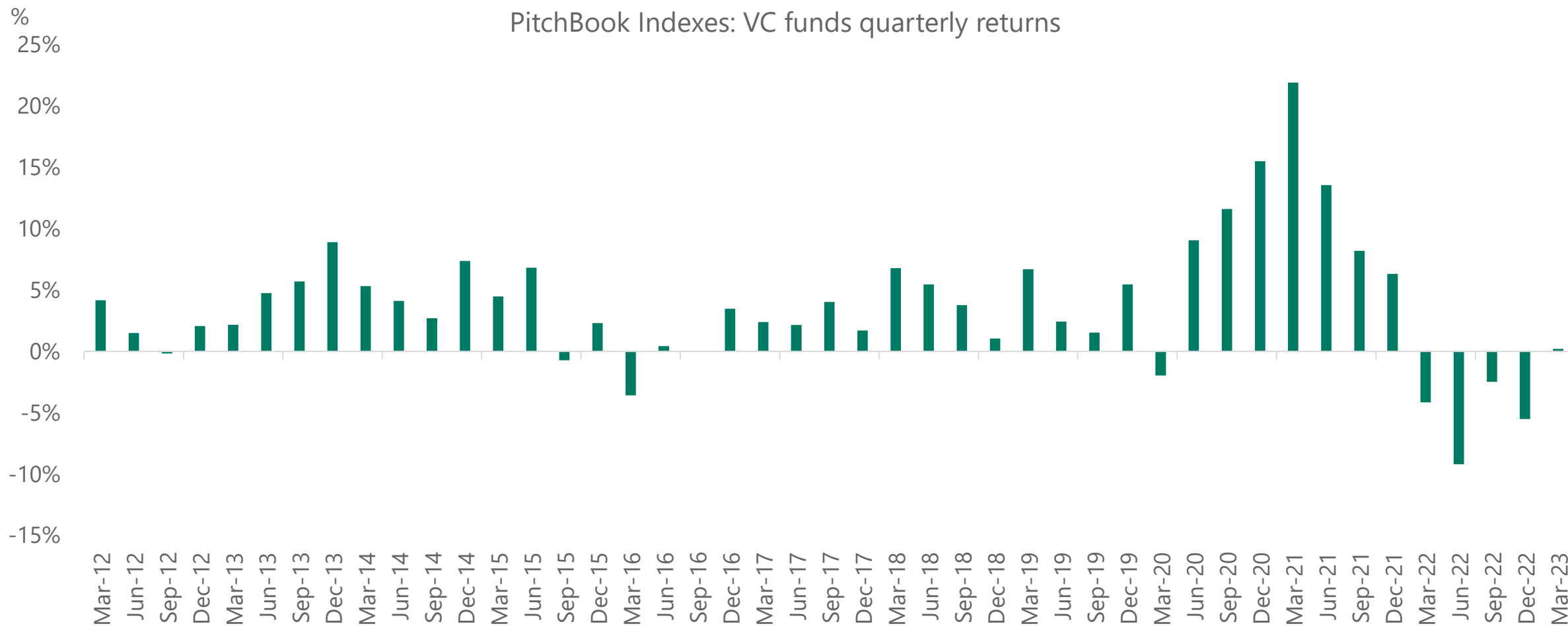


# VC dry powder by vintage



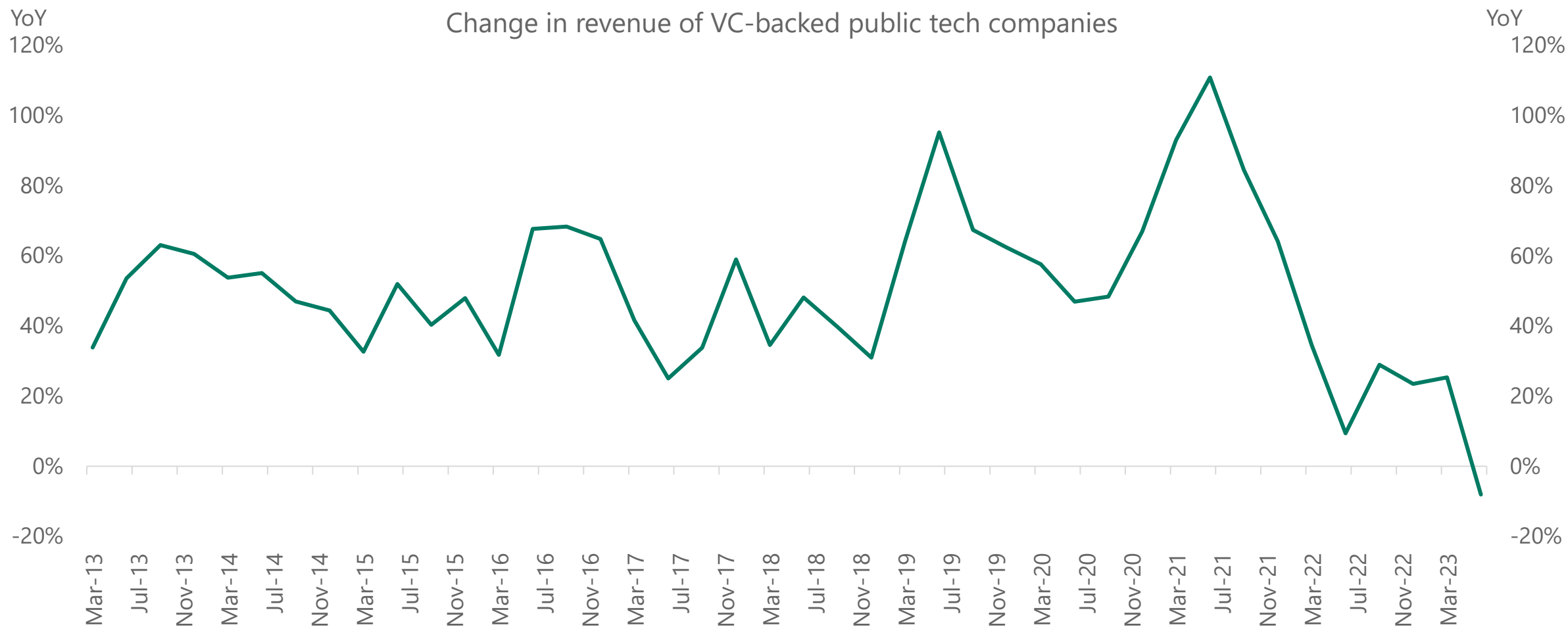
# VC returns negative

PitchBook Indexes: VC funds quarterly returns

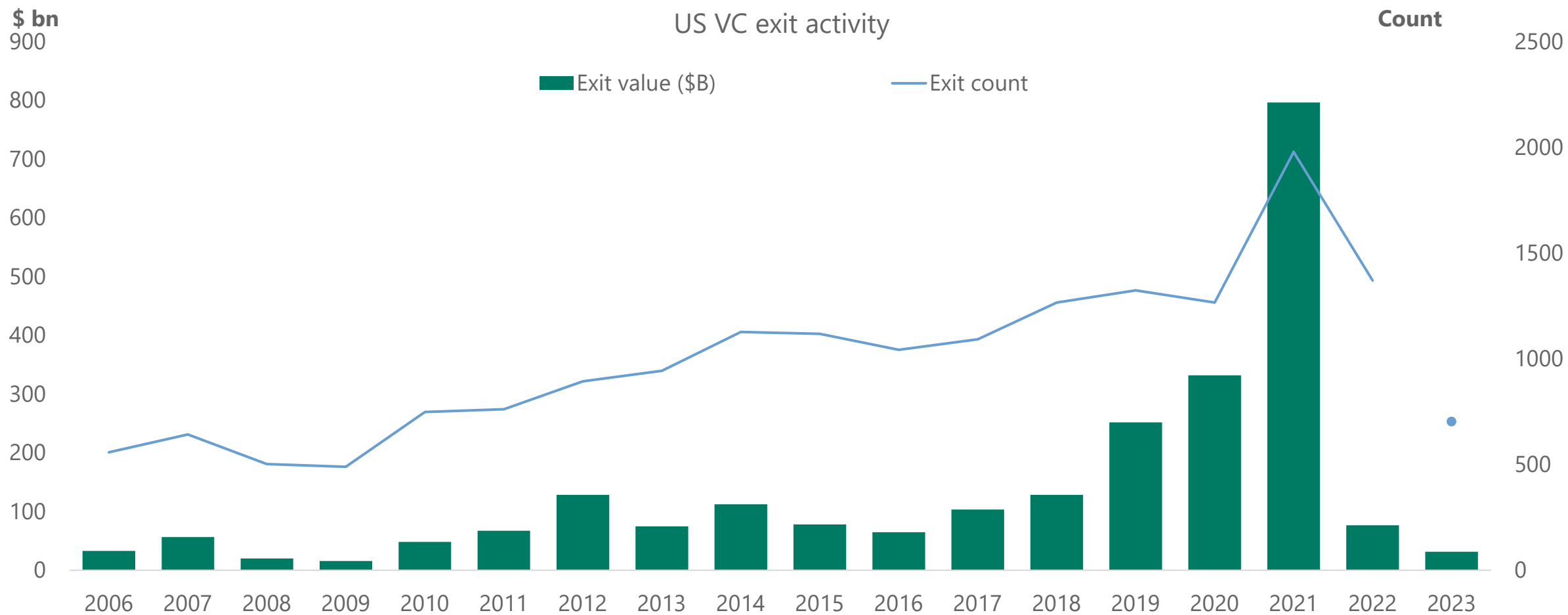


Source: Pitchbook, Apollo Chief Economist. Note: Q12023 preliminary figure

# Revenue growth in VC-backed public tech companies has turned negative

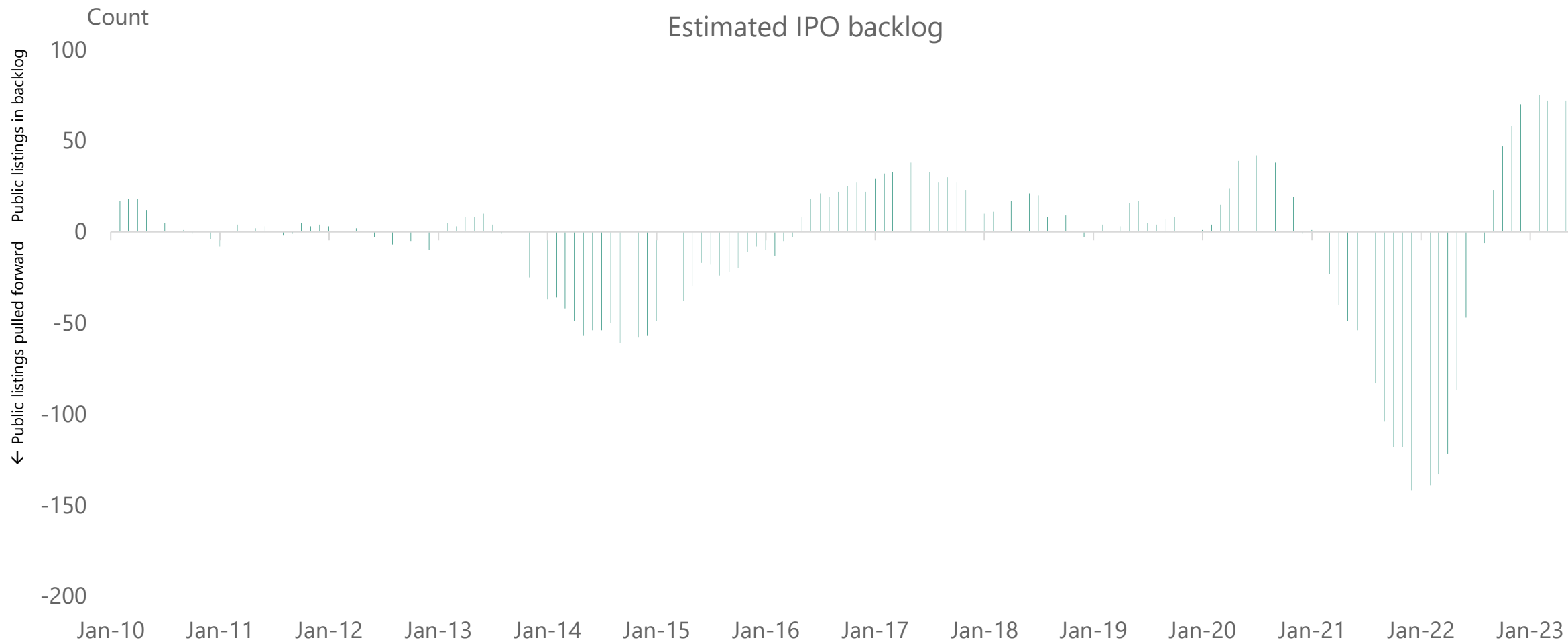


# VC exit activity



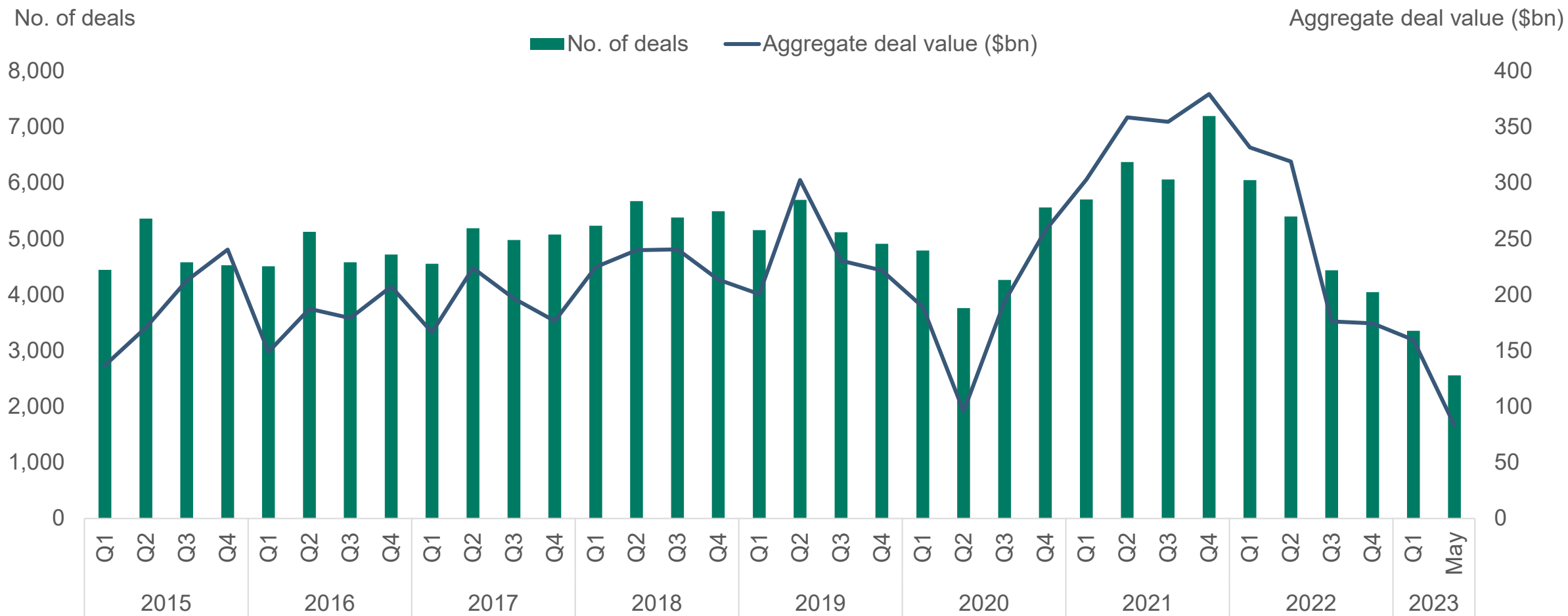
Source: Pitchbook, Apollo Chief Economist. Data as of September 2023

# Backlog of VC-backed IPOs piling up

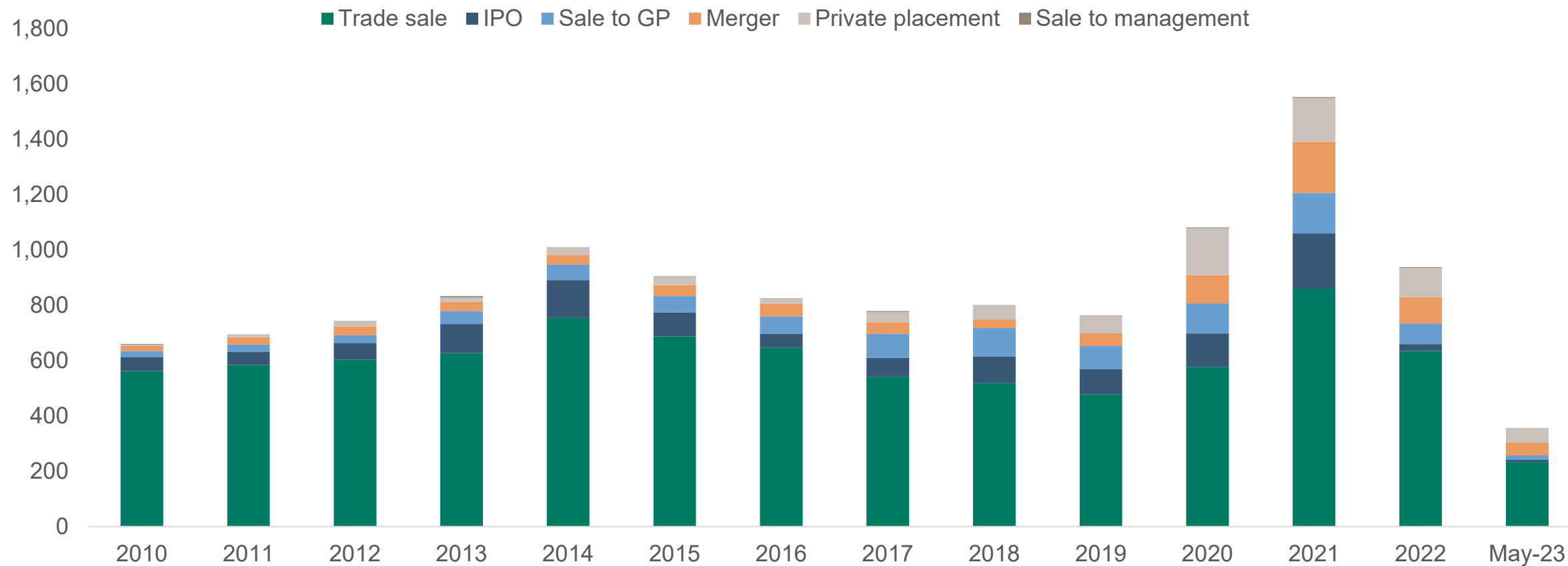


# Recent LBO activity

# Deal making slowing

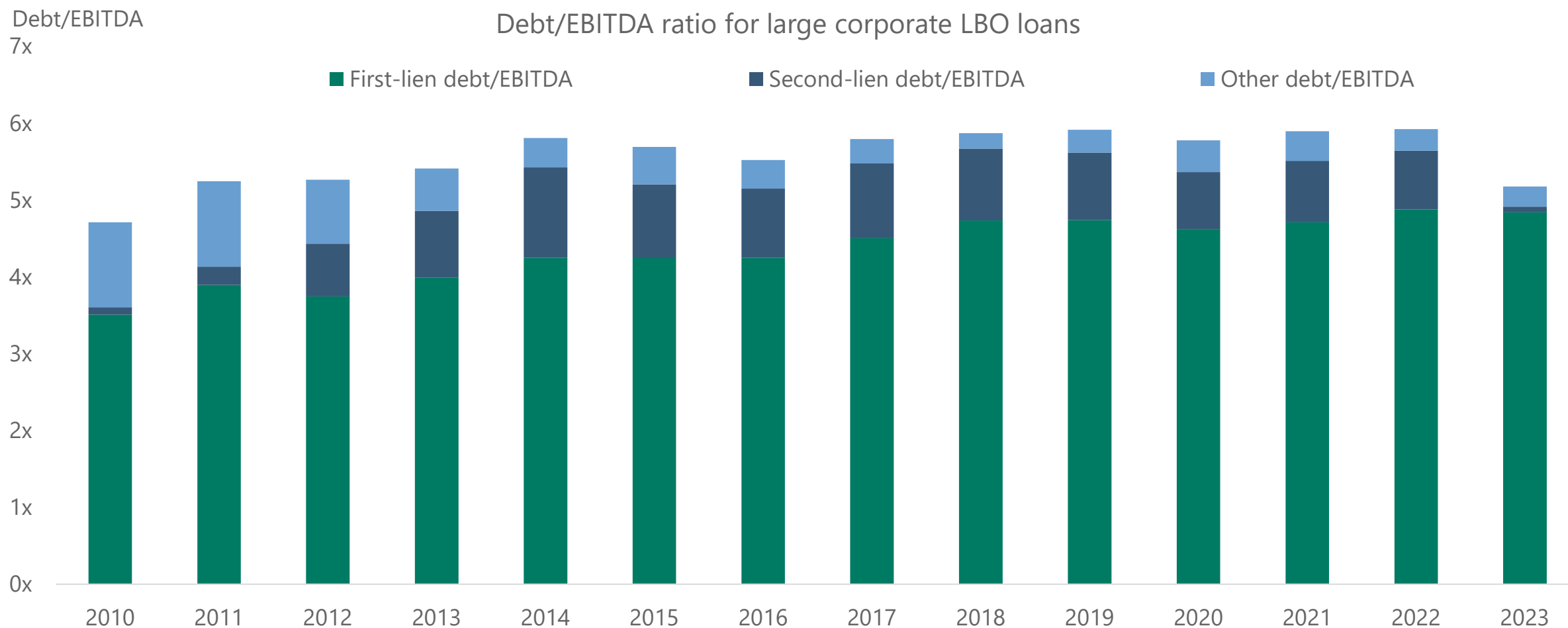


# IPO activity





# Leverage for large corporate LBOs has fallen

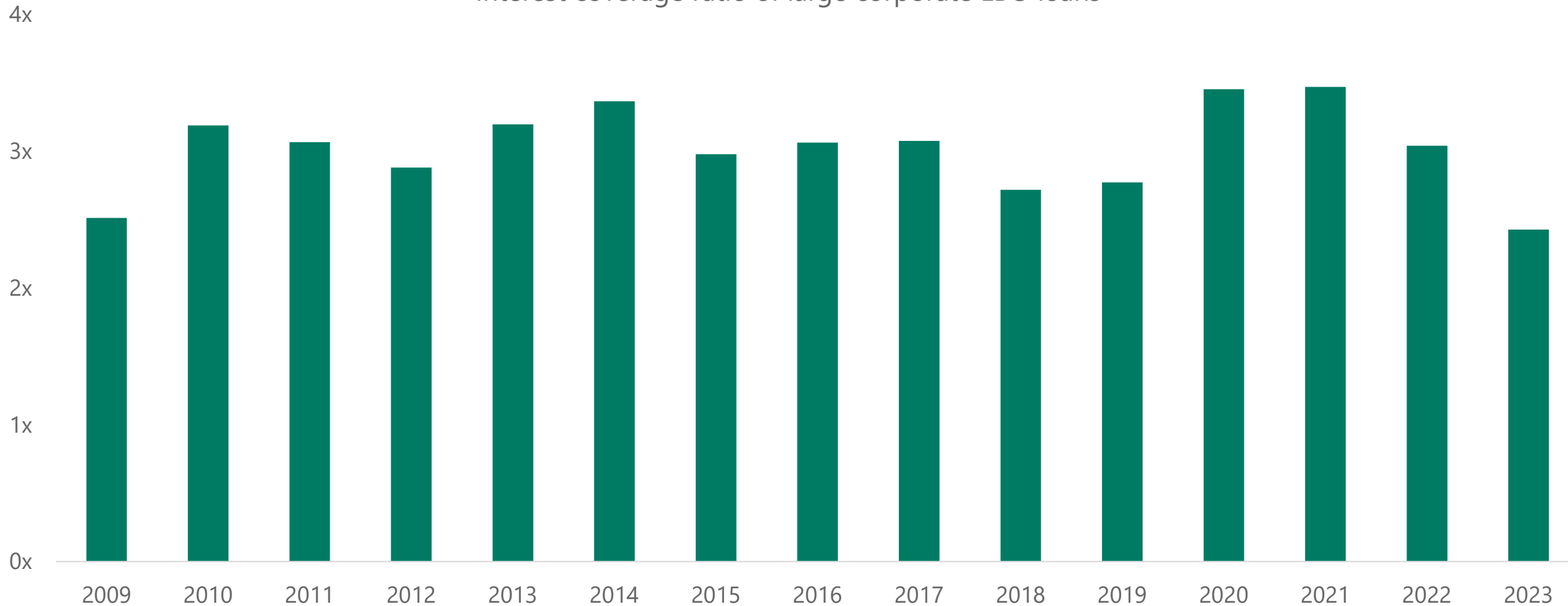


Source: Pitchbook LCD, Apollo Chief Economist. Data as of 30<sup>th</sup> September 2023, Large corporates are defined as EBITDA more than \$50 Million

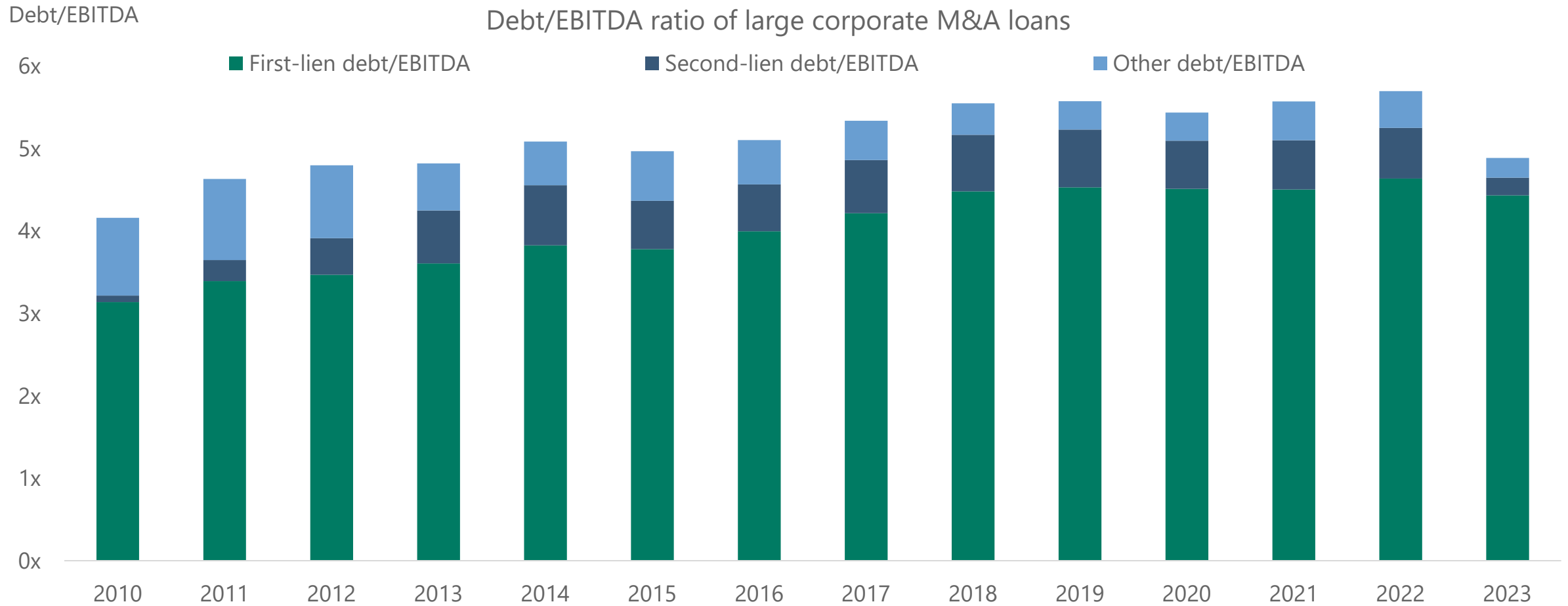
# Interest coverage ratio for large corporate LBOs is declining

EBITDA/Cash interest  
4x

Interest coverage ratio of large corporate LBO loans

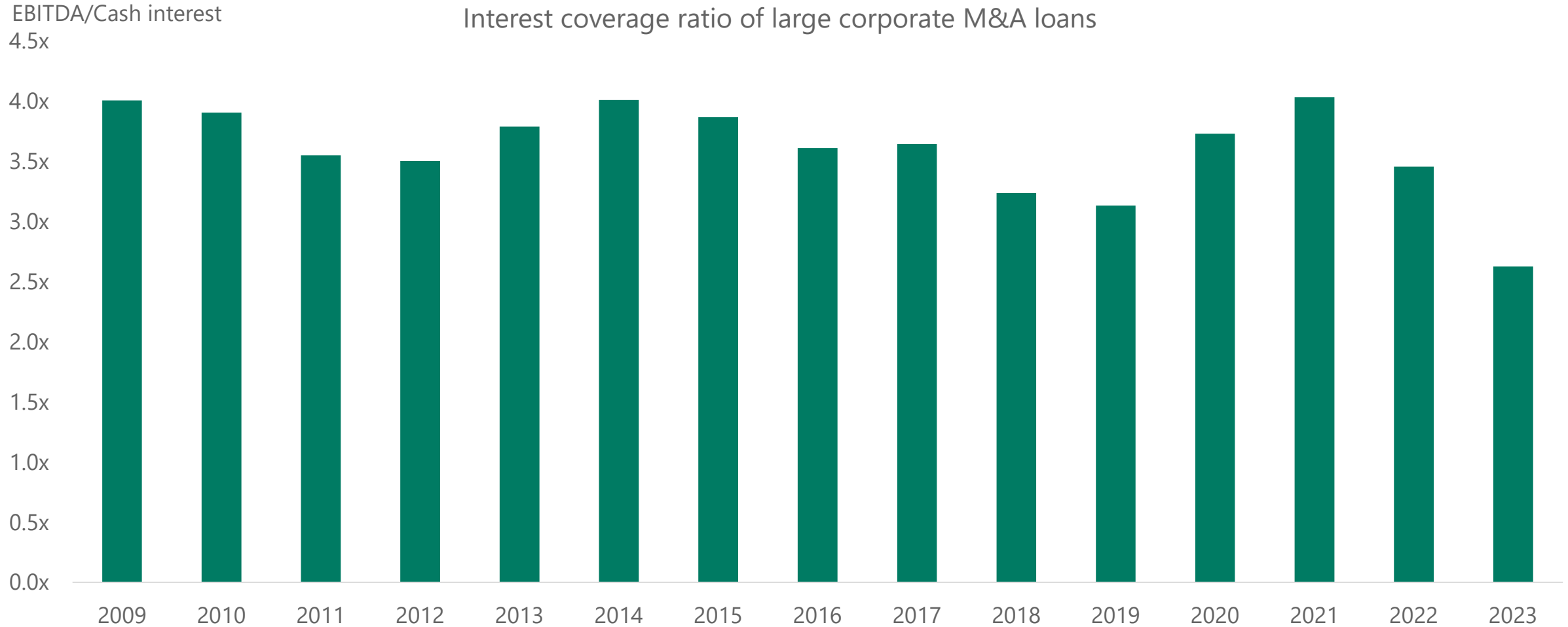


# Leverage for large corporate M&A loans has also fallen



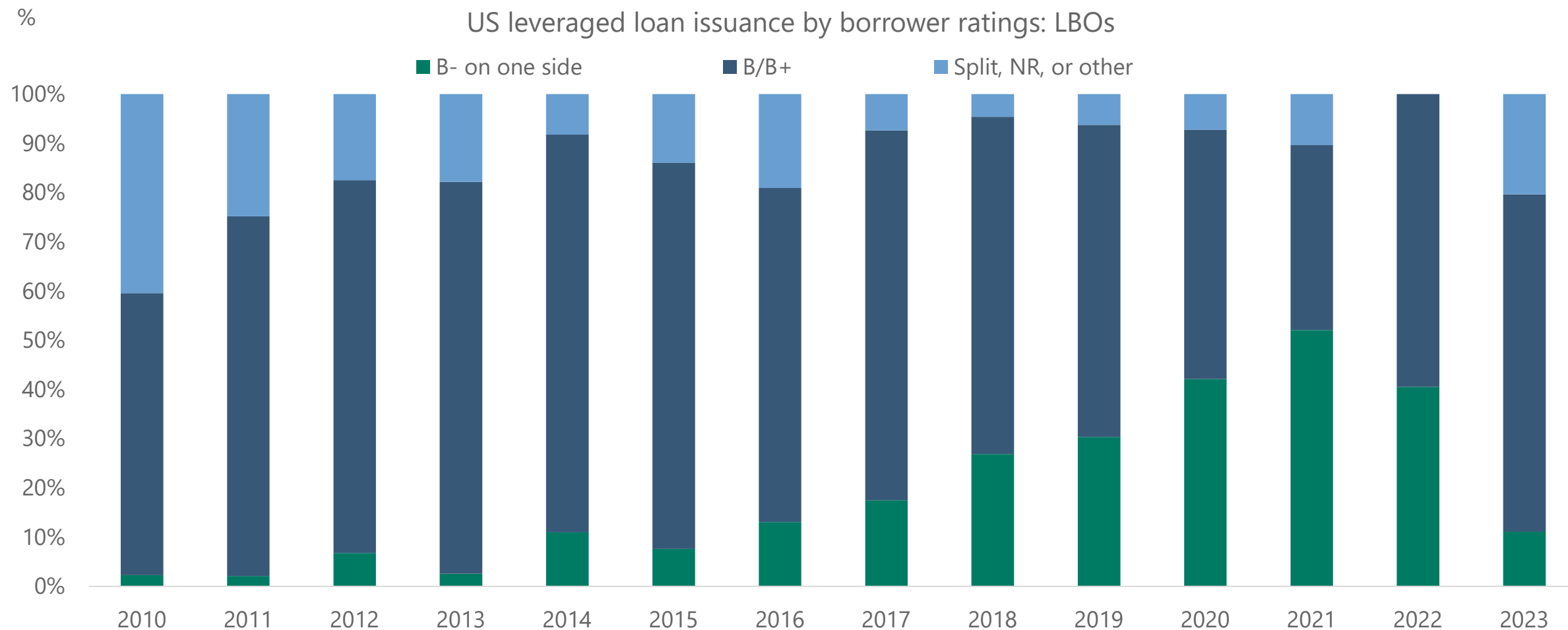
Source: Pitchbook LCD, Apollo Chief Economist. Data as of 30<sup>th</sup> September 2023, Large corporates are defined as EBITDA more than \$50 Million

# Interest coverage ratio for large corporate M&A loans also declining



Source: Pitchbook LCD, Apollo Chief Economist. Data as of 30<sup>th</sup> September 2023, Large corporates are defined as EBITDA more than \$50 Million

# LBO loan issuance by borrower rating

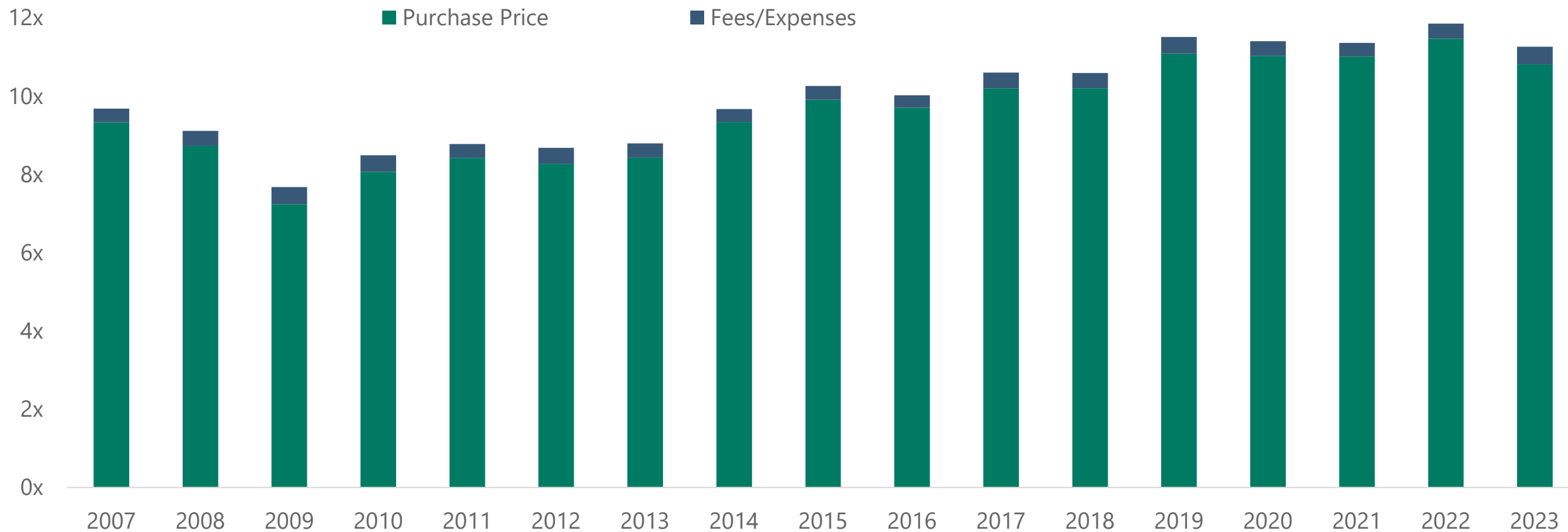


Source: Pitchbook LCD, Apollo Chief Economist. Data as of 30<sup>th</sup> September 2023

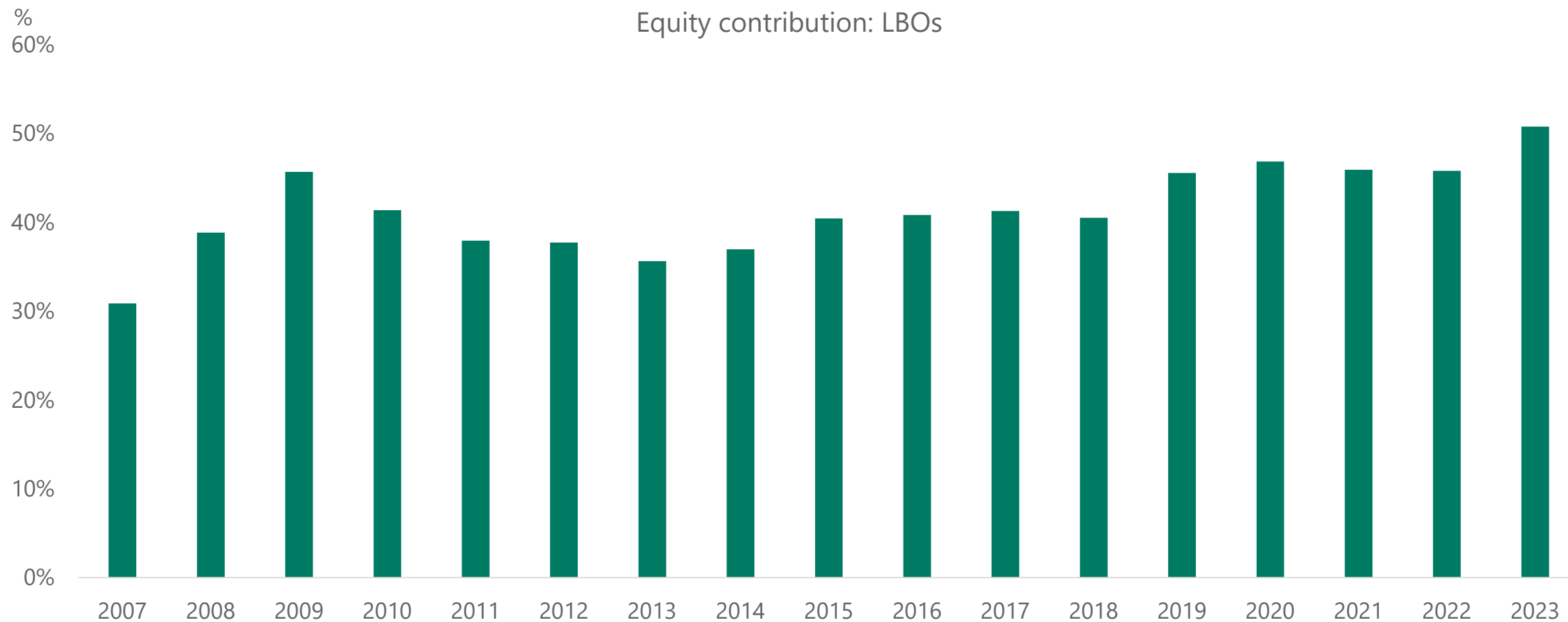
# Purchase price multiples

Purchase price multiple  
14x

Purchase price multiples: LBOs



# High debt costs leading to high equity contributions



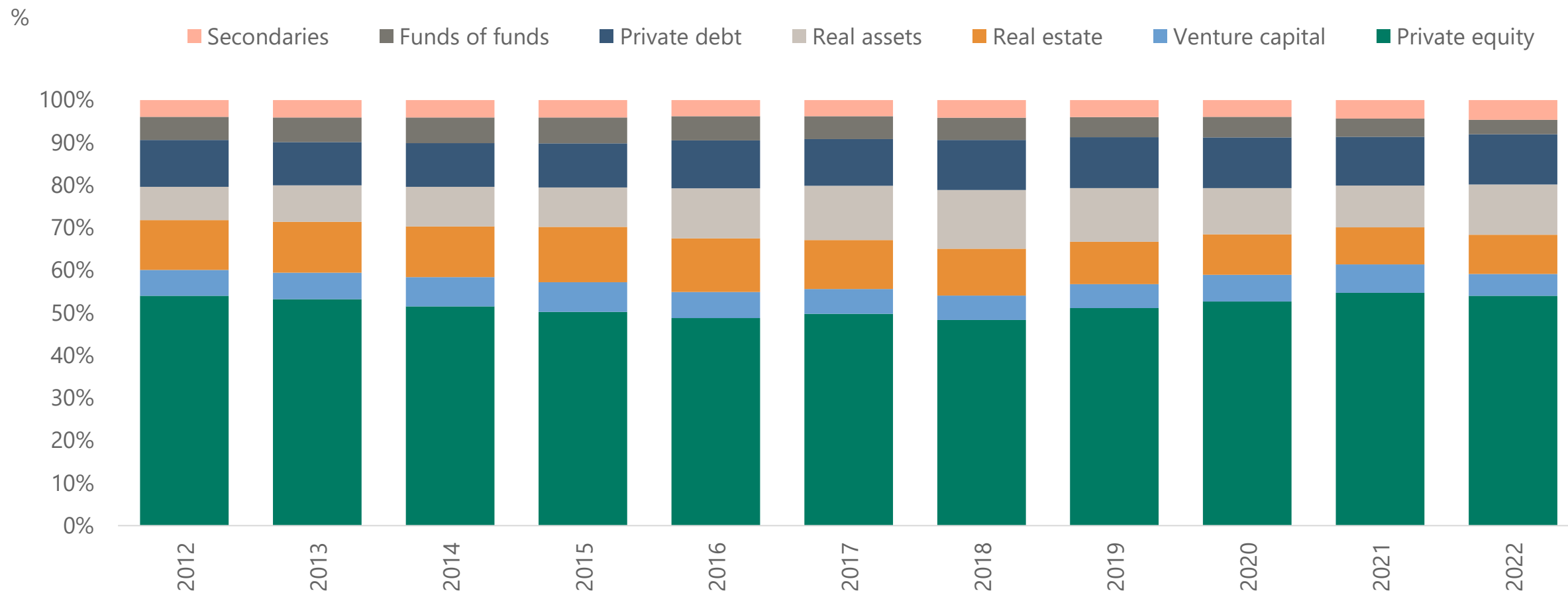
# Average yield to maturity is above 11%





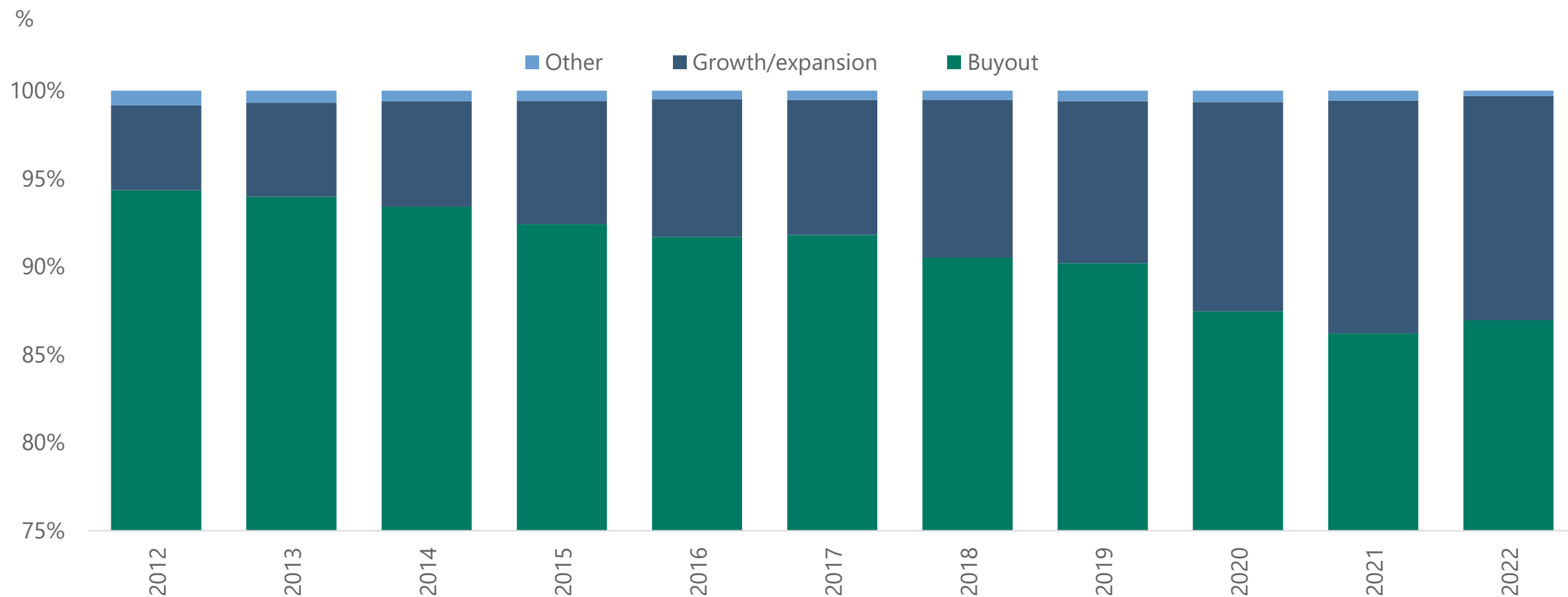
# Index weightings

# Private capital index weightings

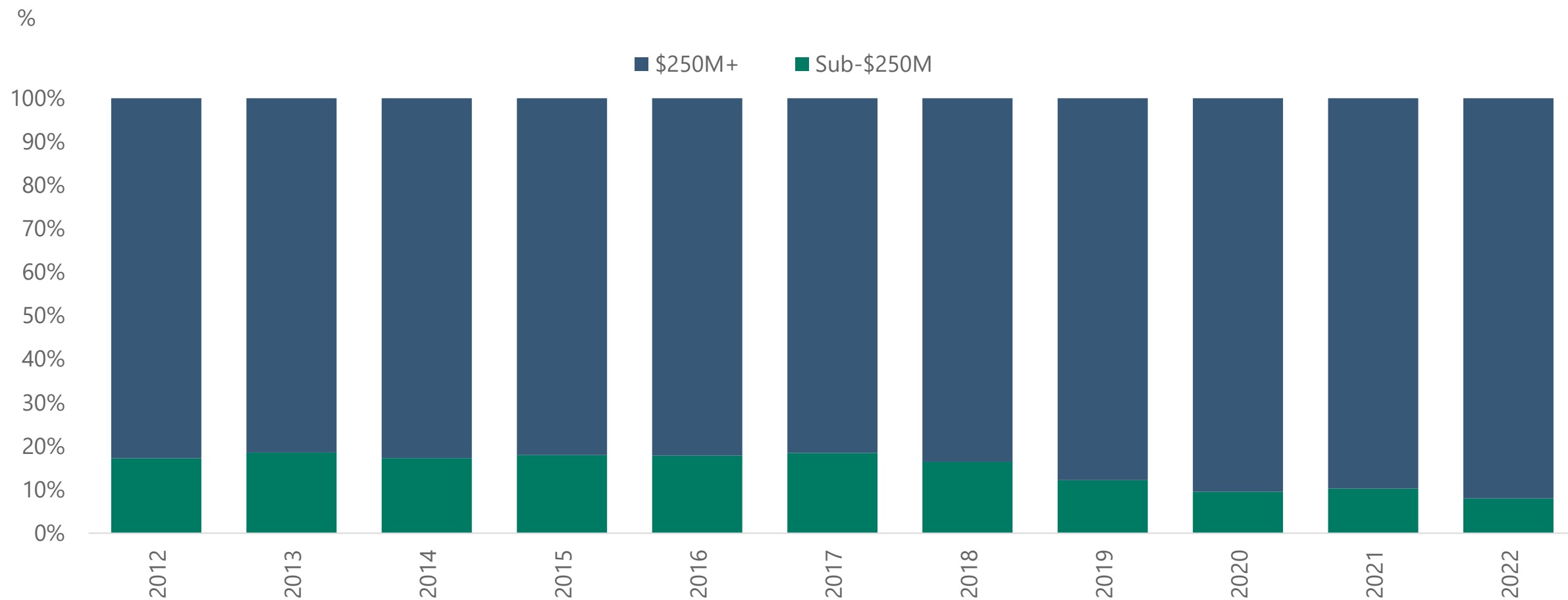


Source: Pitchbook, Apollo Chief Economist. Note: Data as of 31st December 2022

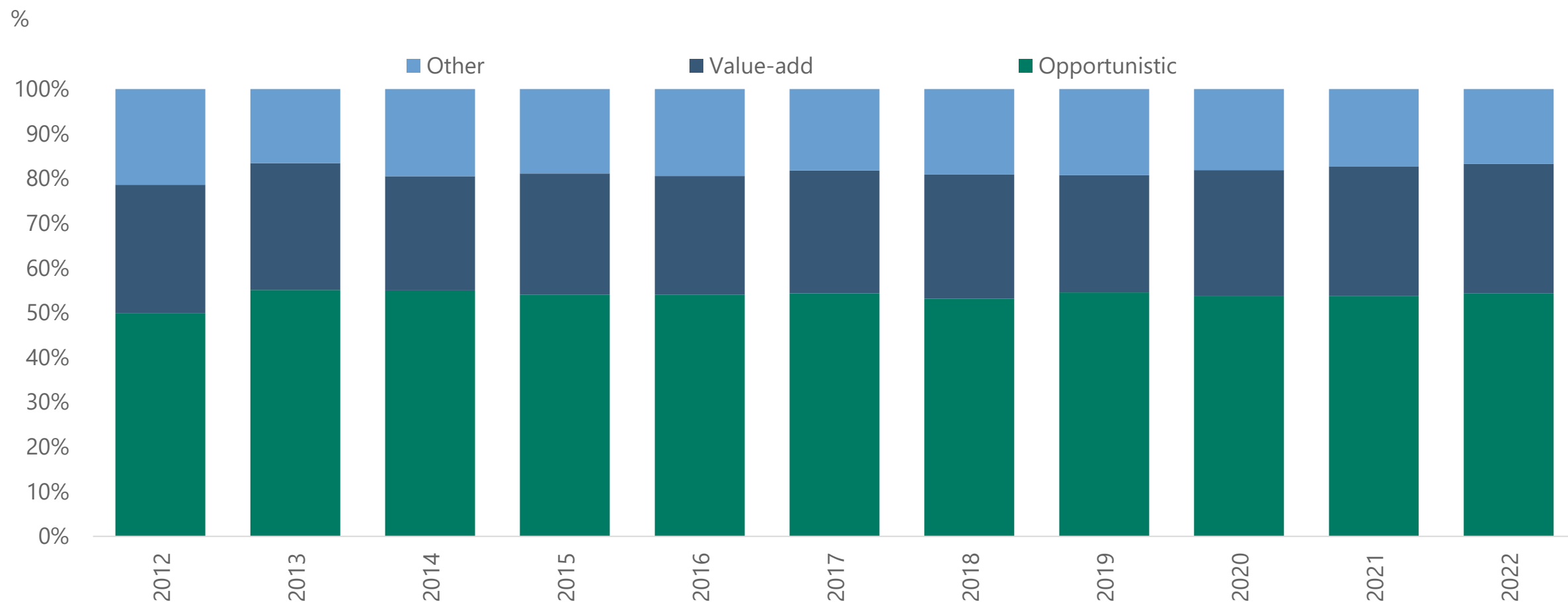
# Private equity index weightings



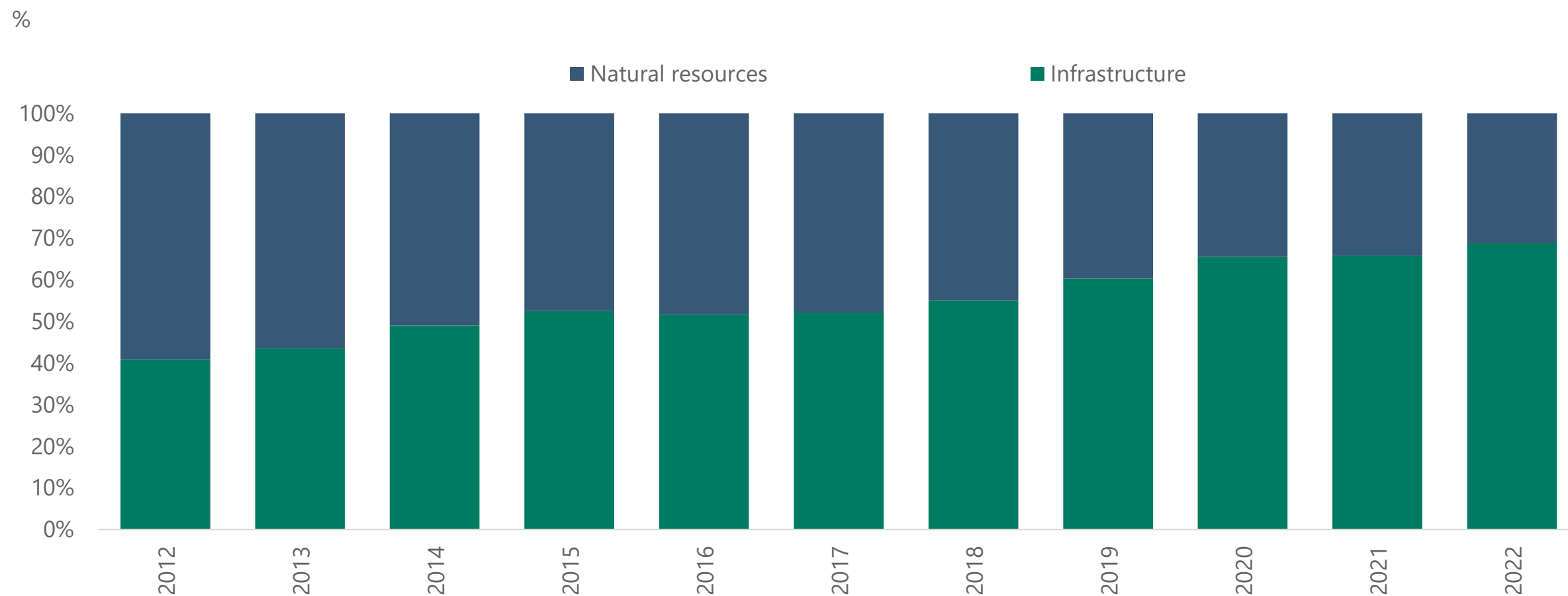
# Venture capital index weightings



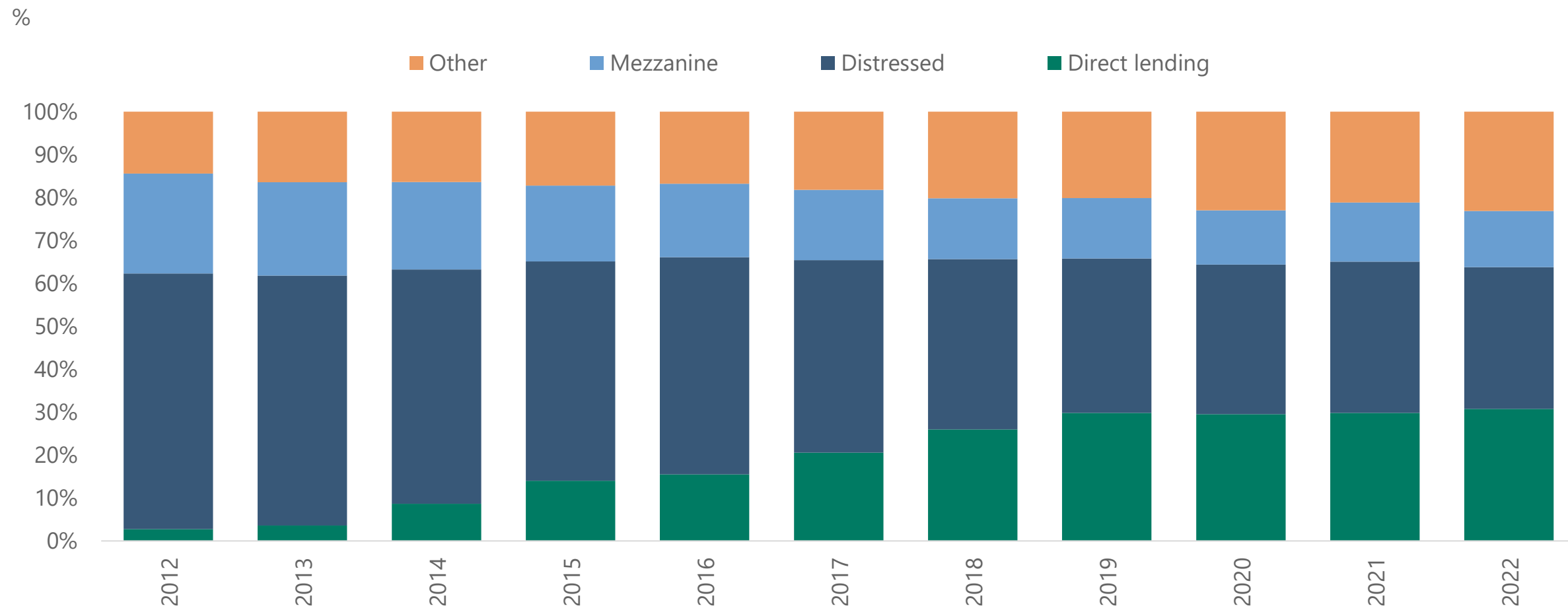
# Real estate index weightings



# Real assets index weightings

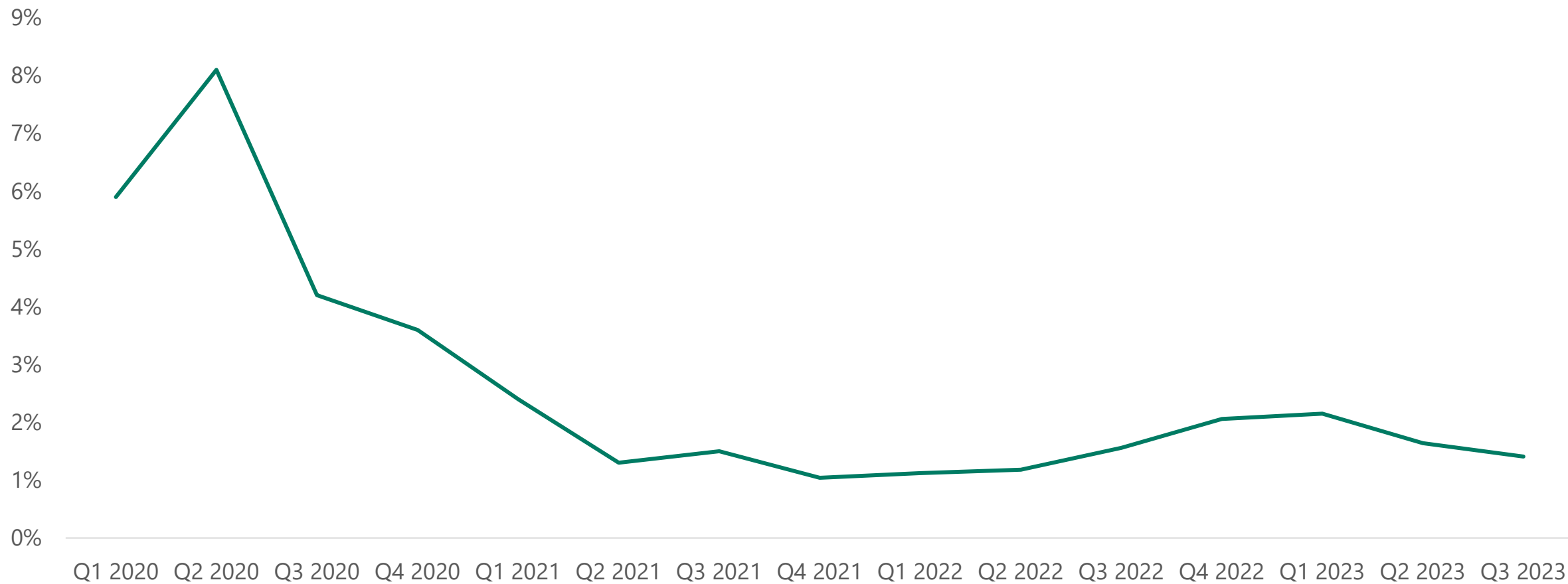


# Private debt index weightings



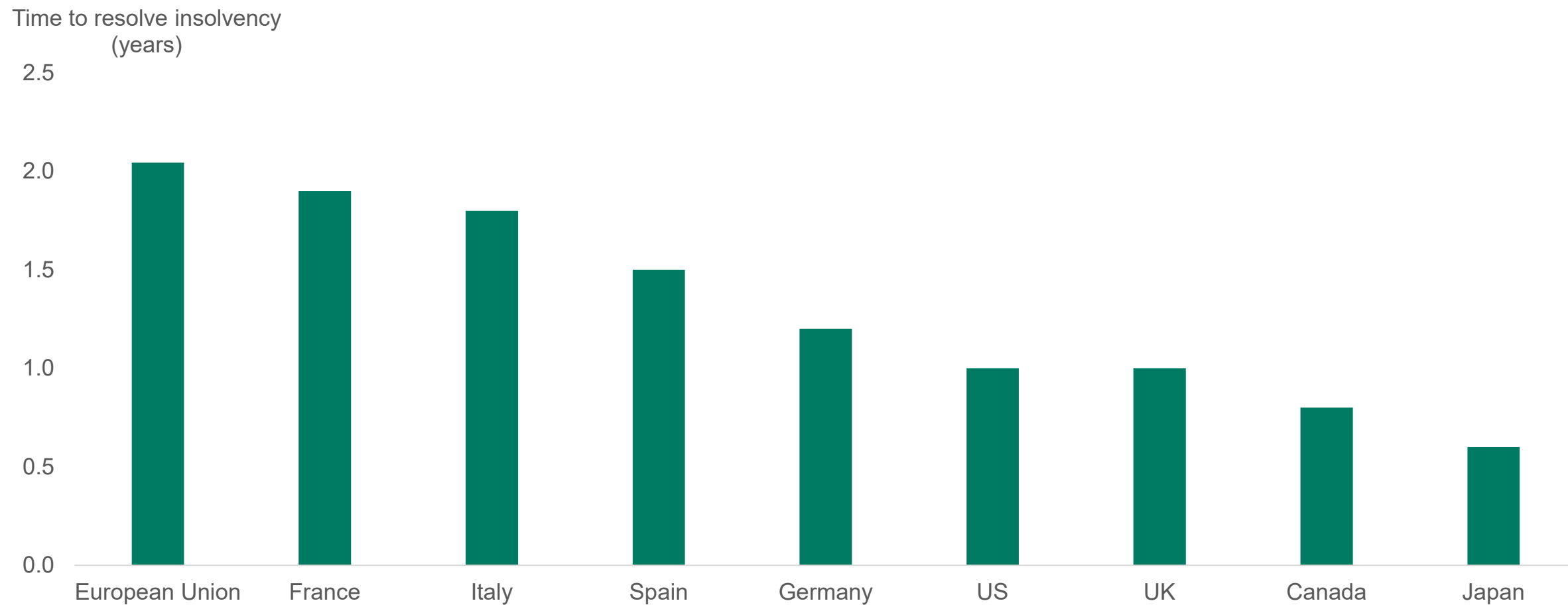
# Private credit defaults rate declined

US private credit default rate



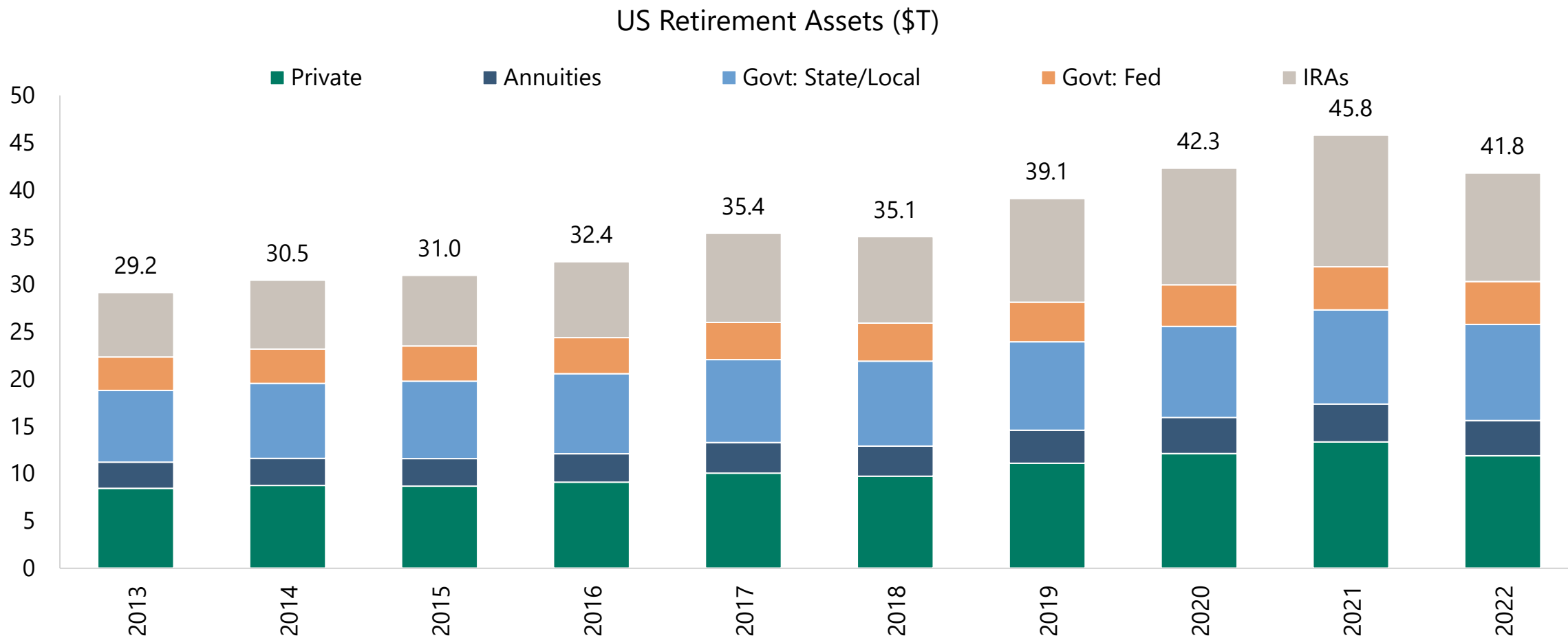


# Time to resolve insolvency in 2019

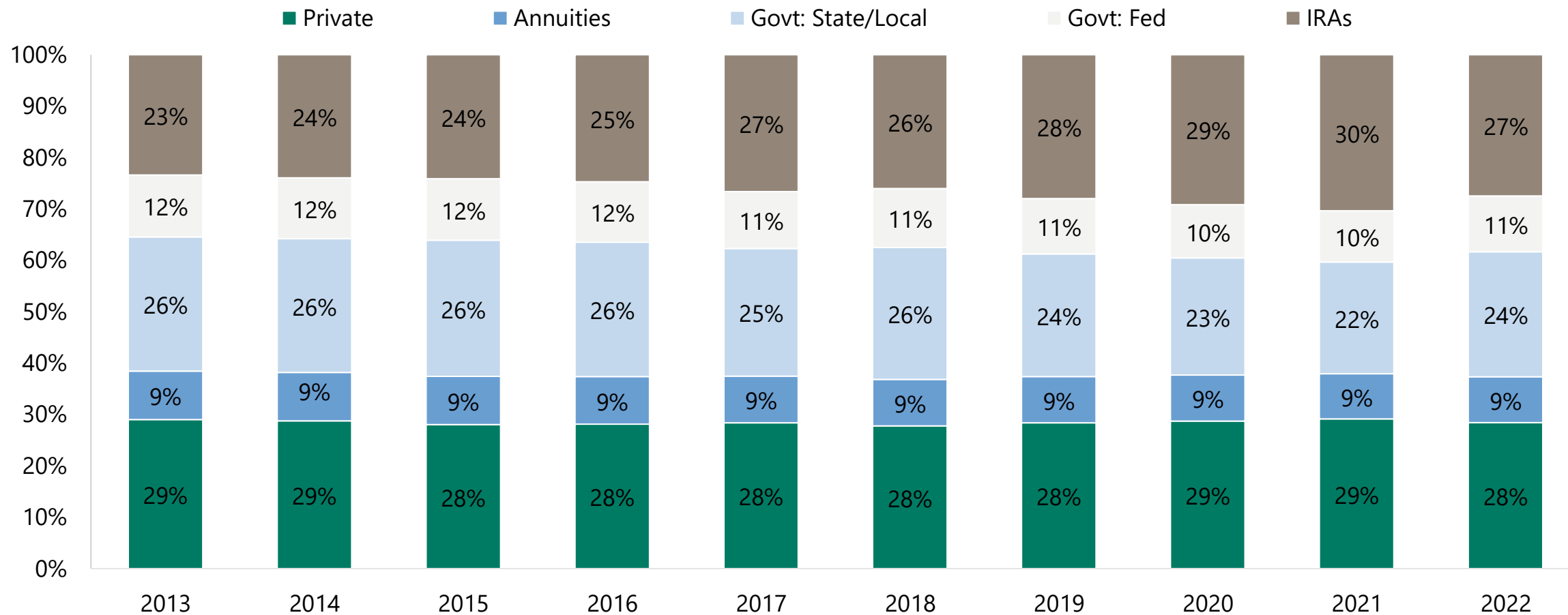


# Retirement assets

# The composition of US retirement assets

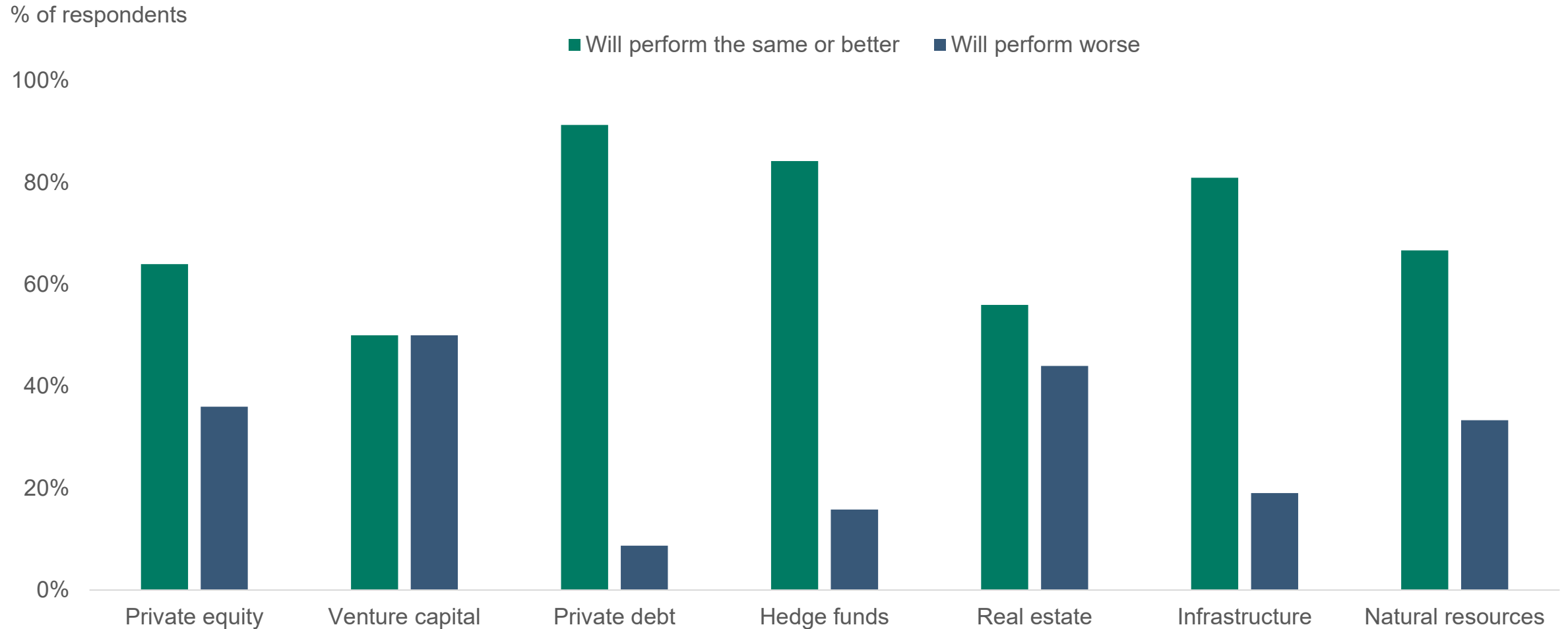


# US retirement assets: % of total

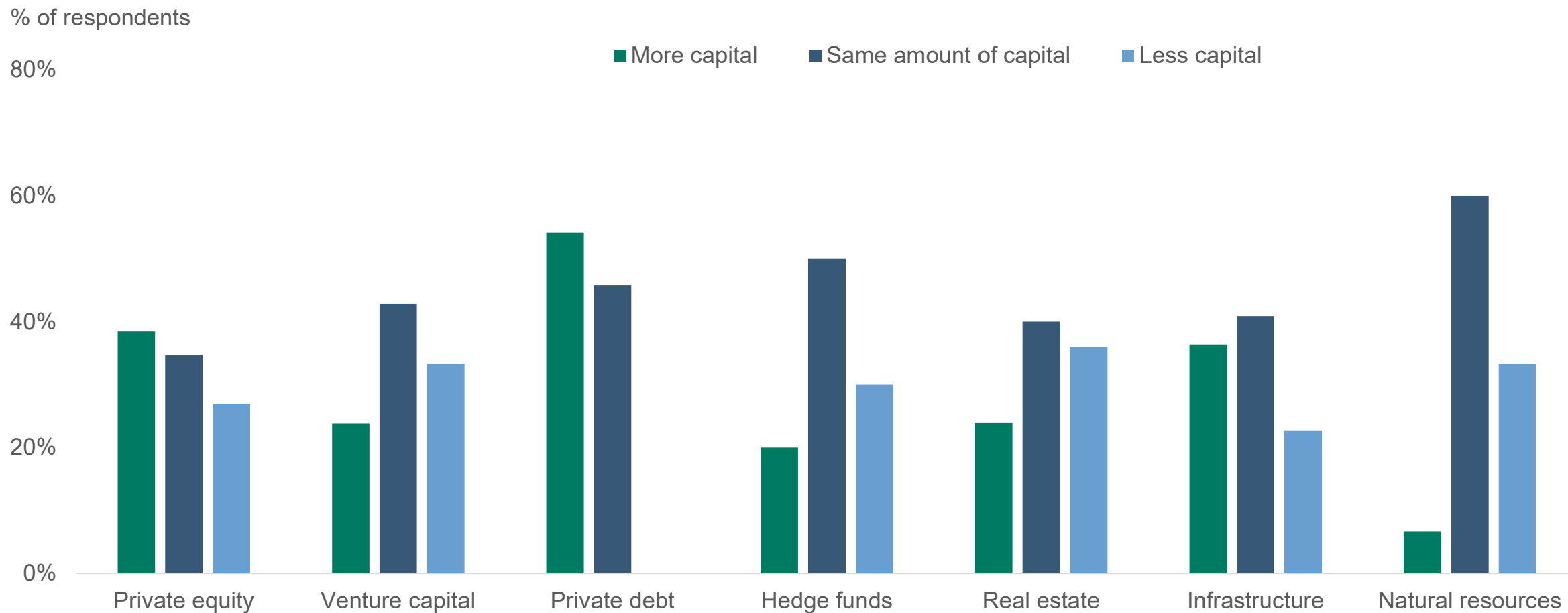


# Preqin survey of North-American investors

# North America-based investors were asked: 'What are your return expectations in the coming year compared with the year before?'



# Investors were asked: 'What are your 12-month capital commitment plans?'



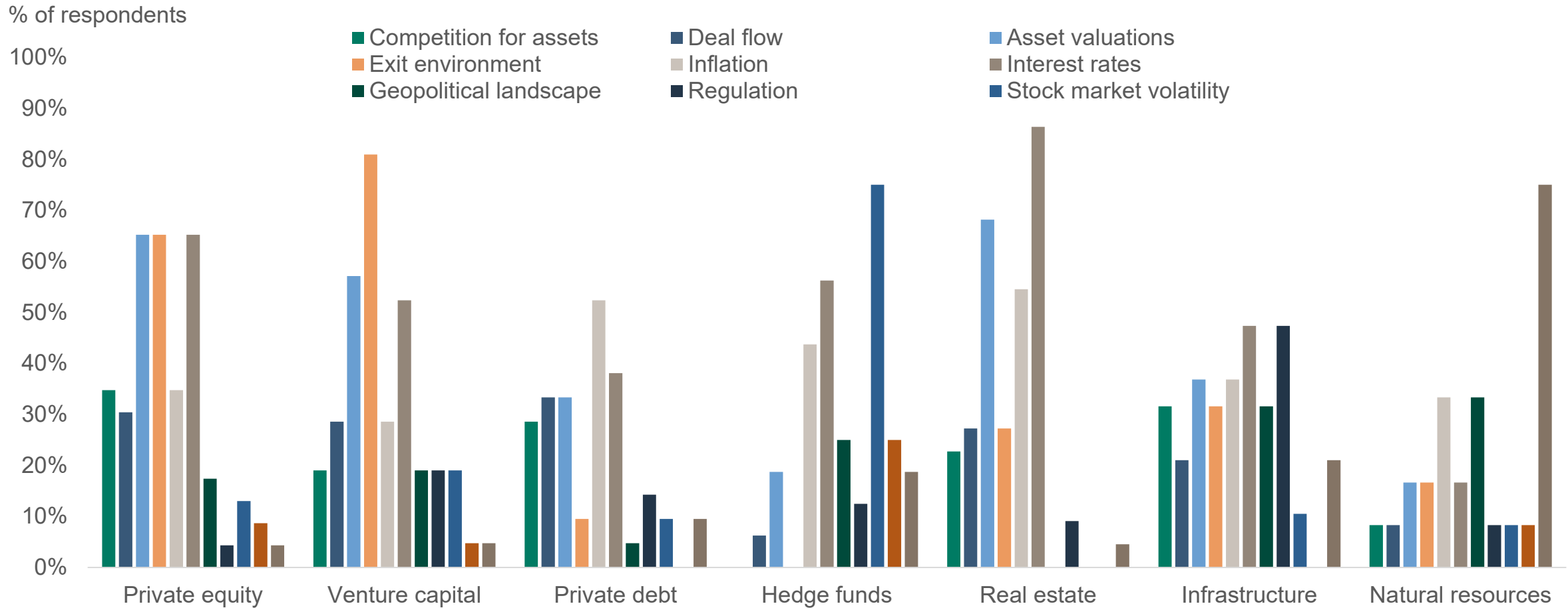
# Investors were asked: 'When do you expect to make your next commitment?'

% of respondents





# Investors were asked: 'What are the main challenges to returns in the next 12 months?'





# Torsten Slok, Ph.D.

## Chief Economist

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Torsten Slok joined Apollo in August 2020 as Chief Economist and he leads Apollo's macroeconomic and market analysis across the platform.

Prior to joining, Mr. Slok worked for 15 years as Chief Economist at Deutsche Bank where his team was top ranked in the annual Institutional Investor survey for a decade. Prior to joining Deutsche Bank Mr. Slok worked at the IMF in Washington, DC and at the OECD in Paris.

Mr. Slok has a Ph.D in Economics and has studied at the University of Copenhagen and Princeton University.