

Private Investments Sub-Committee Update

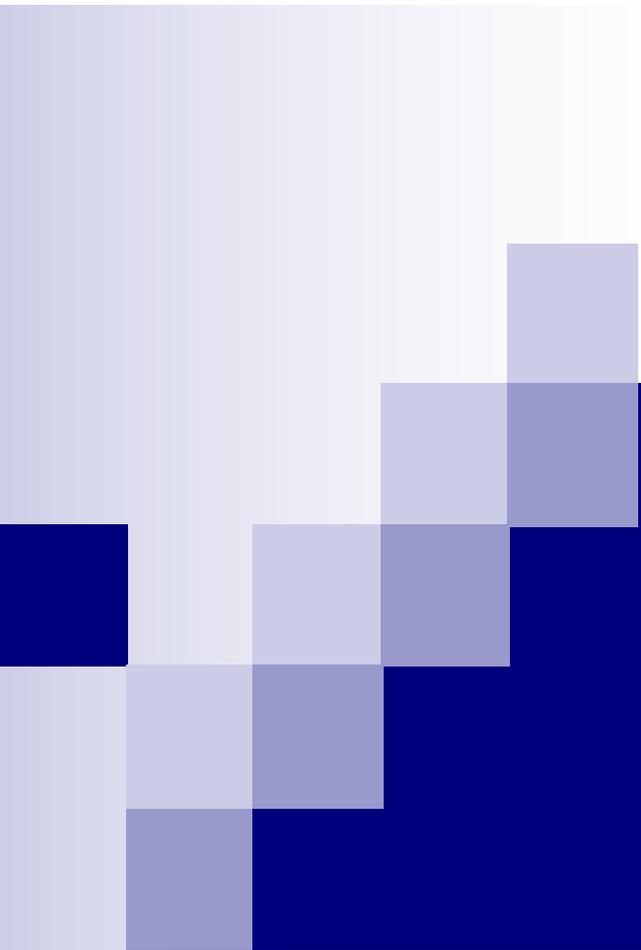
SEC Asset Management Advisory Committee – 1st
December 2020

Agenda

- Recap on why we are focused on potential expansion of access to private investments
- Today's presenters:
 - **Erik Sirri** to summarize findings on whether private equity ("PE") provides better and / or diversifying returns
 - **John Suydam** will provide an overview of the different private asset markets and the access points for investors today to help broaden our outlook beyond PE
 - **Joe Savage** will lay out some initial thoughts on design principles for wider access
- Next steps:
 - Investigate returns on other asset classes
 - Seek data and evidence on risk of private investments vs some other retail products such as levered ETFs / ETNs and options
 - Seek feedback and refine Design Principles

Why are we looking at wider access to private markets

- Growing pool of self managed assets in taxable and self directed retirement accounts
- More concentrated public equity markets – larger in size but dominated by behemoths
- The PI sub-committee is not yet ready to make recommendations:
 - Original “gating” issue of showing better and / or diversifying returns to public markets is likely to be inconclusive
 - Alternative approaches need to be debated further-eg:
 - Is the absence of evidence of worse returns sufficient?
 - Why should only institutional investors have access?
 - Risk of private investments compared to some other retail investment products



Private equity returns

Erik R. Sirri
Babson College
December 1, 2020



Three questions about private equity returns

1. What are the challenges in measuring private equity returns?
2. How do private equity returns compare to public market returns?
3. Is private equity likely to provide a diversification benefit to a retail investor's portfolio?



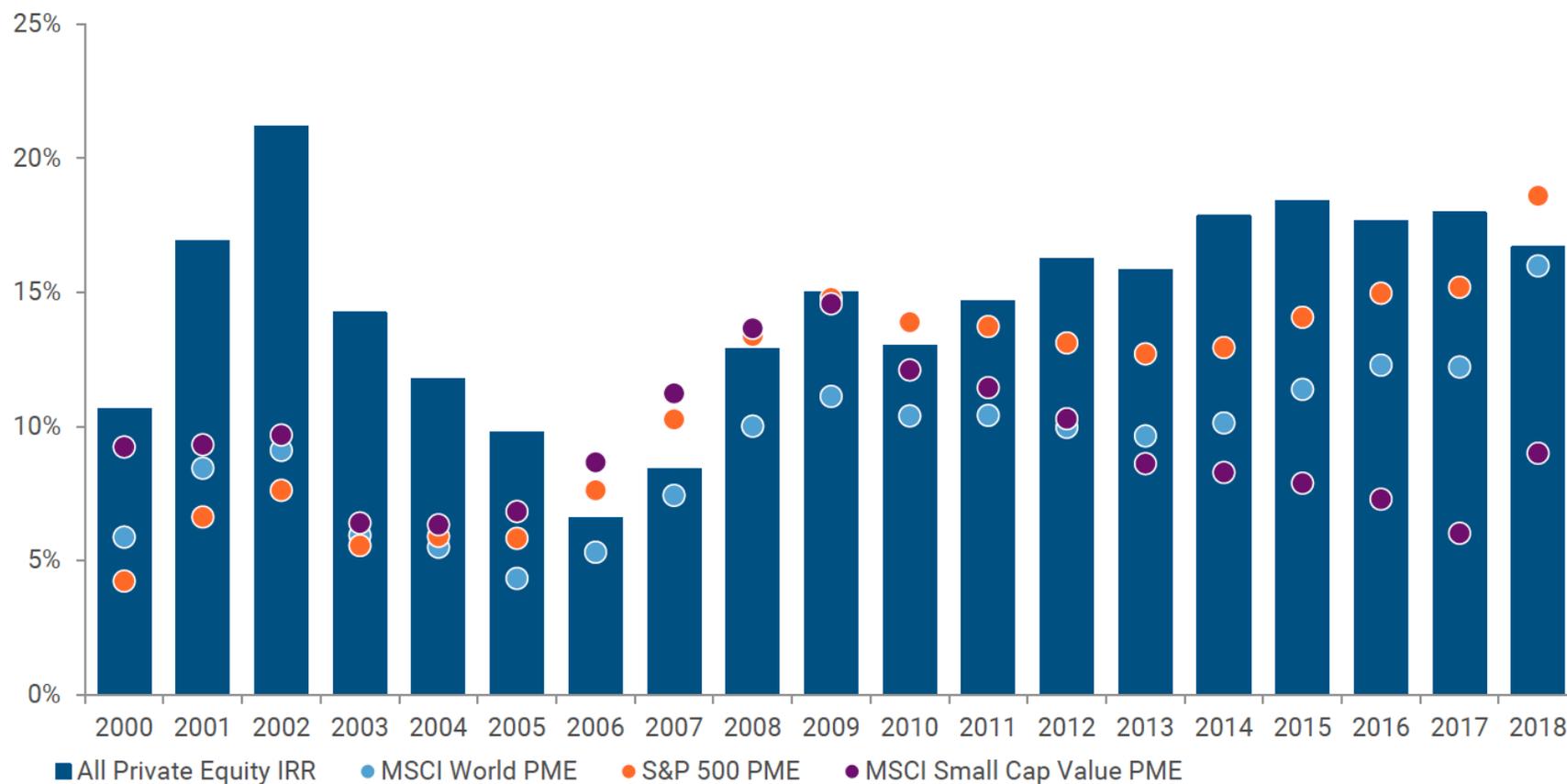
Measurement of private equity returns

- Unlike a typical stock or bond, PE has irregular cashflows (size, timing, direction).
- This causes problems for, and is a well-known weakness of, IRR.
- There are other return measures:
 - Public Market Equivalent (PME)
 - Multiple of Money (MoM)
 - Others: Time Weighted Returns, Realized Value to Paid-in-Capital

Vintage year net performance

All Private Equity Pooled IRR vs. PME - Q4 2019

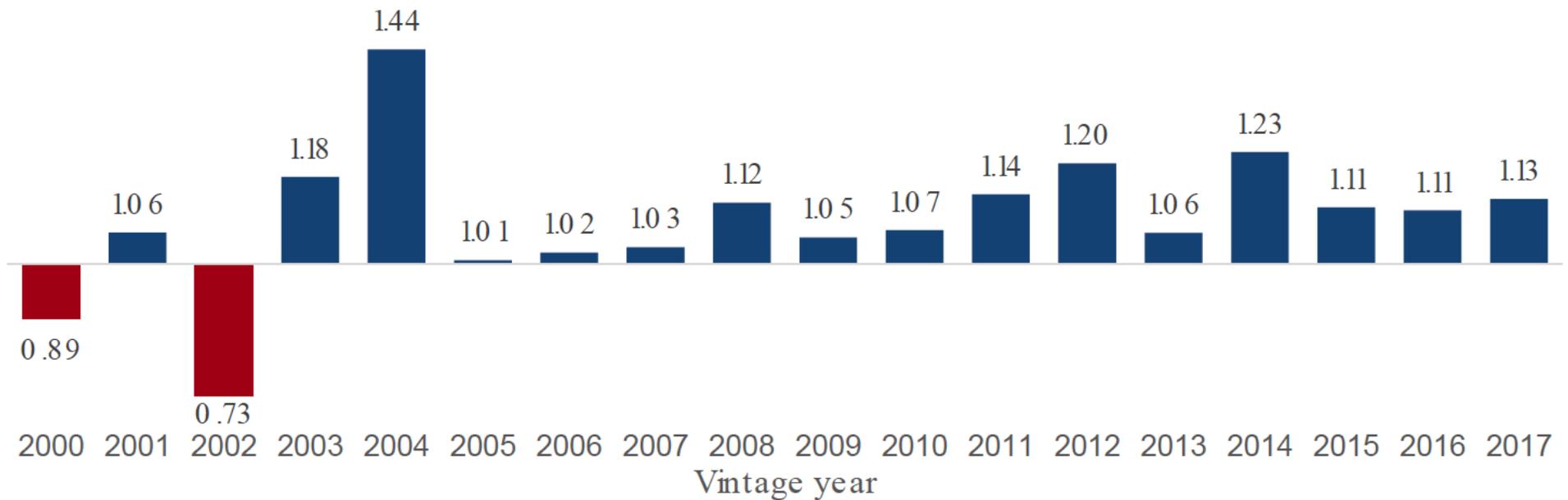
By Vintage Year



Note: All Private Equity includes Buyout, Venture Capital, Growth Equity and Co-Investments.
Source: Hamilton Lane Data, Bloomberg (September 2020)

But the evidence on returns is mixed

North American PE Funds versus Russell 3000 KS-PME



Lerner (2020). Prequin data.

Performance summary: MOM vs IRR

EQUITY FUND PERFORMANCE SUMMARY AS OF 3/31/20

FUND	VINTAGE YEAR	FUND SIZE	NET MOM (TVPI)	NET IRR TO LPs
Fund VII	2000	\$554M	2.1x	24.8%
Fund VIII	2005	\$765M	2.9x	18.3%
Fund IX	2008	\$823M	3.8x	44.7%
Fund X	2011	\$1,275M	2.8x	38.7%
Fund XI	2014	\$3,662M	2.8x	29.3%

Would these numbers make sense to a typical retail investor?

Spread of Net Returns

Dispersion of Net Returns by Strategy & Geography

Vintage Years: 1979–2017, Ordered by Spread of Returns

■ Dispersion of Returns ● Median IRR

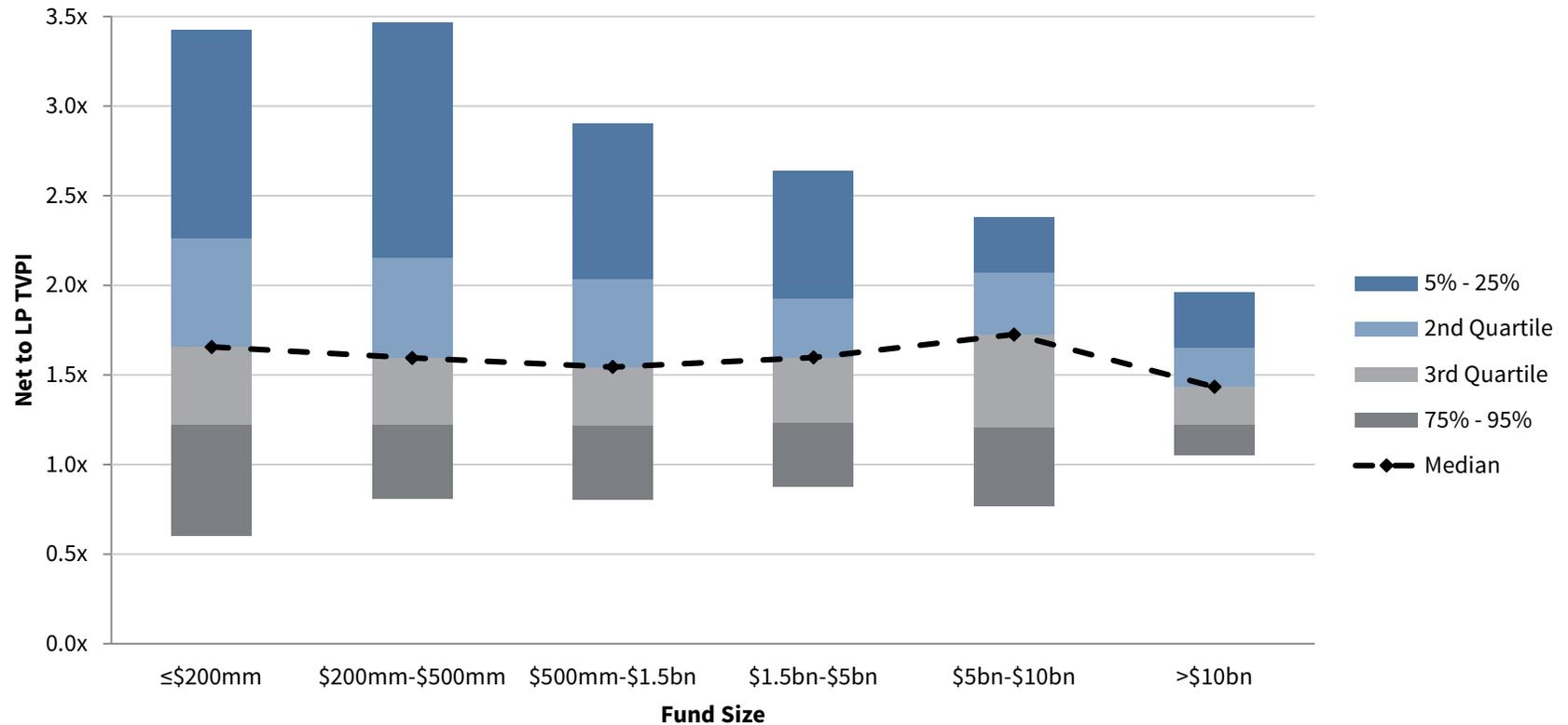


Source: Hamilton Lane Data via Cobalt (August 2020)

Private equity returns and risks vary by strategy and fund size

US PRIVATE EQUITY (VINTAGE YEARS 1986-2017): TVPI

As of March 31, 2020



	≤\$200mm	\$200mm-\$500mm	\$500mm-\$1.5bn	\$1.5bn-\$5bn	\$5bn-\$10bn	>\$10bn
N	263	296	341	170	31	23
5%	3.4X	3.5X	2.9X	2.6X	2.4X	2.0X
25%	2.3X	2.2X	2.0X	1.9X	2.1X	1.7X
MEDIAN	1.7X	1.6X	1.5X	1.6X	1.7X	1.4X
75%	1.2X	1.2X	1.2X	1.2X	1.2X	1.2X
95%	0.6X	0.8X	0.8X	0.9X	0.8X	1.1X



Source: Cambridge Associates LLC Private Investments Database.

Notes: Pooled returns are net of fees, expenses and carried interest. Private equity includes buyouts and growth equity. Includes vintage years 1986-2017. Vintages after 2017 are considered too young to have meaningful returns.

Correlations also vary by fund strategy and size, providing more diversification at lower end

CORRELATION TO RESPECTIVE PUBLIC MARKET MPMES: GLOBAL BUYOUTS

As of September 30, 2018

	S&P 500	Russell 2000	Russell 2500	Russell Midcap	MSCI ACWI
Global Mega Cap PE Funds	0.61	0.59	0.61	0.63	0.62
Global Large Cap PE Funds	0.59	0.54	0.57	0.58	0.60
Global Mid Cap PE Funds	0.27	0.17	0.20	0.23	0.28
Global Small Cap PE Funds	0.44	0.38	0.41	0.44	0.53

CORRELATION TO RESPECTIVE PUBLIC MARKET MPMES: US BUYOUTS

As of September 30, 2018

	S&P 500	Russell 2000	Russell 2500	Russell Midcap	MSCI ACWI
US Mega Cap PE Funds	0.62	0.61	0.64	0.65	0.62
US Large Cap PE Funds	0.59	0.56	0.59	0.59	0.57
US Mid Cap PE Funds	0.42	0.35	0.37	0.38	0.43
US Small Cap PE Funds	0.38	0.36	0.37	0.36	0.41

Source: Cambridge Associates LLC Private Investments Database. Copyright © 2020 by Cambridge Associates LLC. All rights reserved.

Notes: Data as of September 30, 2018. Vintage years included are 1995–2015 for Mega Cap and 1988–2015 for Large, Mid, and Small Cap. By Cambridge benchmark definitions, Mega funds don't date back further than 1995. Funds raised after 2015 are considered to young to have produced meaningful results. Data shows the correlation between the return of each sub grouping and the return of respective public mPME. Mega is defined as >\$10B from 2006–2015, >\$3.5B from 2000–2005, and >\$1B 1995–1999. Large is defined as \$1B to \$10B from 2006–2015, \$1B to \$3.5B from 2000–2005, \$750M to \$1B from 1997–1999, \$500M to \$1B from 1995–1996, >\$500M from 1993–1994, and >\$300M from 1988–1992. Mid is defined as \$350M to \$1B from 2000–2015, \$250M to \$750M from 1997–1999, \$200M to \$500M from 1995–1996, \$100M to \$500M from 1993–1994, and \$100M to \$300M from 1988–1992. Small is defined as <\$350M from 2000–2015, <\$250M from 1997–1998, <\$200M from 1995–1996, and <\$100M from 1988–1994.



Summary

- The magnitude, timing and direction of cash flows present significant challenges for the presentation of returns to retail shareholders.
- The evidence on PE returns is mixed: it may be that no one single performance measurement is sufficient to tell the whole return story.
- There is some evidence that private equity returns provide diversification benefits to retail investors, but the difficulty in measuring returns makes such an inference difficult.



Sources

1. Hamilton Lane, “SEC Asset Management Advisory Committee,” Hamilton Lane, September 2020.
2. Cambridge Associates, “Private Investments, AMAC Private Investments Subcommittee,” September 16, 2020.
3. Josh Lerner, “Remarks to the SEC Asset Management Advisory Committee Private Investments Subcommittee,” September 16, 2020.
4. Ludovic Phalippou, “Track Record Marketing in Private Equity,” undated, presented September 16, 2020.
5. Memorandum to Private Investments Subcommittee of the Asset Management Advisory Committee, “Academic Literature on Potential Benefits for Portfolio Efficiency of Private Equity Investments” September 1, 2020.

All materials available on SEC website at <https://www.sec.gov/page/asset-management-advisory-committee>

APOLLO GLOBAL MANAGEMENT

Access to Alternative Investments

*John Suydam, Senior Partner & Chief Legal Officer – Apollo Global Management
SEC Asset Management Advisory Committee*

December 1, 2020

What are Alternative Investments?

While there is no standard definition of alternatives, alternatives are any investment strategy that is not purely long-only, unlevered and investing in equities and/or debt instruments

Key Alternatives Characteristics¹

*Low correlation with traditional asset classes
Not listed on an exchange
Private fund structures or '40 Act compliant vehicles
Reduced liquidity*

*Common
Alternative
Asset Classes*

Alternative Asset Classes

*Private Equity
Venture Capital
Private Credit
Real Assets
Structured Products
Hedge Funds*

Source: Citi Alternative Investments 2008. (1) These views reflect the views and opinions of Apollo Global Management.

Alternative Investments Come in Many Different Forms

Private Equity (*\$4.5Tn Market*)¹

Negotiated private investments in (most often) non-public companies at different stages of maturity with the objective of improving performance and reselling at a higher price in the future

Venture Capital (*1.5Tn Market*)²

A type of private equity investing where capital is provided to startups, early-stage, and/or emerging companies that are generally viewed as having high growth potential or demonstratable high growth

Private Credit (*\$848Bn Market*)³

Directly originated financing or secondary market loans or bonds (predominately corporate) that are not traded and often unrated

Real Assets (*\$1.8Tn Market*)⁴

Negotiated private investments in real assets (real estate, infrastructure, natural resources etc.) with the objective of generating current income, improving performance, and/or reselling at a higher price in the future

Structured Products (*\$7Tn Market*)⁵

Pools of fixed income securities purchased with equity from investors and leveraged with the objective of generating spread income for investors above comparative non-structured yields

Hedge Funds (*3.5Tn Market*)⁶

Private investment vehicles primarily focused on global equity, fixed income, and/or (gold, commodities etc.) exposures created by sophisticated trading strategies – including short selling and hedging – that can employ leverage and/or derivative instruments

Note: These views reflect the views and opinions of Apollo Global Management and we believe they represent broad directional characteristics, but these views are not absolute and certain alternatives may not fit within the mentioned context. Sources: Citi Alternative Investments; (1) Preqin, Bain, Institutional Investor (2) Crunchbase (3) Preqin Future of Alternatives: Private Debt (4) Preqin Future of Alternatives: RE, Infrastructure & Natural Resources, respectively (5) Bloomberg (6) Preqin Future of Alternatives 2025: Hedge Funds

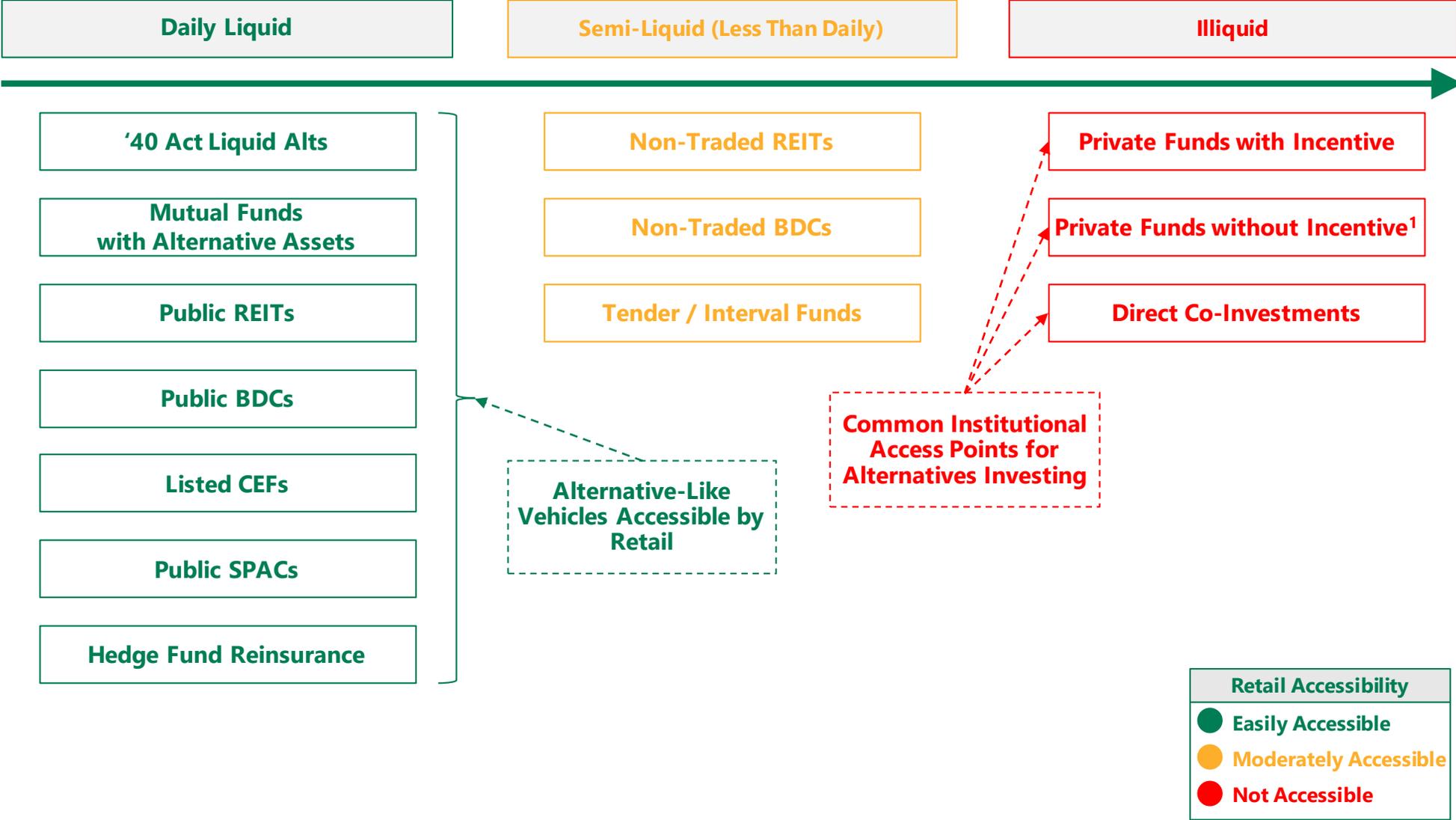
Alternatives Differ From Traditional Investments in a Few Key Ways

Traditional Investments	Alternative Investments
Relative performance objective	Generally absolute performance objective
Generally no leverage	May use leverage
Performance dependent primarily on market returns	Performance dependent primarily on alpha generation
Historically high correlation with market indices	Often low-to-moderate correlation with market indices
Typically offers daily liquidity	Typically offers less than daily liquidity
Fixed management fee on assets under management	Can have management and incentive fee structure

Source: Citi Alternative Investments 2008. Note: These views reflect the views and opinions of Apollo Global Management.

Retail Investors Can Only Access Certain Types of Alternative Investments

- Today's regulatory format limits retail access to private vehicles that employ alternative investment strategies



(1) In this format, incentive fees can only be charged on Net Interest Income ("NII"), which is defined as interest income, dividend income and any other income accrued, less operating expense and not on capital gains. If NII surpasses the hurdle rate, then the GP is entitled to carry. Carry cannot be taken on any capital gain at any time if there are over 100 accredited investors in a vehicle.

Alternatives Provide Much Needed Returns for Institutional Investors

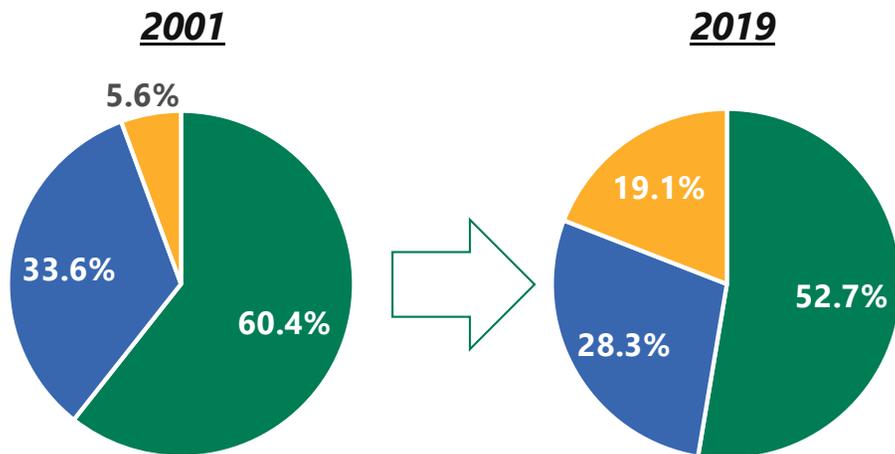
Alternatives assets are expected to grow at a 9.8% CAGR through 2025¹

US state pension funds have significantly increased their allocation to alternatives...

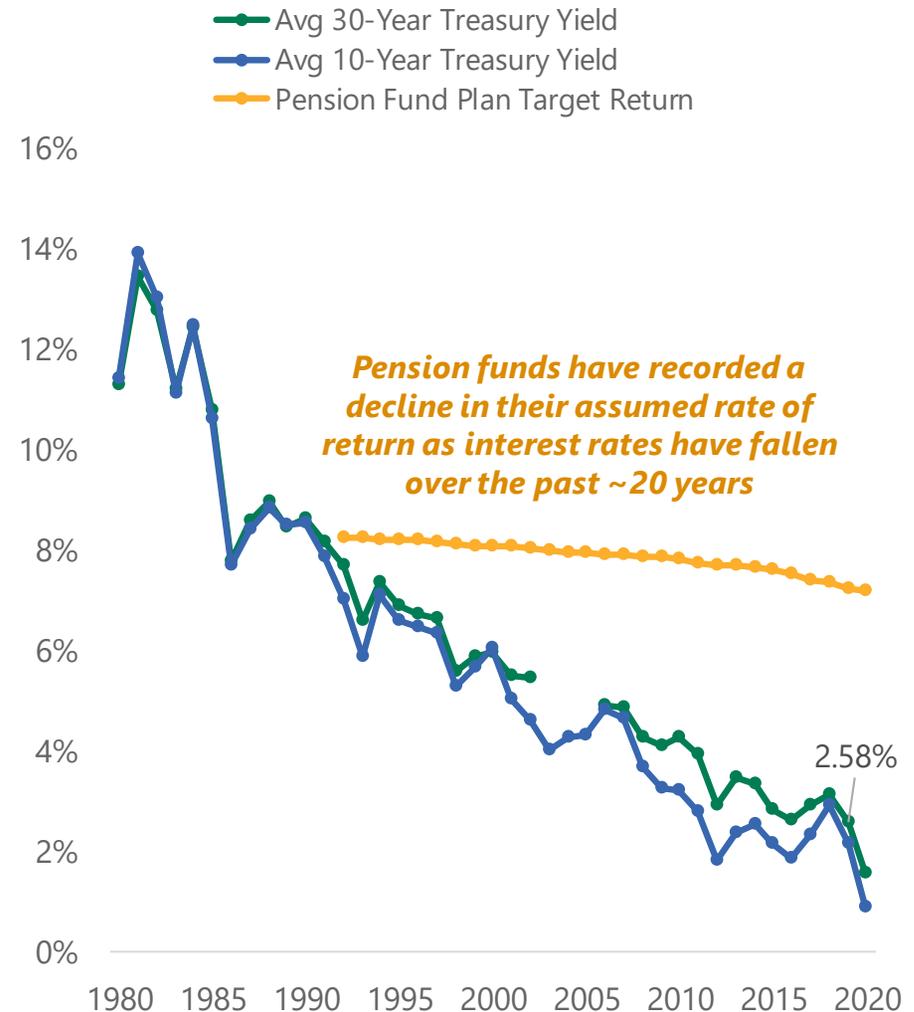
...In order to generate returns in a challenging rate environment

Asset Allocations of US State Pension Funds²

- Equities
- Fixed Income & Cash Holdings
- Alternatives

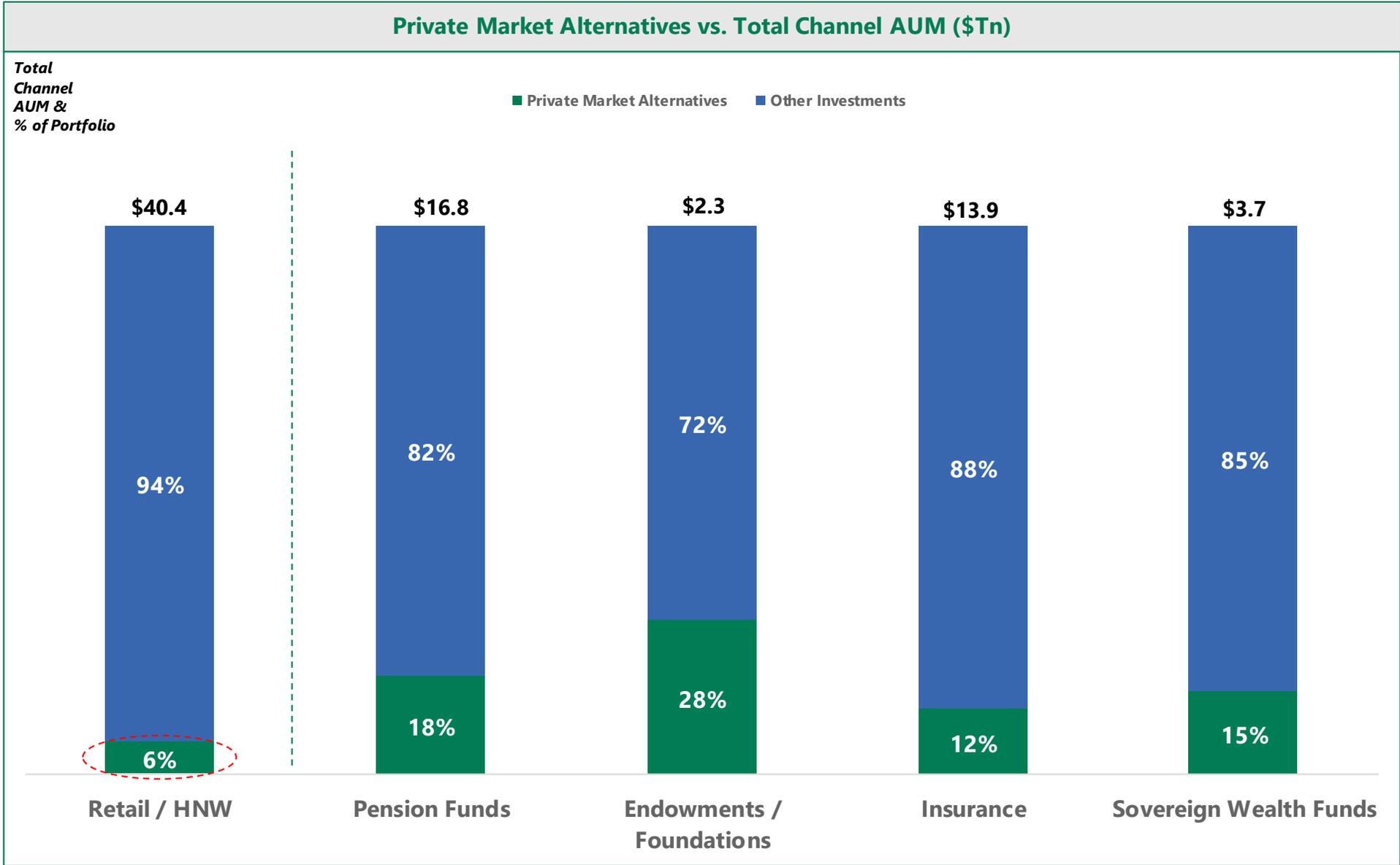


Allocation to alternatives has increased from ~5% to 19% over the past ~10 years



(1) Preqin Future of Alternatives 2025 (2) Equable Institute State of Pensions 2020 (July 2020) Note: "Alternative" investments include private equity, hedge funds, real estate, commodities, and tactical asset allocations. 2020 yields are the average as of June 2020. (3) No 30-year treasury bonds were issued between February 18, 2002 and February 8, 2006.

Retail Investors are Underinvested in Alternatives Relative to Institutions



Source: Large, well-known global consulting firm. As of August 2020.

Retail Investors Face Disadvantages When Investing in Alternatives

Expanding access to alternatives vehicles could mitigate certain issues retail investors face today

Liquidity Mismatches

Retail vehicles invest in illiquid assets and are unlikely to provide liquidity in times of stress despite stated liquidity parameters

Distribution Fees

Up front and ongoing brokerage fees are high

Concentration Risk via SPACs

Sub-accredited retail cannot invest in PE, but can invest in SPACs, which are more concentrated versions of PE

Note: These views reflect the views and opinions of Apollo Global Management.

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SEC Asset Management Advisory Committee –

1st December 2020

Design Principles

Design Principles

- Assuming the Committee generally agrees that investors would benefit from greater access to private investments, what should be the design principles for this access?
- Goals -- provide greater access with attention paid to other investor objectives:
 - Understanding and managing potential risks and rewards
 - Meeting investors' liquidity needs
 - Reducing or disclosing conflicts of interest
 - Understanding impact of fees and expenses
- Requires adjusting or eliminating current private investment standards:
 - Wealth
 - Income
 - Financial Sophistication
 - Natural Person vs. Institution

Design Principles

- **Principles for Wider Access:**
 - Diversification
 - Disclosure
 - Transparency of Fees and Performance
 - Reasonable Costs to Investors
 - “Chaperoned” Access with Fiduciary Obligations?
 - Full Retail vs. “Super Retail” Investor Access
 - Balancing Investor Protection and Investor Choice

- **Potential Access Vehicles**
 - Private Equity Funds or Funds of Funds
 - Mutual Funds
 - Closed-End Funds
 - Retirement Plans
 - Other Structures

- **Committee Input:**
 - **What factors are most important in designing greater access?**
 - **What investor protections are needed?**

- **Next steps**

Questions and Comments