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Fee Productivity and Transparency of Pension Plan Assets

November 27, 2018



BNY MELLON

Agenda

1. Fee Productivity
2. Passive Investing Trends
3. Manager Fee Oversight

Section 1

Fee Productivity



What is Fee Productivity?

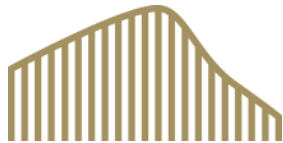
We define Fee Productivity as a method to evaluate the effectiveness of active investment strategies while taking into consideration the following:

1)



Net of Fee Investment Returns

2)



Investment Risk
(Specifically Downside Risk as Measured by the Sortino Ratio)

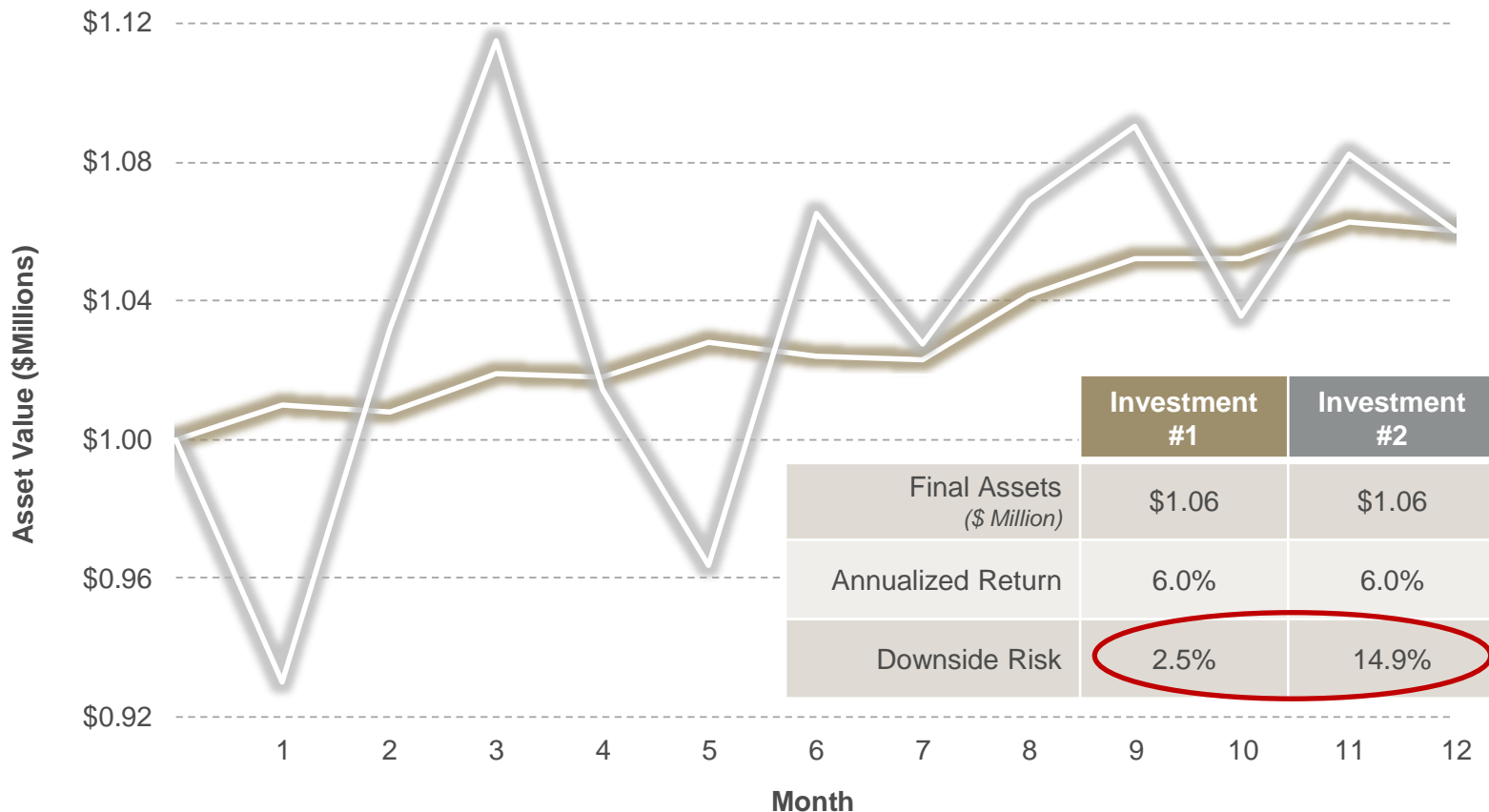
3)



Passive Options within the Asset Class

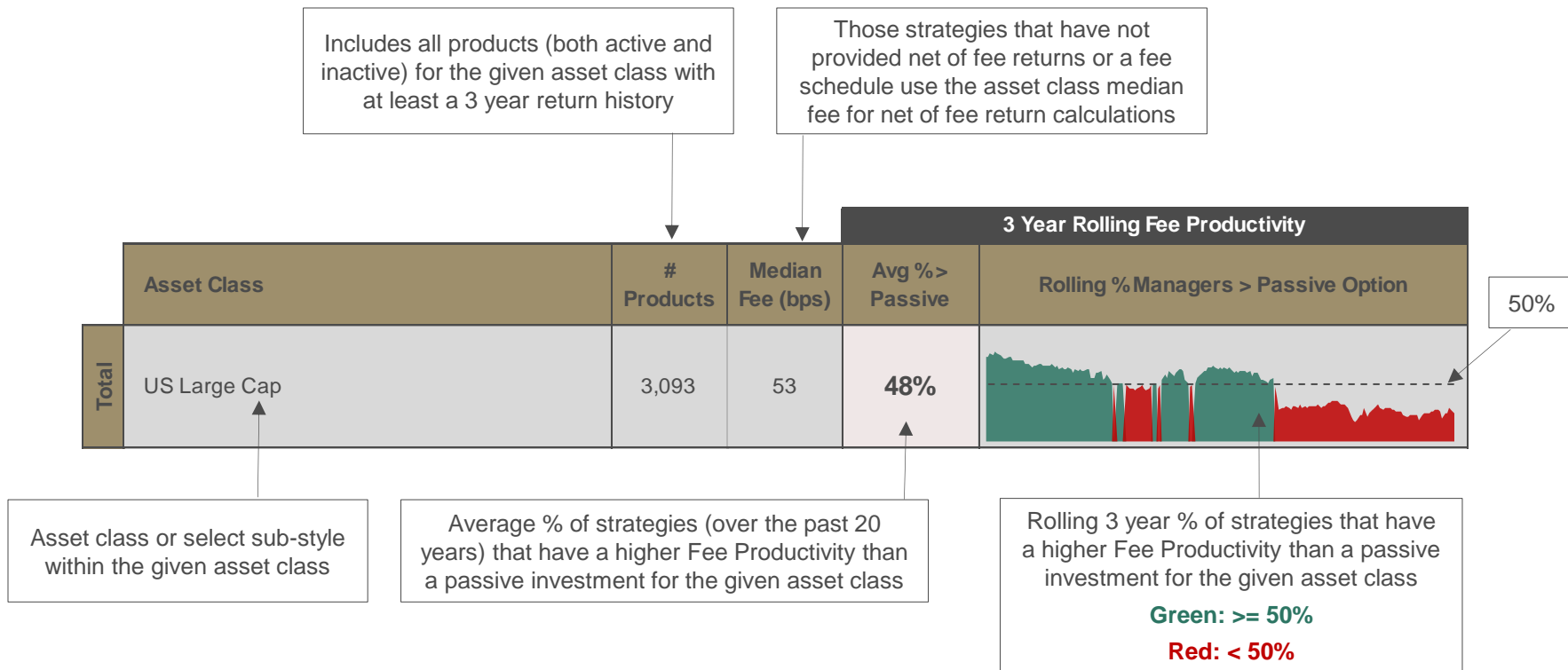
The Importance of Accounting for Risk – An Example

Two investments that provide the same end result should not be considered equal. If one investment can provide the same return with substantially less risk (specifically on the downside), this should be considered a 'better' investment option.



Note: For illustrative purposes only. The two sample investments are hypothetical and not representative of any actual investments available in the marketplace. Hypothetical monthly return streams were created with varying volatility levels and final return values equated to provide a hypothetical example.

How to Interpret the Data

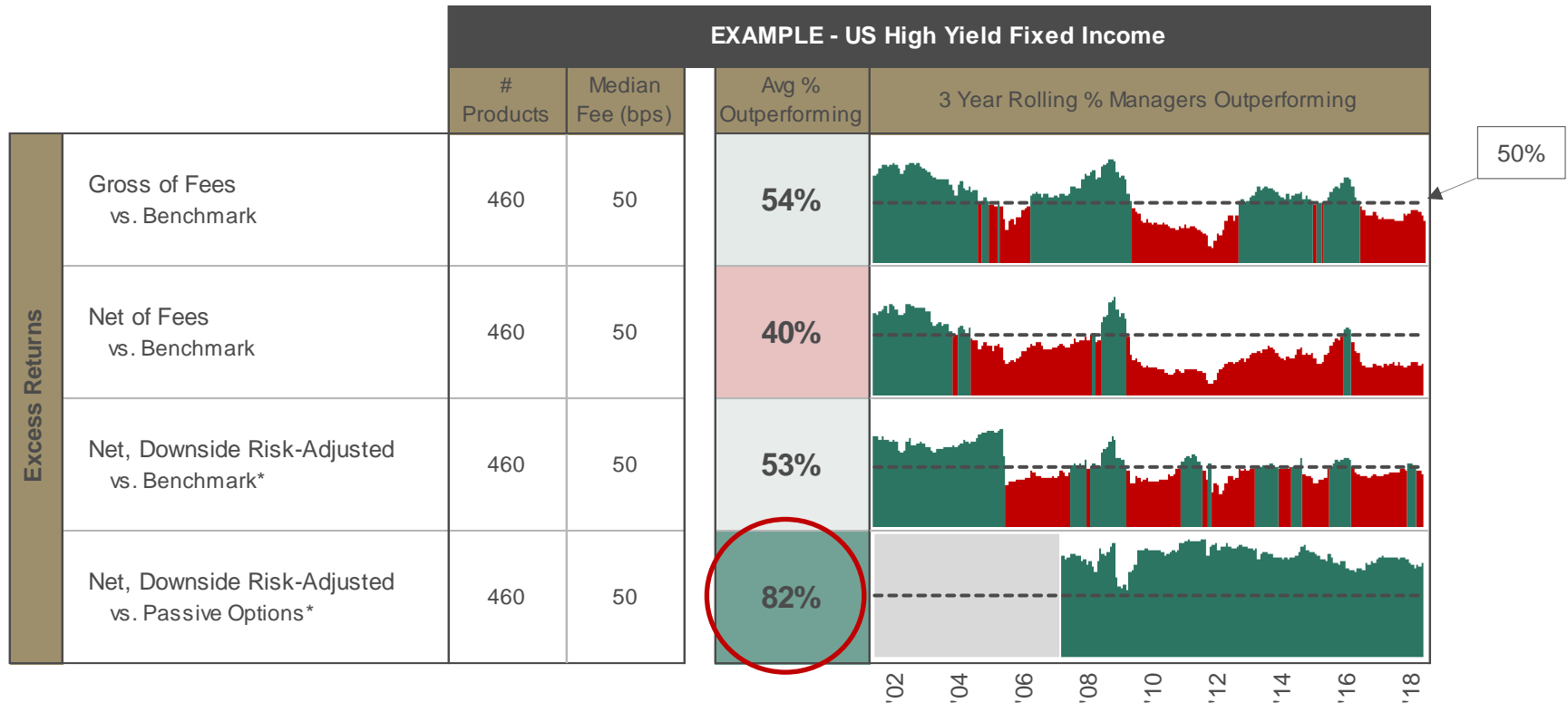


Source: eVestment, BNY Mellon, Morningstar Direct

Note: Number of managers includes both active and inactive products. Product Sortino Ratios were calculated using net of fee returns. Fees are calculated as average fee available across all fee tiers for each product. In the instance where a product does not disclose a standard fee schedule, the universe median fee was used. The Citigroup 3-Month T-Bill was used as the risk-free rate for Sortino Ratio calculations.

The Story Can Change for the Better

The case for active management within U.S. High Yield Fixed Income strategies is very compelling once you factor in the effectiveness of available passive options within the asset class.



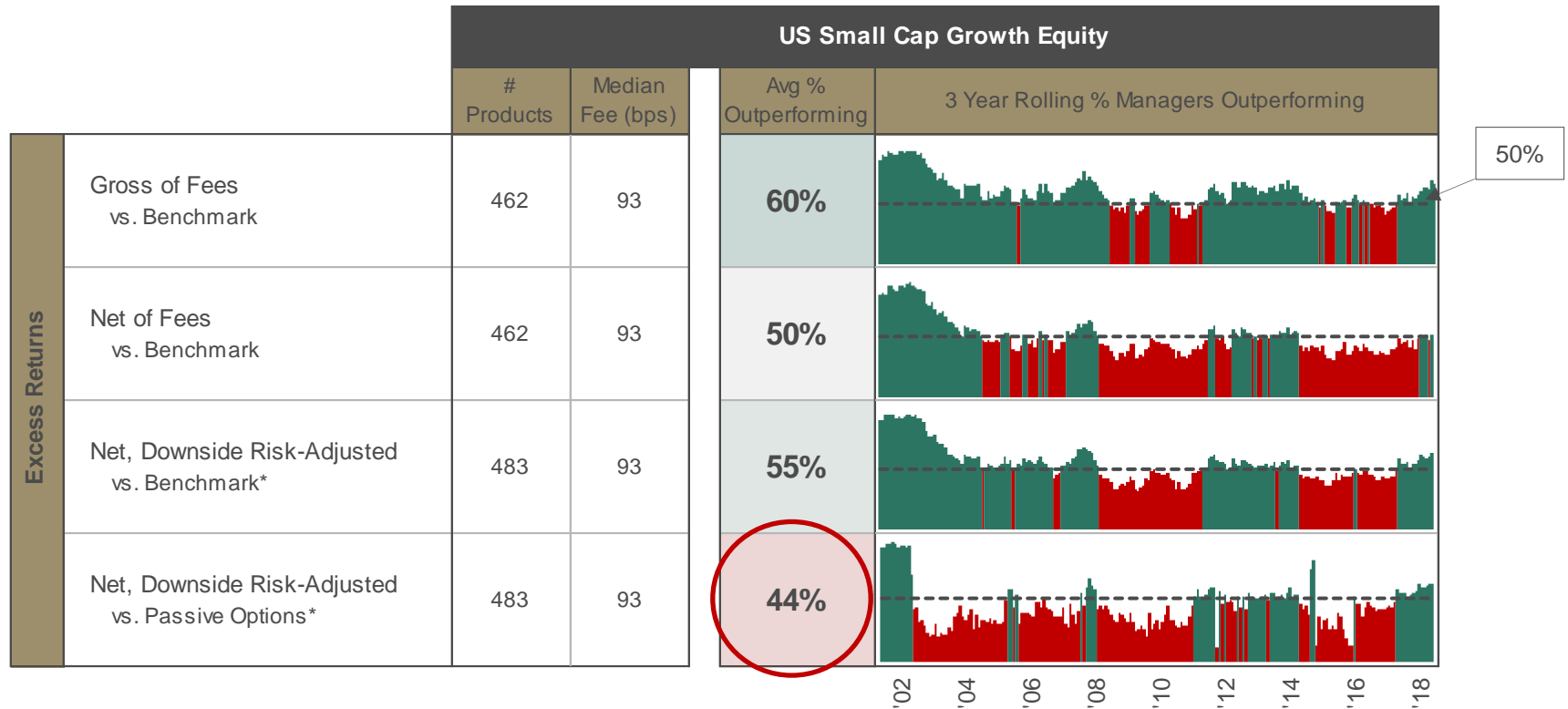
Source: BNY Mellon, eVestment, Morningstar Direct

* Downside risk-adjusted returns are calculated with the net of fees Sortino Ratio for all products.

Note: Fees are calculated as average fee available across all fee tiers for each product. In the instance where a product does not disclose a standard fee schedule, the universe median fee was used. The Citigroup 3-Month T-Bill was used as the risk-free rate for Sortino Ratio calculations.

The Story Can Change for the Worse

The case for active management within U.S. Small Cap Growth strategies begins to look less compelling when fees and then risk are factored into the equation.



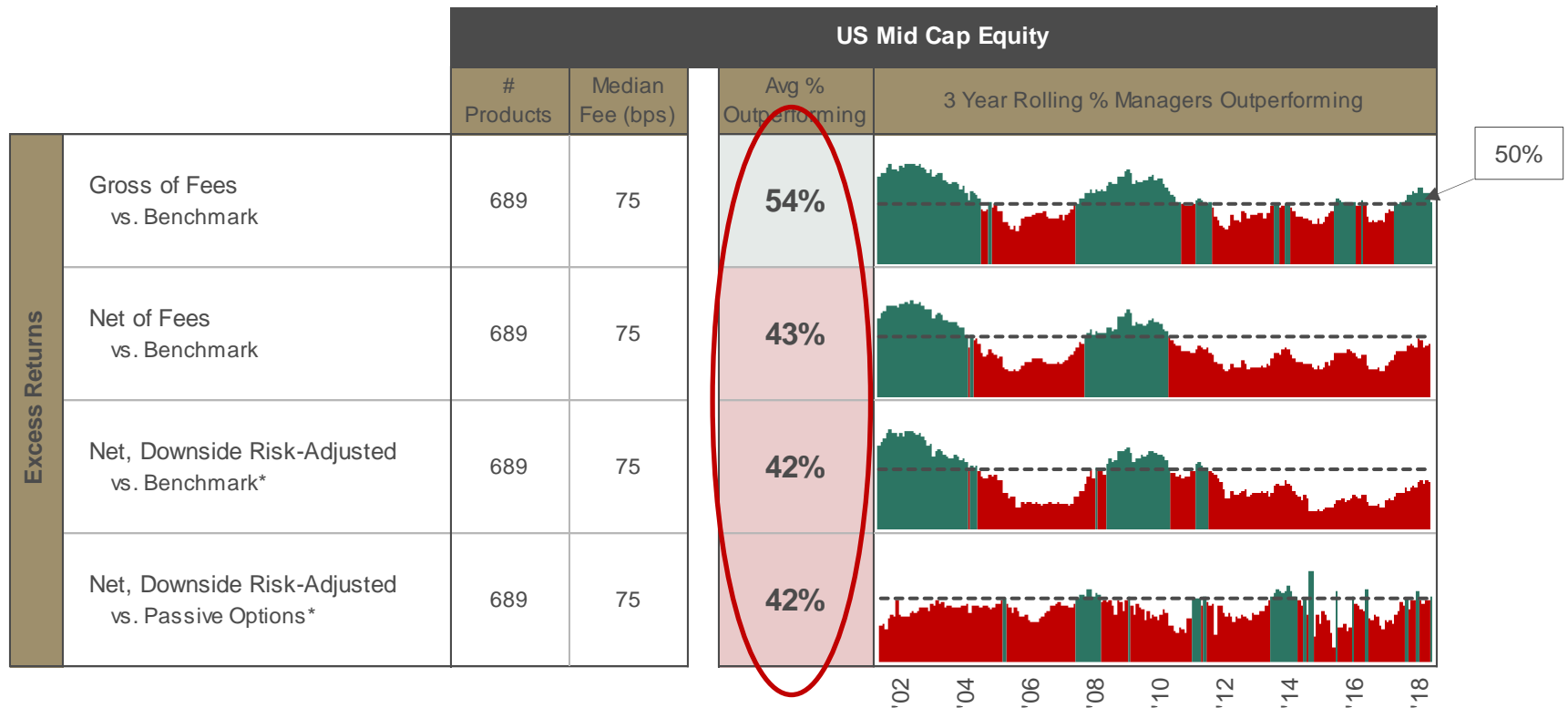
Source: BNY Mellon, eVestment, Morningstar Direct

* Downside risk-adjusted returns are calculated with the net of fees Sortino Ratio for all products.

Note: Fees are calculated as average fee available across all fee tiers for each product. In the instance where a product does not disclose a standard fee schedule, the universe median fee was used. The Citigroup 3-Month T-Bill was used as the risk-free rate for Sortino Ratio calculations.

The Story Can Remain the Same

The case for active management within U.S. Mid Cap strategies does not look compelling even when fees are not considered and looks even worse when accounting for fees and risk.



Source: BNY Mellon, eVestment, Morningstar Direct

* Downside risk-adjusted returns are calculated with the net of fees Sortino Ratio for all products.

Note: Fees are calculated as average fee available across all fee tiers for each product. In the instance where a product does not disclose a standard fee schedule, the universe median fee was used. The Citigroup 3-Month T-Bill was used as the risk-free rate for Sortino Ratio calculations.

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Section 2

Passive Investing Trends

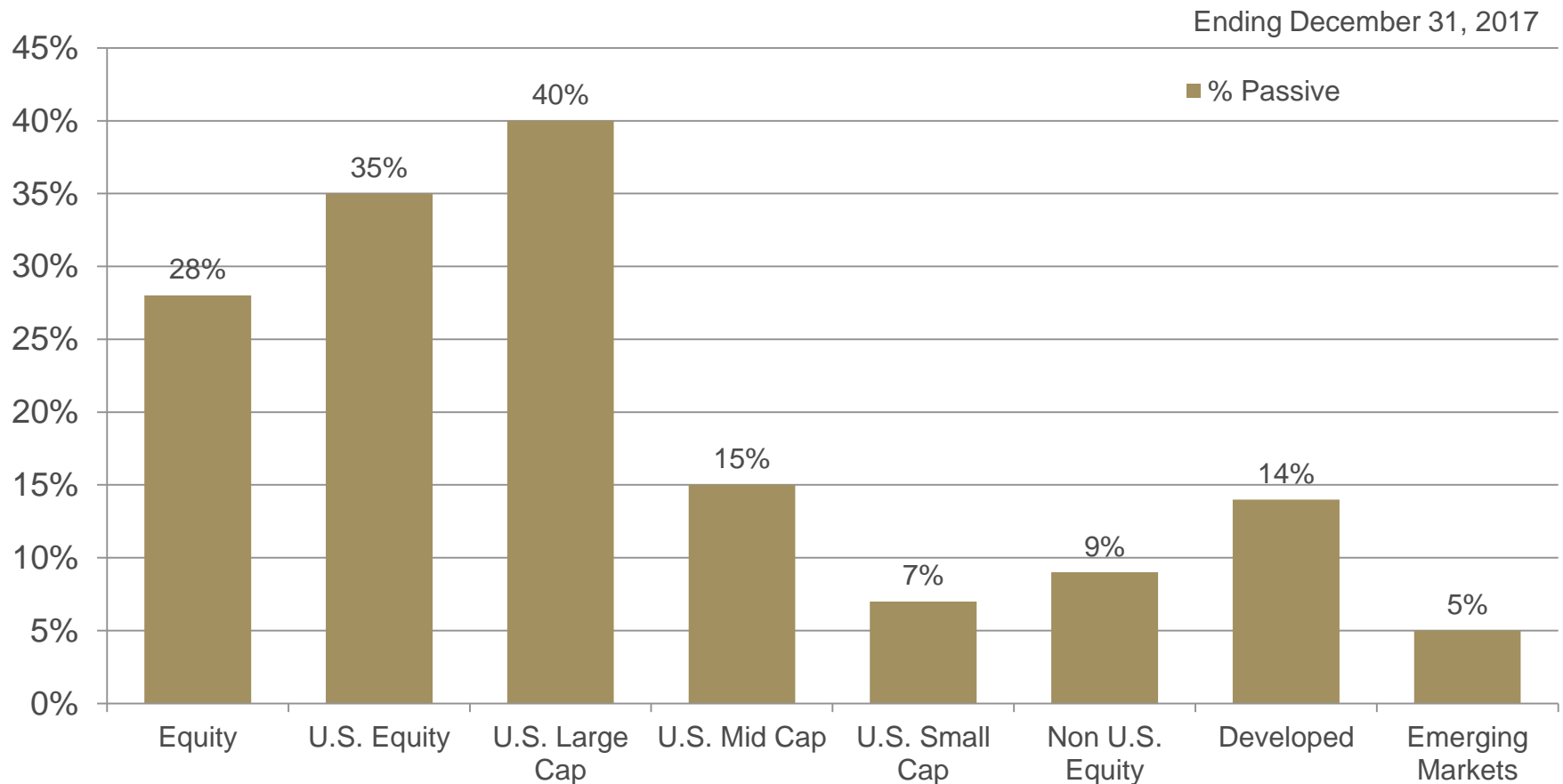


Discussion Topics

- Active versus passive management among asset owners
- What asset classes do asset owners choose more often for passive investing?
- Has passive investing changed over the previous five years?
- Does one type of asset owner choose passive investing more than other types of asset owners?

Active vs. Passive Investing

- Active management is clearly still the prominent style of investing across asset owners
- Passive management is most prevalent in the equity, both U.S. and Non-U.S., with U.S. Large Cap being the most at 40% of large cap assets

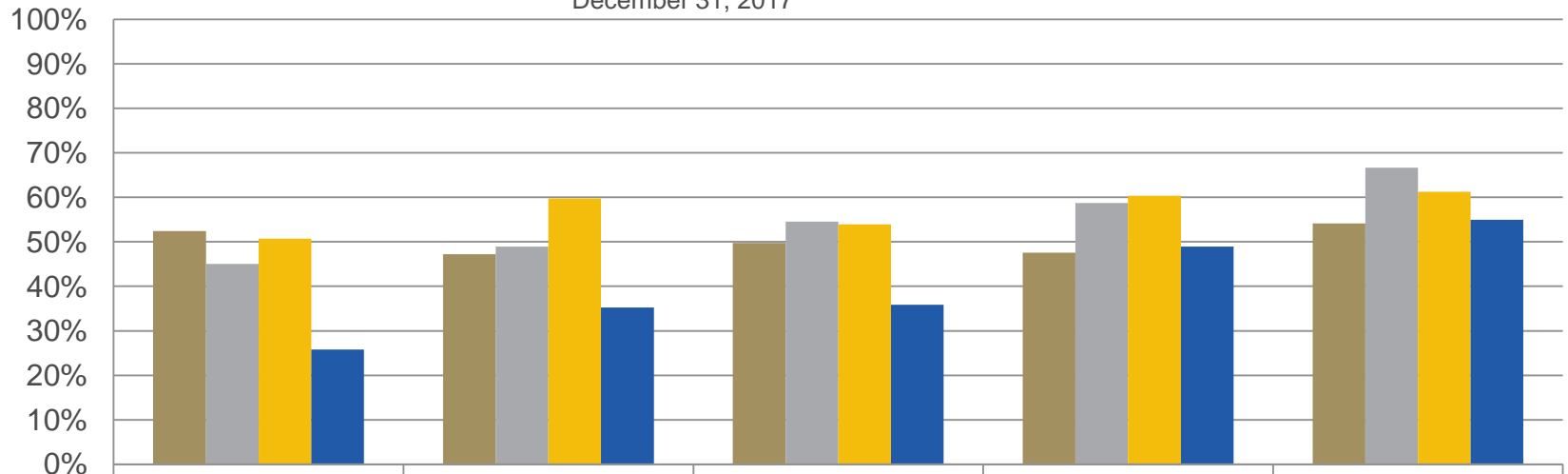


Do Active Managers Consistently Outperform Their Benchmarks?

- U.S. large-cap equity, active managers outperform approximately half the time, small cap is slightly more than this for the longer term
- Other asset classes such as small-cap and developed, active manager in the longer term outperform nearly two-thirds of the time
- Emerging market managers have had a hard time beating the benchmark recently

Active Management Outperformance

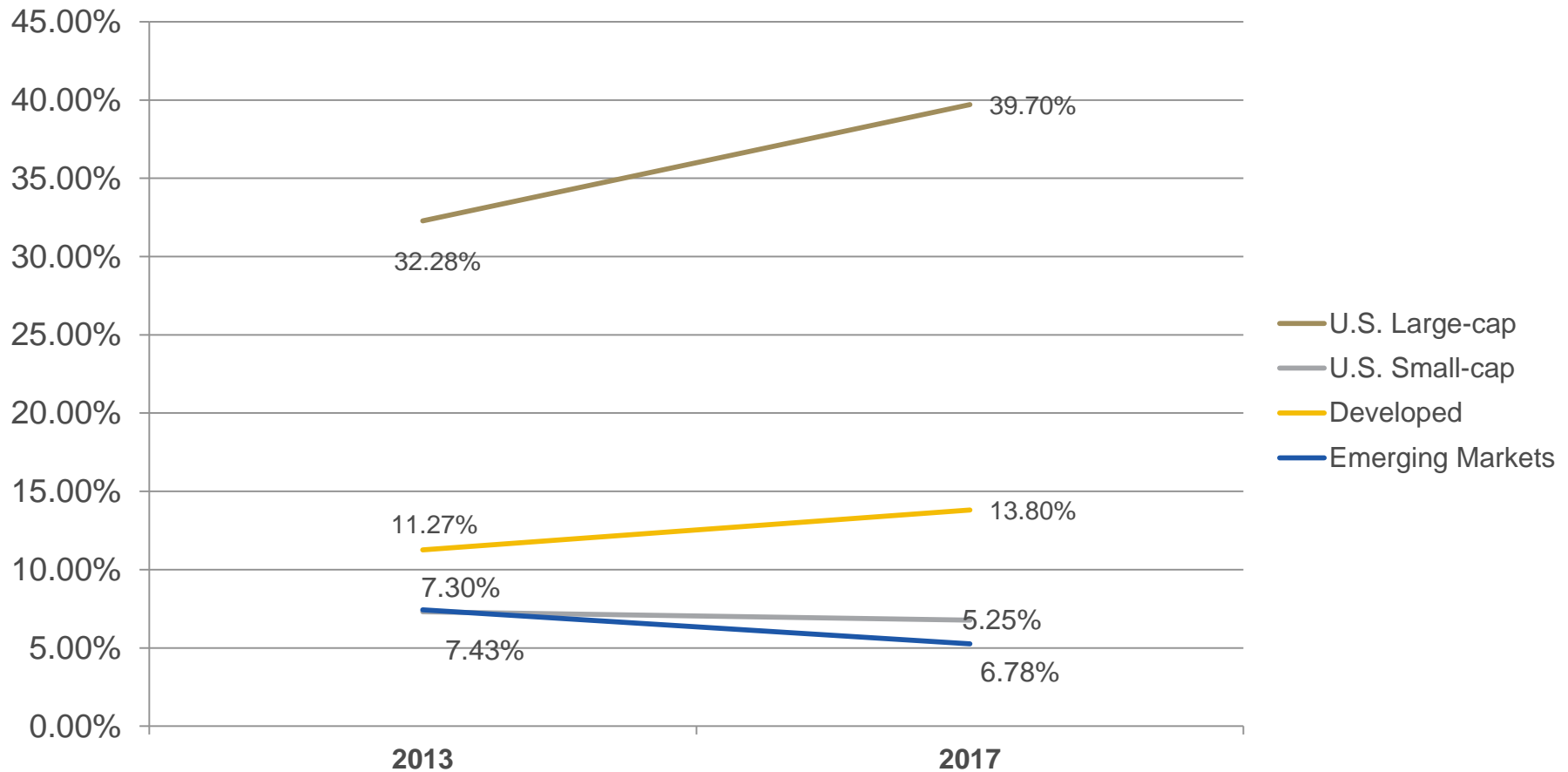
December 31, 2017



	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Large-Cap	52.44%	47.18%	49.75%	47.54%	54.10%
Small-Cap	45.00%	48.90%	54.55%	58.74%	66.67%
Developed	50.74%	59.73%	53.93%	60.33%	61.26%
Emerging	25.82%	35.20%	35.88%	48.95%	54.94%

Change in Passive Investing, Previous Five Years

- U.S. large-cap has seen the greatest increase in passive investing followed by emerging markets
- Developed and small-cap have remained relatively flat in their passive allocations

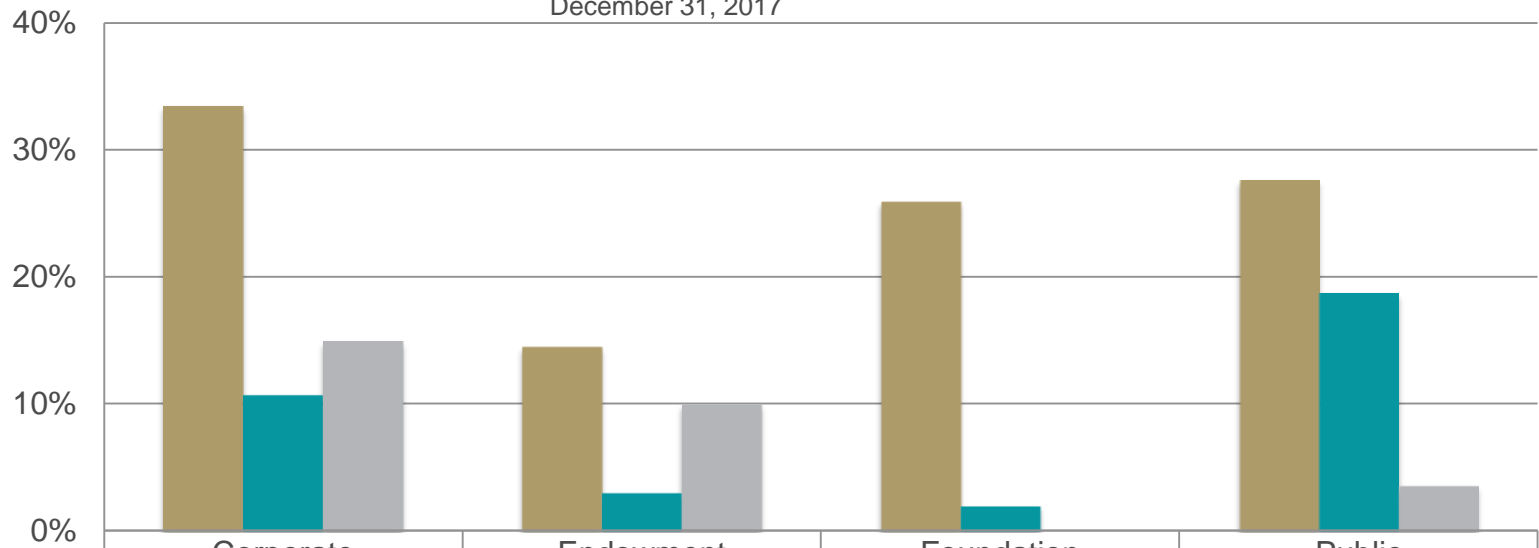


How Do Asset Owners Differ on Their Strategy?

- Corporates tend to allocate the most to passive investing compared to other asset owner plan types
- Endowments hold the least amount of passive assets and tend to have more confidence in active management

Equity Asset Allocation by plan type—Passive

December 31, 2017



	Corporate	Endowment	Foundation	Public
■ US Equity	33.44%	14.53%	25.95%	27.63%
■ Non-US Equity	10.72%	3.03%	2.01%	18.68%
■ Global Equity	14.87%	9.94%	0.00%	3.59%

Section 3

Manager Fee Oversight

Globalization of Financial Regulatory Policy

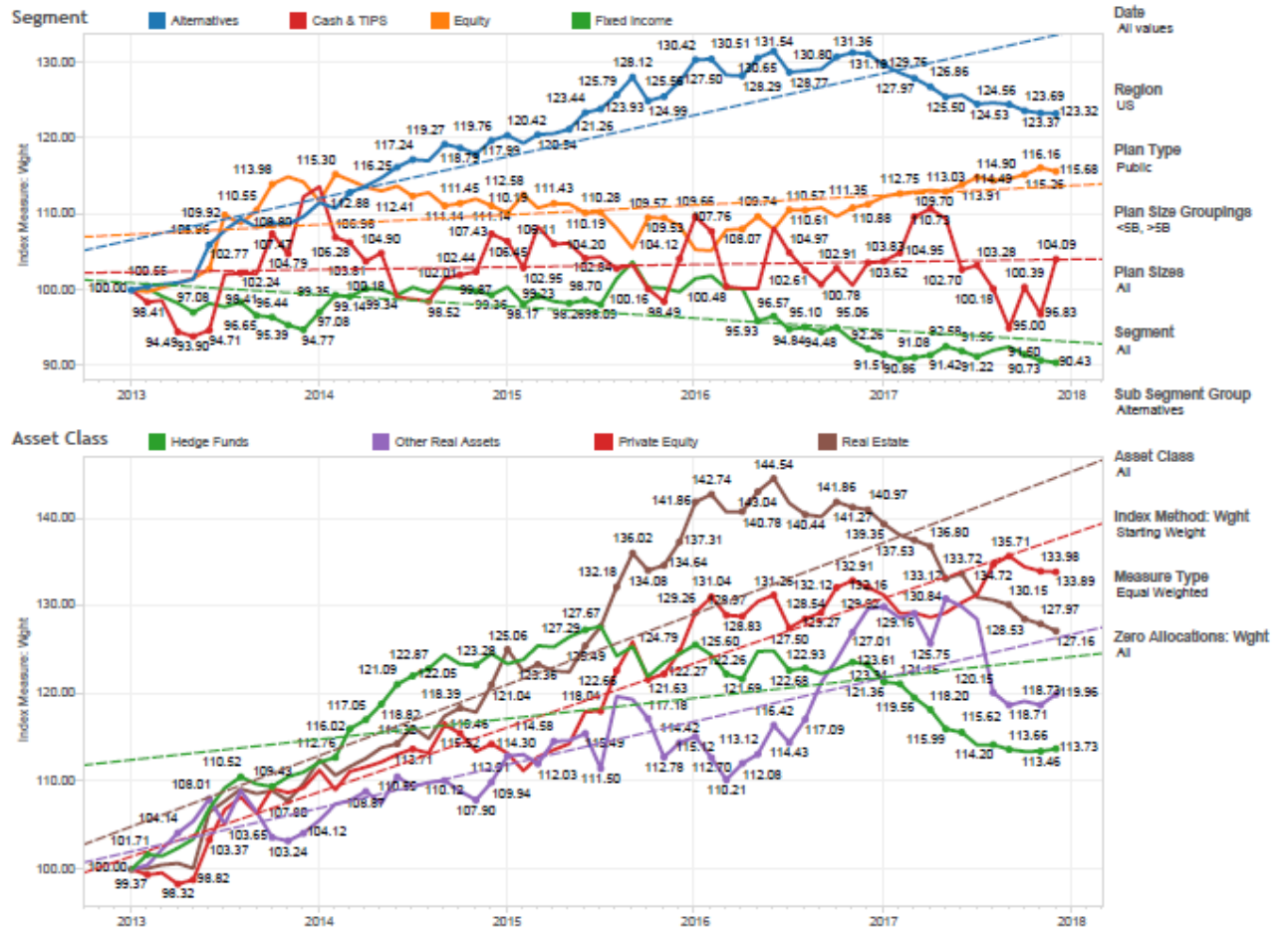
- Global regulatory change, transparency and disclosure continues to support trend towards increased transparency in the asset management industry
- Following the global financial crisis, political support for tighter oversight of financial services have lead to more regulatory policy with continued persistence since 2010
- Important regulatory policy in major capital markets:
 - North America – Dodd-Frank, AIFMD, FTT and IFRS
 - EMEA – Basel III, MiFID II, UCITS, AIFMR
 - APAC/LatAM – BRICS countries are driving toward increased governance and continued adoption of developed market standards (e.g. Basel principles)
- **Ongoing Regime-shift: Investors continue to be focused on performance and how it relates to risk, governance and transparency**

Increasing Allocations to Alternative Investments

Asset Strategy View shows Public Pensions allocation trends in alternative investments:

- In the past five years, public pensions have increased allocations to alternative assets by more than 23%
- This increase is driven mostly by Private Equity and Real Estate, with Hedge Funds increasing at a lower rate

Indexed Asset Movements



Focus on Fees

Fees are a quantifiable metric relevant to investors and directly relate to performance

Investors want a total plan view of fees across their publically traded portfolio as well as their private assets, despite diversity of vehicles (SMAs, commingled investments, co-investments, private equity and real estate) on both gross and net of fee basis

- Focus by industry associations (e.g. the Institutional Limited Partners Association's Fee Transparency Initiative)
- Legal requirement in some states

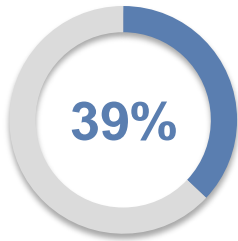
Number of challenges to provide this oversight:

- Disclosure of fee metrics not uniform (fees for performance, management fees and other expenses)
- Definition of fee metric not standardized
- Calculation of fees vary by investment

Hedge Fund Managed Account Market Trends

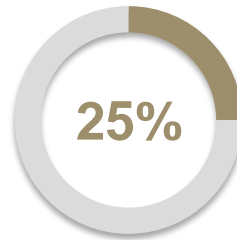
The future of hedge fund investing

Use of Managed Accounts is increasing



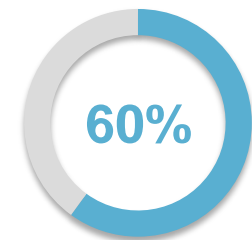
Of Institutional Hedge Fund Investors use Managed Accounts Today¹

Increasing share of flows are going into DMAs



Of New Capital in Managed Account Structures²

Manager willingness is increasing



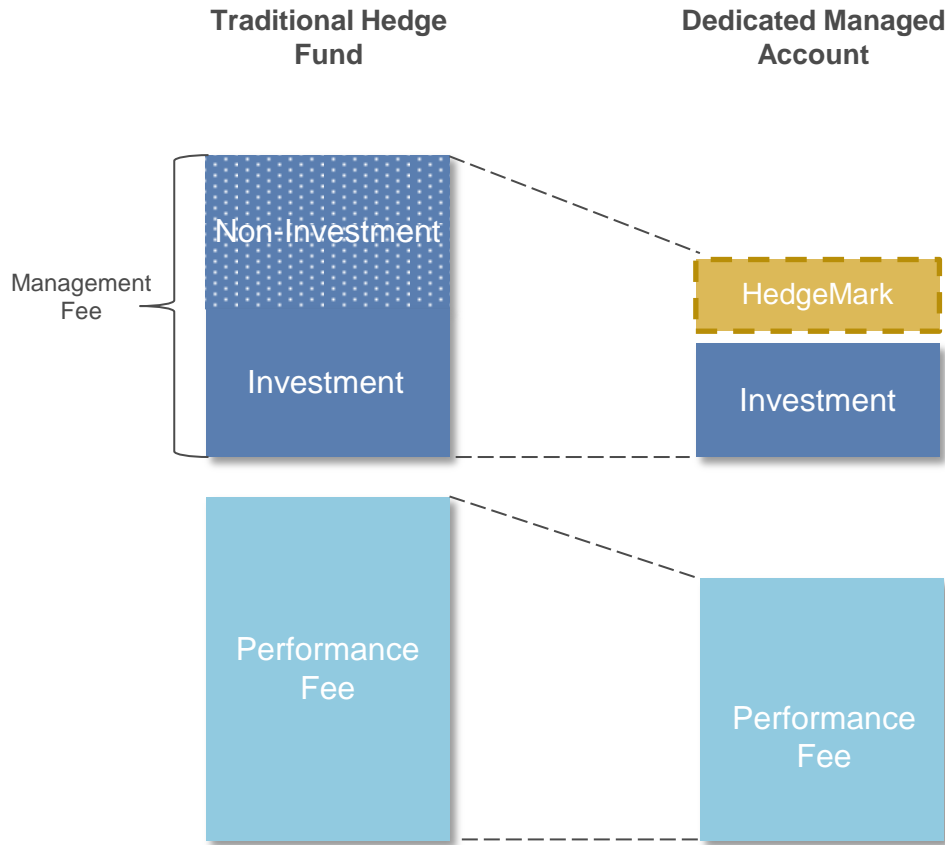
Of Hedge Fund Managers Currently Offer Managed Accounts²

¹ EY, 2018 Global Hedge Fund and Investor Survey

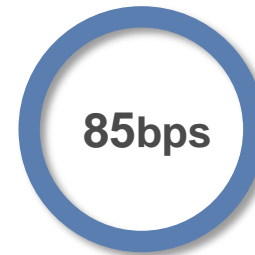
² Credit Suisse Prime Services Research, "Mass Appeal, Bespoke Approach, A Tailored View of Managed Accounts", February 2018

Hedge Fund Dedicated Managed Account Manager Fees

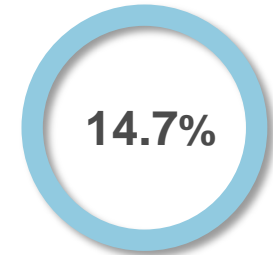
Dedicated Managed Accounts provide opportunity to lower management fees and performance fees



Average HedgeMark Client Management Fee¹



Average HedgeMark Client Performance Fee²



Key Concepts

- HedgeMark operating model reduces burden on manager and helps support reduced fees
- Customized mandates = customized fees
- Terms structured to better align with investor's objective (e.g. hurdles, clawbacks, etc.)

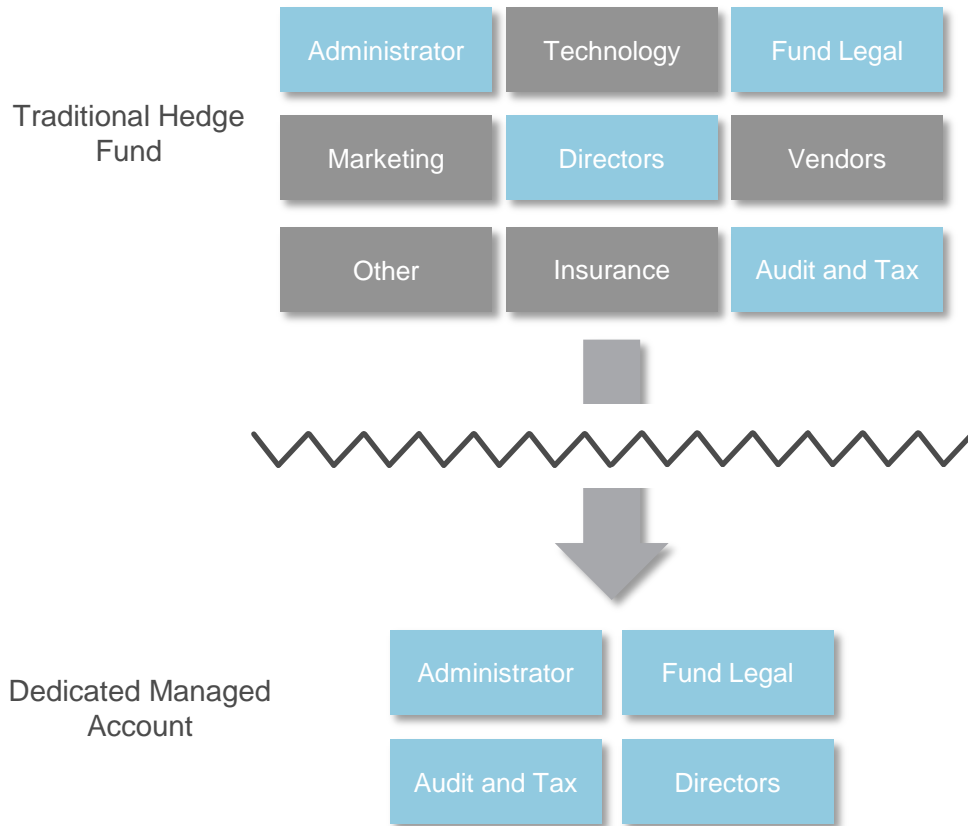
* Actual fees are payable to the Manager are subject to negotiation in each case and therefore may be a greater or lesser portion of total fund expenses than represented in the illustrative chart shown above.

¹ Fees based on negotiated terms and NAV for funds on the HedgeMark DMA platform as of Sep 30, 2018. Does not include funds with zero management fees.

² Fees based on negotiated terms and NAV as of Sep 30, 2018 for funds on the HedgeMark DMA platform. Performance fee assumes each fund has \$100M in Net Assets and experiences a 10% return. Does not include funds with zero performance fees

Hedge Fund Manager Expenses

Dedicated Managed Accounts provide opportunity to lower fund expenses



Controlling Expenses

- Opaque in commingled structures
- Complete expense transparency in DMA
- Only DMA related expenses typically allowed (e.g. audit, admin, legal)
 - ✓ Can apply caps and limits
- Any manager pass-through expenses negotiated and defined in IMA
- All invoices reviewed/approved by HedgeMark
- Use of platform service providers can create economies of scale

* Actual expenses are payable to the Manager and are subject to negotiation in each case and therefore may be a greater or lesser portion of total fund expenses than represented in the illustrative chart shown above.

Manager Oversight

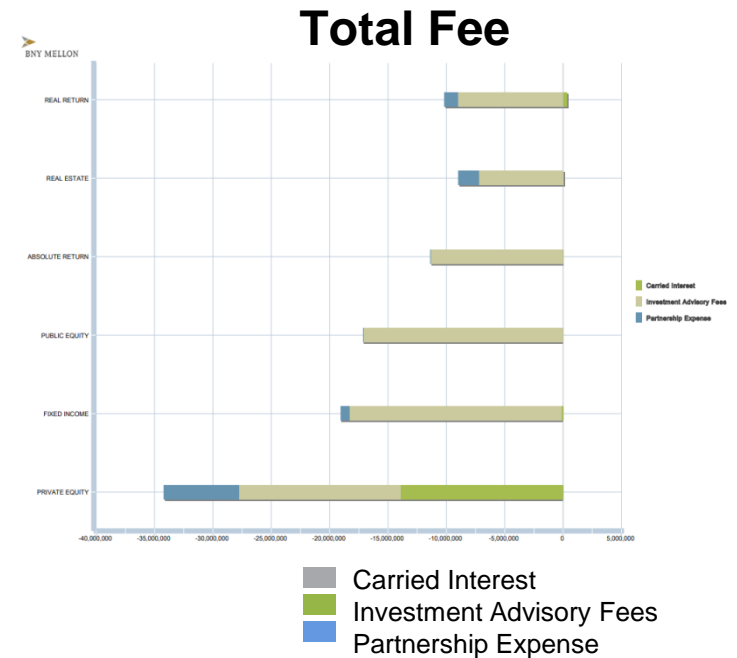
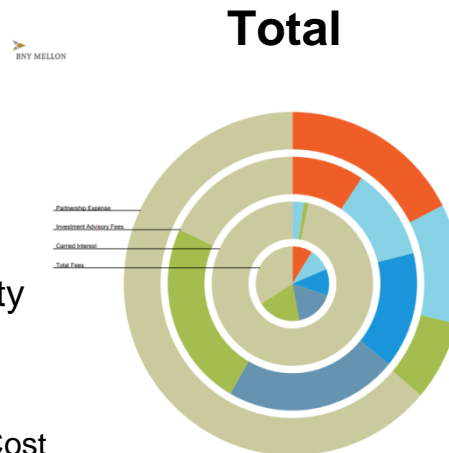
Monitoring Manager Fees

Analyze fees across your portfolios

- Dimensions
 - Analyze by Asset Class, Private vs. Public, Manager
 - Fee types
 - > Management Fees (Inv Advisory Fees)
 - > Carried Interest/Incentive Fees
 - > Partnership Expense
 - Current Year vs. Last Year

BNY MELLON		Fee Analysis			
Category	Total Fees	Investment Advisory Fees	Carried Interest	Partnership Expense	
Total	-100,653,997.88	-76,751,164.82	-13,728,521.72	-10,135,541.45	
ABSOLUTE RETURN	-11,374,451.98	-11,374,451.98			
FIXED INCOME	-19,080,580.56	-18,186,413.18	-134,003.00	-760,024.00	
PRIVATE EQUITY	-34,196,328.81	-13,814,725.09	-13,921,346.16	-6,460,257.56	
PUBLIC EQUITY	-17,193,220.98	-17,155,445.90			
REAL ESTATE	-8,956,408.53	-7,191,571.29	7,015.07	-1,771,852.31	
REAL RETURN	-9,853,007.02	-9,028,557.38	319,812.37	-1,143,407.58	

- Summary Reports
- Drill Down Reports
- Customization vs. Comparability
- Considerations
 - Equity method of accounting vs Cost
 - Agreed fee detail categories
 - Managers' willingness to provide fee details



Best Practices for Fee Transparency

- Partnership with Investment Managers
 - Alignment of interest between clients and investor providers
 - Dialogue on importance of all elements of fees (e.g. expenses as a drag on returns)
 - Comparison of fee structures to assess value for underlying investor
- Industry move toward comprehensive reporting standards
 - Move toward transparent cost disclosures globally for multiple investors (pension, endowment and foundations, investment managers, broker-dealers, private wealth clients, etc.)

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