

BNY Mellon Endowments and Foundations Performance and Asset Allocation Study (2020)

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Universities, philanthropies, cultural institutions and other not-for-profit organizations are contending with significant financial hardship brought on by COVID-19.

From shuttered classrooms and museums, to suspended fundraising activities and hospital procedures, many of these institutions may see a shortfall in revenue and will likely seek government emergency funding or tax relief. Many will implement painful cost-saving measures.

While it would be natural to assume that institutions supported by larger endowments will weather the pandemic better than their smaller peers, wealthier institutions are not exactly insulated. There are often donor imposed restrictions on how gifts are used, limiting the extent to which investment proceeds can address shortfalls in operating capital. Some states impose spending ceilings on universities to prevent overuse of endowment assets. Fundamentally, as many endowments and foundations (E&Fs) are established with the intention of being able to exist in perpetuity, they have spending policies in place that limit the use of investment gains to support day-to-day operations.

For fiscal year 2019, the average university endowment spending rate was 4.5%¹. With respect to spend rates for other not-for-profits, many have embraced a 5% spend rate in line with IRS guidelines for private foundations. Many institutional boards will face significant pressure to temporarily increase spending as they grapple with COVID-19 related challenges. However, as discussed in a 2019 white paper by BNY Mellon Wealth Management about spending and forecasted returns, even the average spend rate of 4.5% will likely prove challenging over the next decade.²

When last published in 2018, the BNY Mellon Performance and Asset Allocation Study for Endowments and Foundations revealed a few key trends. Among those findings was strong yearly performance for 2017, at 14.15% and 15.20%, respectively, for institutions with less than \$1B and greater than \$1B in assets.³

We also saw that larger foundations outperformed their smaller peers for the one, three and five-year time periods in nearly every sub-asset class. That outperformance by larger E&Fs was particularly prominent in alternative asset classes.

As we were set to publish this paper based on 2019 year-end findings, one key headline finding was that, in contrast to the last study, smaller E&Fs had slightly outperformed their larger peers for the one-year period. This slight outperformance was driven by relatively high allocations to well-performing equities. However, as COVID-19 spread from a regional crisis to a global pandemic, with severe impacts on the financial markets, we saw a reversal of that trend. By the end of the first quarter 2020, smaller E&Fs underperformed their larger peers by nearly 2%.

With the global pandemic and its impact on the financial markets still unfolding, it remains to be seen if larger E&Fs will continue to see less severe total portfolio impacts. Their higher allocations to alternatives seems to have provided some cushion from the dramatic first quarter drop in the equities market, although it is possible that lagged performance may be obscuring more declines to come in some alternative asset classes.

This paper examines a universe of 93 E&Fs using aggregate data from BNY Mellon's Asset Strategy View® solution to observe performance and asset allocation trends, with further comparative analysis of those with less than \$1B (comprising 47 institutions) and greater than \$1B (comprising 46 institutions) in assets. This study examines trends for the most recent five calendar years. Given the significant impact of COVID-19 on the financial markets, we felt it important to incorporate 2020 data on E&F performance and allocation trends into this study as well. Additionally, we have incorporated industry viewpoints on the impact of COVID-19 to share perspectives and stimulate dialogue. With that said, we owe a special thanks to our colleagues at BNY Mellon Wealth Management, Thomas Jefferson University, and Caissa, a leading multi-asset class investments and analytics platform servicing many E&Fs, for their commentary included in this study.

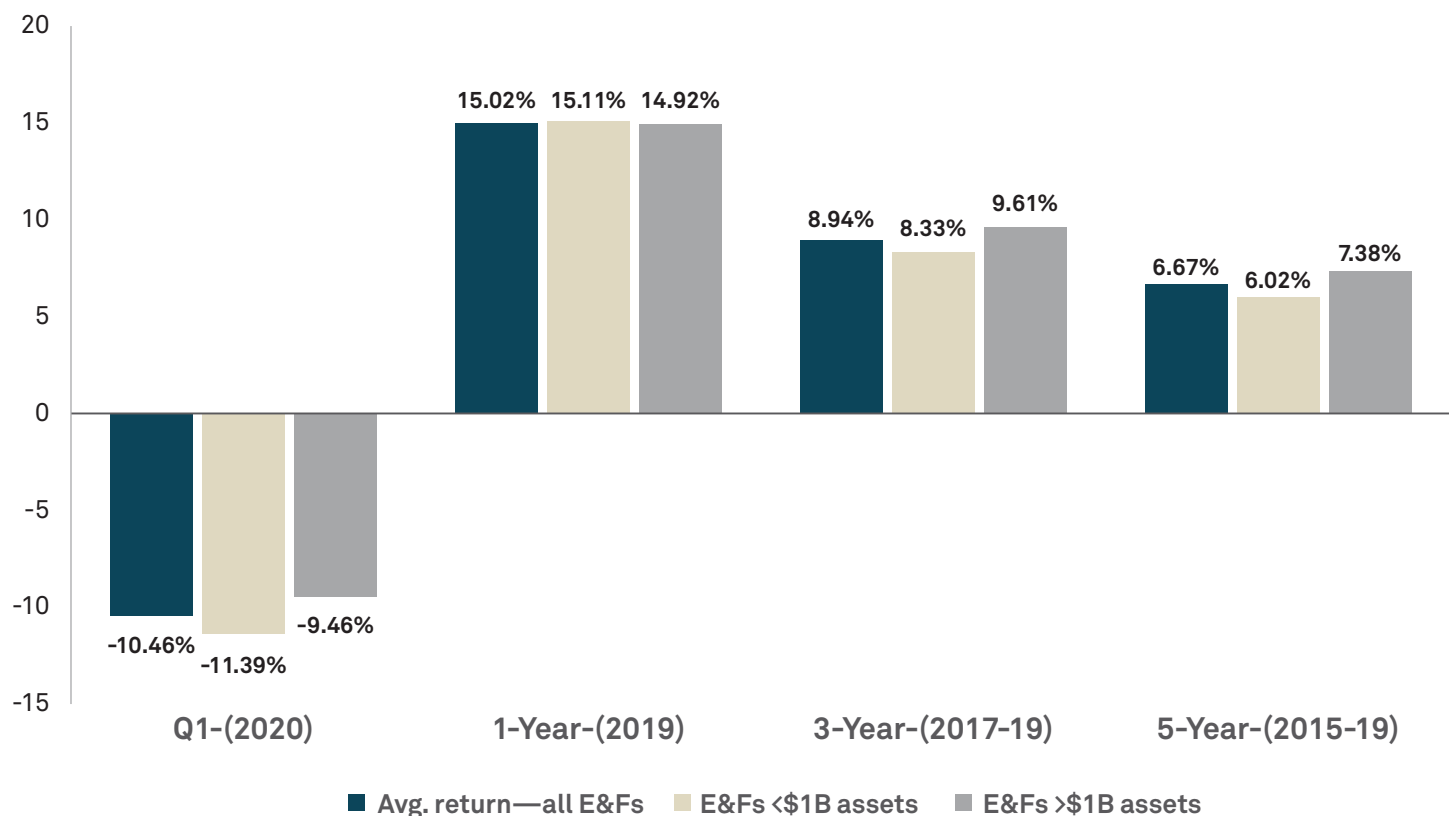
Performance Trends

Data gathered from a universe of 93 E&Fs based in the United States showed an average performance return of 15.02% for the 2019 calendar year, with three-year and five-year returns at 8.94% and 6.67%, respectively. For the year-end 2019, the slight outperformance of 19 basis points that smaller institutions achieved over their larger counterparts was significantly reversed by the end of first quarter 2020. As seen in Figure 1A, E&F performance for the entire universe during the first quarter saw returns drop to -10.46%, with smaller E&Fs underperforming their larger peers by 1.93%.

For broader context, another industry study reported a median return of 5.1% for higher education E&Fs based on data through fiscal year 2019. Median returns of 5.8% were reported for those with greater than \$1B in assets over the same period.¹

The slight one-year outperformance by smaller E&Fs in 2019 was reversed in the first quarter of 2020 as COVID-19 impacts on the financial markets unfolded.

FIGURE 1A—Average Performance for E&Fs for Q1-2020, One (2019), Three (2017-19) and Five (2015-19) Year Periods



Larger institutions outperformed their smaller peers in a majority of sub-asset classes, similar to the trend seen in our 2018 study.

FIGURE 2A—Five-year (2015-19) Performance by Sub-Asset Class for E&Fs

ASSET CLASS	TOTAL E&FS N=93	ASSETS <\$1B n=47	ASSETS >\$1B n=46	DIFFERENTIAL
U.S. Equity	10.43	10.29	10.66	-0.37
Non-U.S. Equity	6.67	6.15	7.21	-1.06
Global Equity	9.30	9.16	9.34	-0.18
U.S. Fixed Income	3.15	3.17	3.17	0.00
Hedge Funds	4.75	3.36	5.93	-2.57
Private Equity	10.63	9.83	11.62	-1.78
Real Estate	8.36	6.21	9.47	-3.26
Other Real Assets ⁴	0.04	-0.51	0.44	-0.96
Other ⁵	4.88	N/A ³	5.50	N/A ³

Numbers are percentages

Sub-asset classes with insufficient sample size data were removed

FIGURE 2B—One-year (2019) and 1st Quarter (2020) Performance by Sub-Asset Class for E&Fs

ASSET CLASS	TOTAL E&FS N=93		ASSETS <\$1B n=47		ASSETS >\$1B n=46		DIFFERENTIAL	
	Dec-19	Mar-20	Dec-19	Mar-20	Dec-19	Mar-20	Dec-19	Mar-20
U.S. Equity	29.40	-21.69	29.15	-21.05	29.76	-21.54	-0.61	0.49
Non-U.S. Equity	21.96	-23.42	21.80	-23.78	22.14	-23.26	-0.34	-0.52
Global Equity	26.42	-21.53	25.47	-22.60	27.19	-20.91	-1.72	-1.69
U.S. Fixed Income	7.19	0.52	7.52	-0.07	6.85	1.07	+0.67	-1.14
Hedge Funds	12.16	-9.18	7.93	-6.14	15.18	-11.51	-7.25	5.37
Private Equity	9.49	1.80	7.18	0.26	11.38	2.18	-4.20	-1.92
Real Estate	7.21	-3.31	7.45	-7.66	7.12	-0.69	+0.33	-6.96
Other Real Assets ⁴	-3.46	-7.73	-1.43	-12.70	-4.43	-6.60	+3.00	-6.10
Other ⁵	15.26	-6.79	15.12	-4.45	15.33	-8.27	+2.1	3.82

Numbers are percentages

Sub-asset classes with insufficient sample size data were removed

Allocation Trends

Differences in performance between larger and smaller E&Fs can be traced to their divergent approaches to asset allocation. Smaller E&Fs have larger allocations to equity and fixed income when compared to larger E&Fs, which have significantly more exposure to alternative asset classes. Real estate was a notable exception as smaller E&Fs had nearly double the exposure to this sub-asset class compared to their peers with more than \$1B in assets. Larger E&Fs, however, generally outperformed their smaller counterparts in real estate until the most recent 2020 quarter as seen in Figures 2A and 2B.

Smaller E&Fs had more exposure to equities and fixed income, while their larger peers invested more heavily in alternative assets.

FIGURE 3A—Asset Allocation Percentages for E&Fs – (Ending December 2019 and March 2020)

ASSET CLASS	TOTAL E&FS N=93		ASSETS <\$1B n=47		ASSETS >\$1B n=46		DIFFERENTIAL	
	Dec-19	Mar-20	Dec-19	Mar-20	Dec-19	Mar-20	Dec-19	Mar-20
U.S. Equity	17.42	15.78	24.48	21.96	10.21	8.73	14.27	13.23
Non-U.S. Equity	11.43	9.47	11.85	9.88	11.01	9.01	0.84	0.87
Global Equity	6.51	5.86	7.72	6.81	5.28	4.78	2.44	2.03
U.S. Fixed Income	11.62	12.87	14.30	16.03	8.87	9.27	5.43	6.76
Non-U.S. Fixed Income	0.31	0.31	0.33	0.33	0.28	0.28	0.05	0.05
Global Fixed Income	0.67	0.67	0.74	0.79	0.59	0.56	0.15	0.23
Other Fixed Income	0.39	1.19	0.50	2.01	0.27	0.26	0.23	1.75
TIPS/Inflation Linked Bonds	0.98	0.95	1.47	1.37	0.47	0.46	1.00	0.91
Hedge Funds	19.01	18.84	14.77	15.65	23.34	22.48	-8.57	-6.83
Private Equity	15.40	16.88	8.41	9.04	22.54	25.81	-14.13	-16.77
Real Estate	3.08	3.32	2.08	2.13	4.11	4.68	-2.03	-2.55
Other Real Assets ⁴	2.54	2.56	1.14	1.17	3.96	4.14	-2.82	-2.97
Cash	1.53	2.12	1.66	2.45	1.39	1.75	0.27	0.7
Other ⁵	9.13	9.17	10.54	10.39	7.69	7.77	2.85	2.62

Numbers are percentages

As of first quarter 2020, larger E&Fs had even higher exposures to hedge funds, other real assets and private equity, though lagged performance may be inflating the value of private equity for both larger and smaller E&Fs.

Figures 4A to 4D display trend lines for asset class allocation over a five-year period (April 2015 baseline) that includes the first quarter of 2020. Figure 4A shows smaller E&Fs lowered exposure to alternative assets while they tended to maintain exposure levels for fixed income and equity over the five years.

Within their alternative allocations, E&Fs with less than \$1B in assets increased exposures to real estate, while decreasing holdings in private equity (Figure 4B)—despite private equity’s higher returns compared to real estate over the five-year period (Figure 2A). Allocations to hedge funds and other real assets by smaller E&Fs also saw heavy declines (Figure 4B).

A reduction in public equity exposure for smaller E&Fs reflected market downturn and falling asset valuations in Q1 2020.

FIGURE 4A—Five-Year Asset Class Changes
(since April 2015 baseline) for E&Fs < \$1B assets

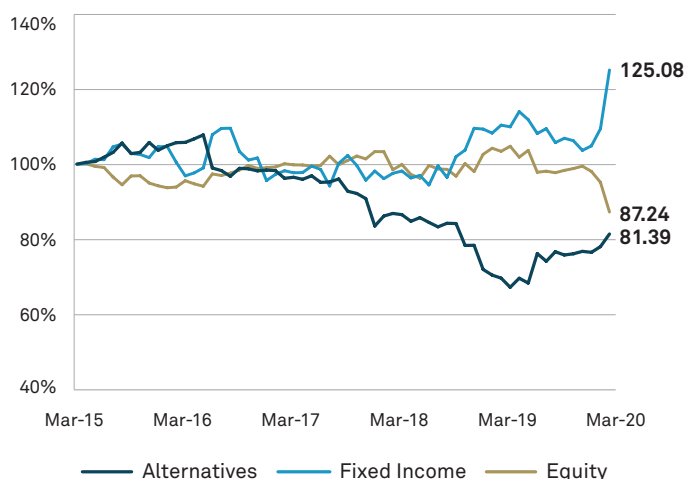
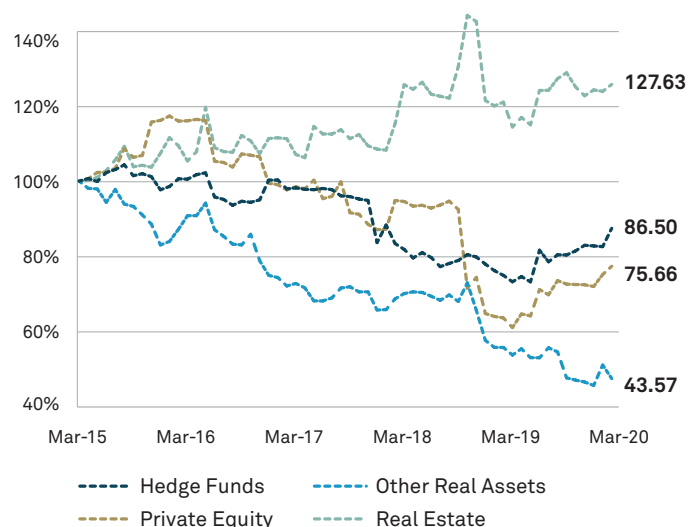


FIGURE 4B—Five-Year Alternative Asset Class Changes
(since April 2015 baseline) for E&Fs < \$1B assets



As seen in Figures 4C, larger institutions maintained relatively high allocations to alternative asset classes compared to traditional asset classes. In the last published 2018 study, we saw that larger institutions significantly lowered their allocation to fixed income while maintaining relatively consistent levels of exposure to equities over the five-year period between 2013 and 2017. However, as we see in Figure 4C, this trend reversed in the third quarter of 2018, as larger E&Fs began to increase their weighting towards fixed income at the expense of equities exposure.

FIGURE 4C—Five-Year Asset Class Changes
(since April 2015 baseline) for E&Fs > \$1B assets

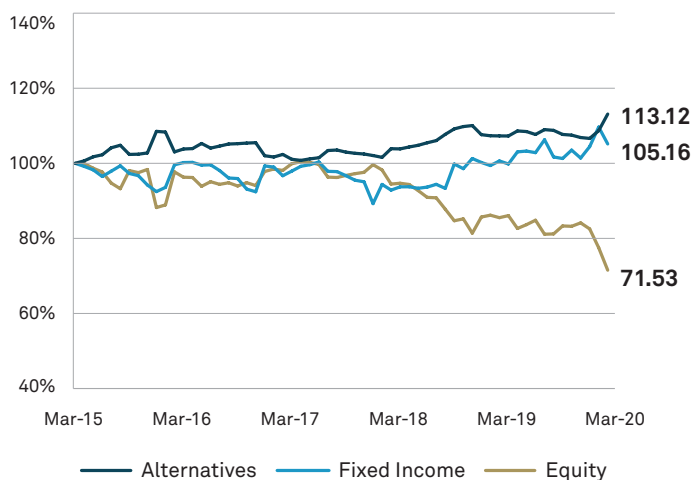
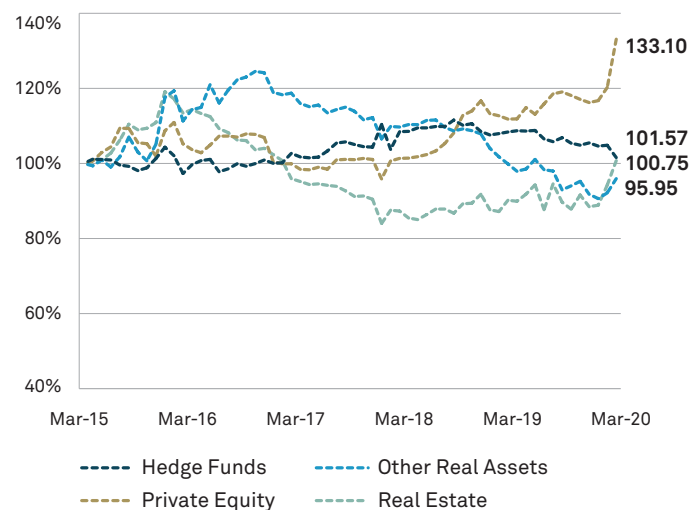


FIGURE 4D —Five-Year Alternative Asset Class Changes
(since April 2015 baseline) for E&Fs > \$1B assets



We see in Figure 4D that within the alternative asset classes, private equity and hedge fund exposures increased over the five-year period while real estate and other real assets saw a dramatic decline.

In stark contrast to their smaller peers, larger E&Fs increased their allocation to private equity and hedge funds over the recent five years.

Summary and Outlook

The snapshot analysis of performance and allocation trends for endowments and foundations as of first quarter 2020 revealed a few key trends:

- Larger E&Fs with more than \$1B in assets outperformed their smaller counterparts over three-, and five-year periods as of year-end 2019, (9.61% vs. 8.33% and 7.38 vs. 6.02%, respectively). They also outperformed their smaller peers by 1.93% in the first quarter 2020, as the onset of COVID-19 saw a sharp decline across every asset class.
- Smaller E&Fs with less than \$1B in assets benefited from their heavy allocation to equities in 2019 and outperformed their larger counterparts by 19 basis points. However, by the close of first quarter 2020, these smaller institutions appear to have been more adversely affected by the significant drops in global stock markets, as their portfolios comprised a larger portion of equities compared to their larger peers.
- Smaller E&Fs greatly reduced alternative asset allocations, with the noticeable exception of real estate, which increased 28% over the five-plus year period ending Q1 2020.
- Larger E&Fs maintained relatively high allocations to alternatives over the last five years. Exposure to high-performing private equity and hedge fund sub-asset classes increased significantly, while exposure to real estate and other real assets decreased.
- Larger E&Fs appear to have cushioned their portfolios from the dramatic market drops seen in the first quarter of 2020 by having greater exposure to higher-returning alternative asset classes. Their performance for the quarter was -9.46%, compared to the -11.39% return seen by smaller E&Fs. However, it is possible that lagged performance might be obscuring more dramatic dips to come in some alternative asset classes.

The larger E&Fs outperformed their smaller peers in nearly every sub-asset class for the five-year period ending 2019.

Taking a broader view on performance and asset allocation changes, E&F's liquidity positions combined with evolving market opportunities present considerations.

While performance represents a key concern for institutions during periods of market volatility, liquidity concerns can be equally pressing. For larger E&Fs with lower exposure to public markets, David Hsu, CEO of Caissa, comments “liquidity may have become a more critical issue with market declines, causing what public exposure they did have to decrease as a percentage of the total portfolio, or what’s known as the ‘denominator effect.’” Conversely, smaller E&F’s “liquid profiles should have provided some assurances” in offsetting underperformance.

Taking a broader view on shifts in asset allocation, the number of private equity-backed companies has risen steadily during the last two decades and now significantly exceeds the number of U.S. public companies. Conversely, the number of U.S. public companies has meaningfully declined during the same period. These diverging trends help to highlight the changing landscape of opportunities available for public and private investors.

With the global pandemic’s impact on financial markets, endowed institutions are facing a potentially monumental challenge to their funding models.

Philanthropies whose missions support grantees on the front lines of responding to the coronavirus may be significantly constrained by urgent needs to ensure continuity of day to day operations. At the same time, the virus has also showcased the flexibility and agility of the U.S. philanthropic system, the largest in the world, as hundreds of individual and institutional foundations have made public pledges to streamline grant-making processes. A number of philanthropies have also answered the call to increase giving during this unprecedented crisis.⁶

Universities, colleges and other not-for-profits with large operational footprints face mounting challenges, as the need for social distancing continues to disrupt revenue streams from students, patients and others serviced by these organizations. These institutions are also bracing for a drop in donations should the pandemic drag on. As mentioned in the introduction of this paper, even the wealthiest endowments are not insulated from the financial impacts of the coronavirus as they generally

adhere to defined spending policy limits and are bound to limitations set forth by donors on how certain funds are used. A number of the universities with the largest endowments have declined to accept federal emergency funding to avoid political and public criticism, even though the CARES Act has stipulated that at least half of grants funded by the \$14 billion approved for higher education go towards student emergency needs such as housing and food.

As we continue to live with the reality of the pandemic, it is difficult to assess the longer term financial impacts on endowed institutions. Though they embrace a long term view to manage their finances and investments despite market fluctuations, the longer the crisis continues, the harder it will be for some institutions to support their spending needs and maintain the discipline they aspire to.

“Covid-19 induced operating losses coupled with the investment market downturn have significantly impacted the liquidity position of Academic Medical Centers (AMCs). Investment Offices will likely be called on to provide increased liquidity to support the operating cash flow requirements of their organizations, sourced from return-seeking intermediate or long-term asset pools. Though markets have recovered, it will likely take two or three years for most AMCs to get back to pre-pandemic levels of operating performance.

– Alfred Salvato

SVP Finance & Chief Investment Officer, Thomas Jefferson University

The next quarters will be a pivotal time for endowed institutions. As a leading provider of performance and risk analytics solutions, we will continue to share information on investment performance and asset allocation trends to inform the dialogue at this critical time for our clients dedicated to the long term success of not-for-profits and their diverse missions.

As a leading provider of performance and risk analytics solutions for endowments, foundations and other institutional investors, BNY Mellon can help asset owners, consultants and others understand peer comparisons in allocation and performance across sub-asset classes. Our multi-asset offerings comprise of best-in-class proprietary solutions and integrated solutions offered in conjunction with carefully selected third-party providers. This flexible model enables us to offer convenience and further insights to our clients.

To find more about how BNY Mellon can help your organization access peer performance data or a range of multi-asset class analytical solutions in North American or worldwide, please contact Guy Holappa at guy.holappa@bnymellon.com.

Footnotes and Sources

¹ NACUBO-TIAA Study of Endowments (2019). National Association of College and University Business Officers and Commonfund Institute.

² Janko, Michael A. "Endowment Spending Rates in a Lower-Return Environment." (February 2019). BNY Mellon Wealth Management. www.bnymellonwealth.com/articles/vision/endowment-spending-rates-in-a-lower-return-environment.jsp

³ McCarthy, Sarah, and Jeannette Yee. "BNY Mellon Endowments and Foundations Study (2018)." (April 2018). www.bnymellon.com/us/en/what-we-do/business-insights/bny-mellon-endowments-and-foundations-study.jsp

⁴ "Other Real Assets" include commodities, infrastructure, public energy, private energy, and timber.

⁵ "Other" includes portfolio types that do not match investment styles already listed in the defined asset classes provided in this study. For the 5 year period, "N/A" (not available) indicates where there was insufficient data to include a value at this time.

⁶ Buchanan, Phil. CEP|Center for Effective Philanthropy. (April, 2020). cep.org/a-call-to-funders-to-increase-giving-in-an-unprecedented-time/

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