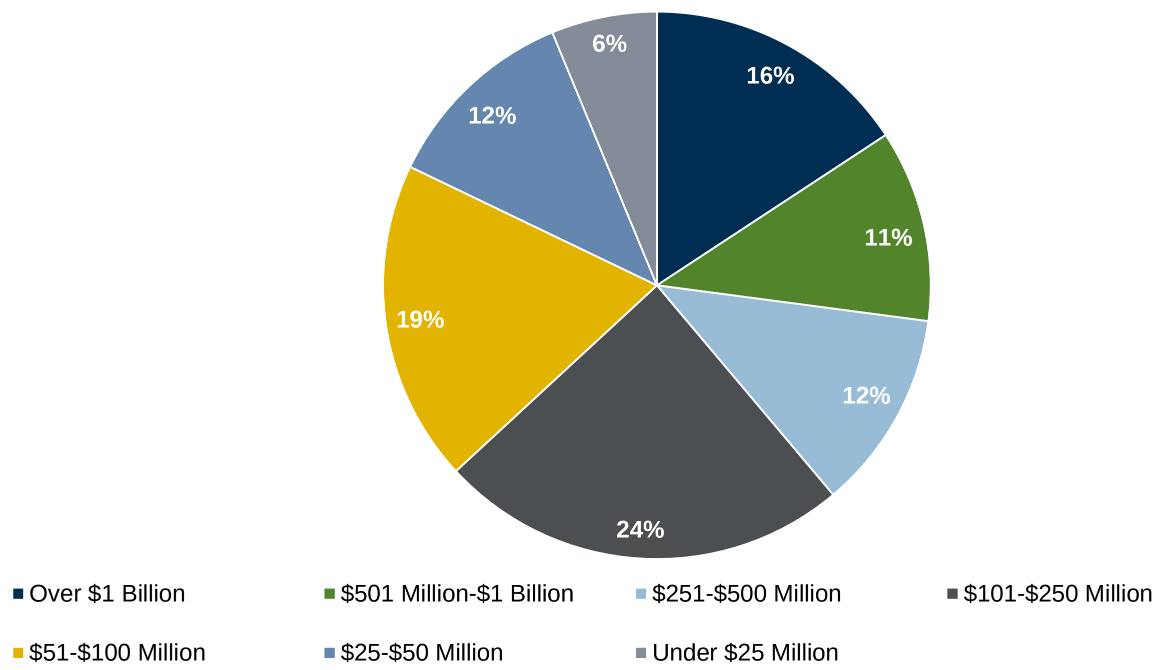
2020 NACUBO-TIAA Study of Endowments

Goldman Sachs Institutional Client Solutions

I. Overview and Key Takeaways

2020 NACUBO-TIAA Study of Endowments

2020 NTSE Participants by Size (%)



- The annual NACUBO-TIAA Study of Endowments (NTSE) provides comprehensive information regarding the financial, investment, governance status and trends of US higher-education endowments.
- The twelfth annual NTSE report represents information and data from 705 US higher-education institutions with endowment assets of $637.7 billion for fiscal year 2020 (July 1, 2019 – June 30, 2020).
- The report is particularly meaningful due to the high number of repeat survey respondents, with 97% of 2020 NTSE participants taking part in last year's NTSE. This is the largest repeat participation rate.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

Key Takeaways

Returns	▪ The average net return for all reporting institutions in FY 2020 was 1.8%, significantly lower than the 5.3% return achieved in FY 2019 (all returns are reported net of fees). ▪ This decrease reflects the fact that few major areas of the investible universe were immune to the steep drawdowns during the early stages of the pandemic and that most markets had not fully recovered by the time the fiscal year ended on June 30.
Investment Objectives	▪ Long-term return objectives were up slightly from 7.0% in FY 2019 to 7.1% in FY 2020.
Asset Allocation	▪ In FY 2020, there was little change in the asset allocations for the NTSE participants compared to FY 2019.
Spending	▪ Effective spending rates for participants averaged 4.59% in FY 2020, up from FY 2019's 4.36%.
Outsourcing	▪ In FY 2020, 41% of endowments reported using an outsourced chief investment officer (OCIO), up from 34% in FY 2010.
Environmental, Social and Governance (ESG)	▪ The COVID-19 pandemic and waves of social unrest expanded the ESG focus from environmental factors to social and governance factors during FY 2020. ▪ While endowments reported marginally increasing stakeholder interest in responsible investing issues in FY 2020, very few reported changes to their responsible investing practices as a direct result of COVID-19. It is likely that the impacts of these events were yet to be fully realized as of the end of FY 2020.

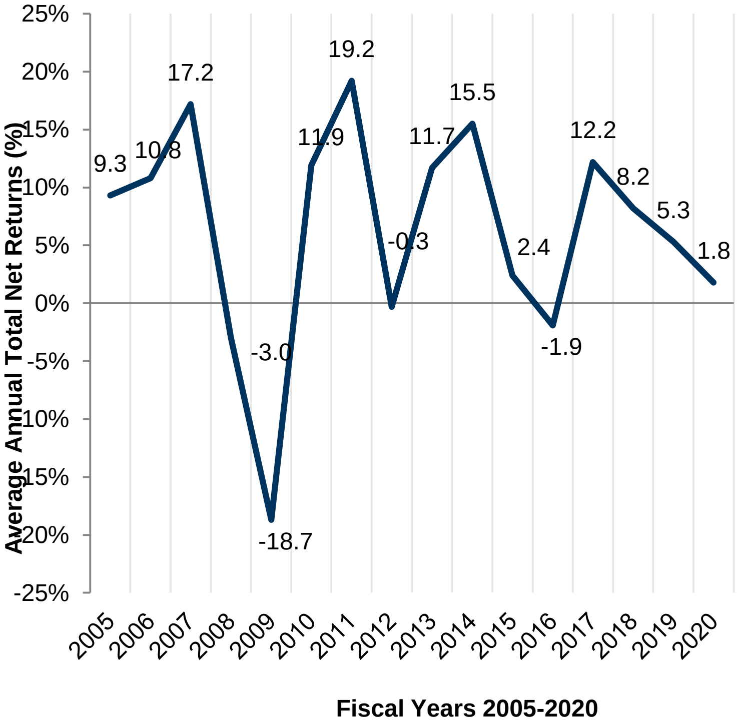
Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

II. Summary and Analysis of Themes

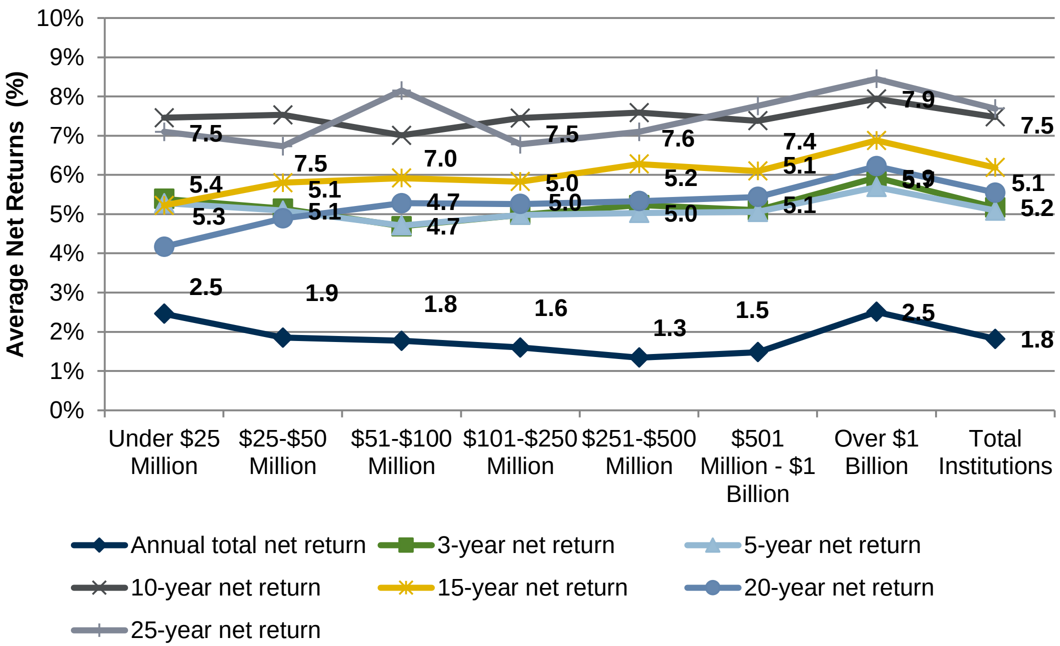
A. Returns and Investment Objectives

Average Investment Return in FY 2020 was 1.8%

Return of US College and University Endowments[1]



Average Net Returns[1]

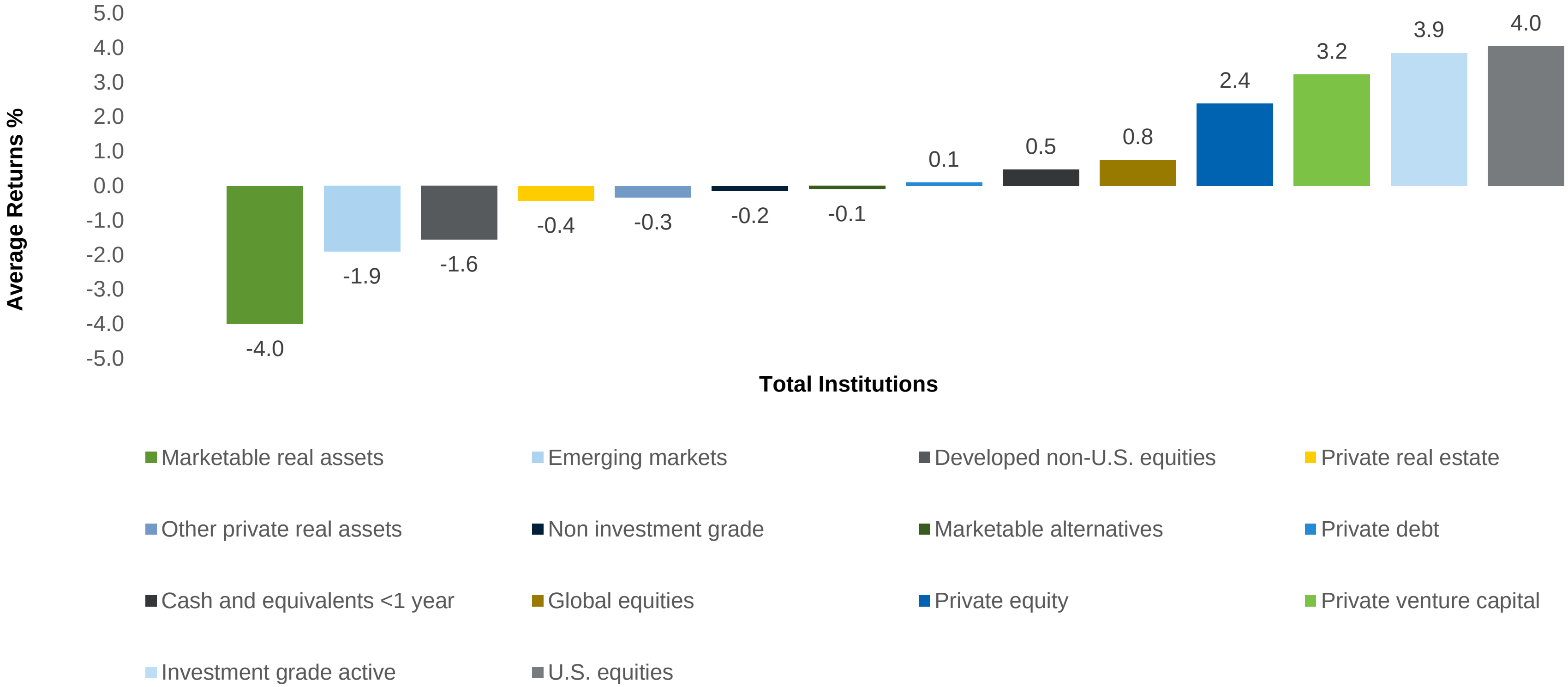


- The average net return for all reporting institutions in FY 2020 was 1.8%, significantly lower than the 5.3% return achieved in FY 2019.
- The largest endowments (those with more than $1 billion in assets) were the highest-performing cohort in FY 2020, with an average return of 2.51%. The smallest cohort (endowments with less than $25 million) was the second-best performer, just five basis points behind the $1 billion-plus funds.

[1] Net of all management fees and expenses.
Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

US Public Equities Outperformed Private Assets in FY 2020

Average Return for Invested Asset Classes

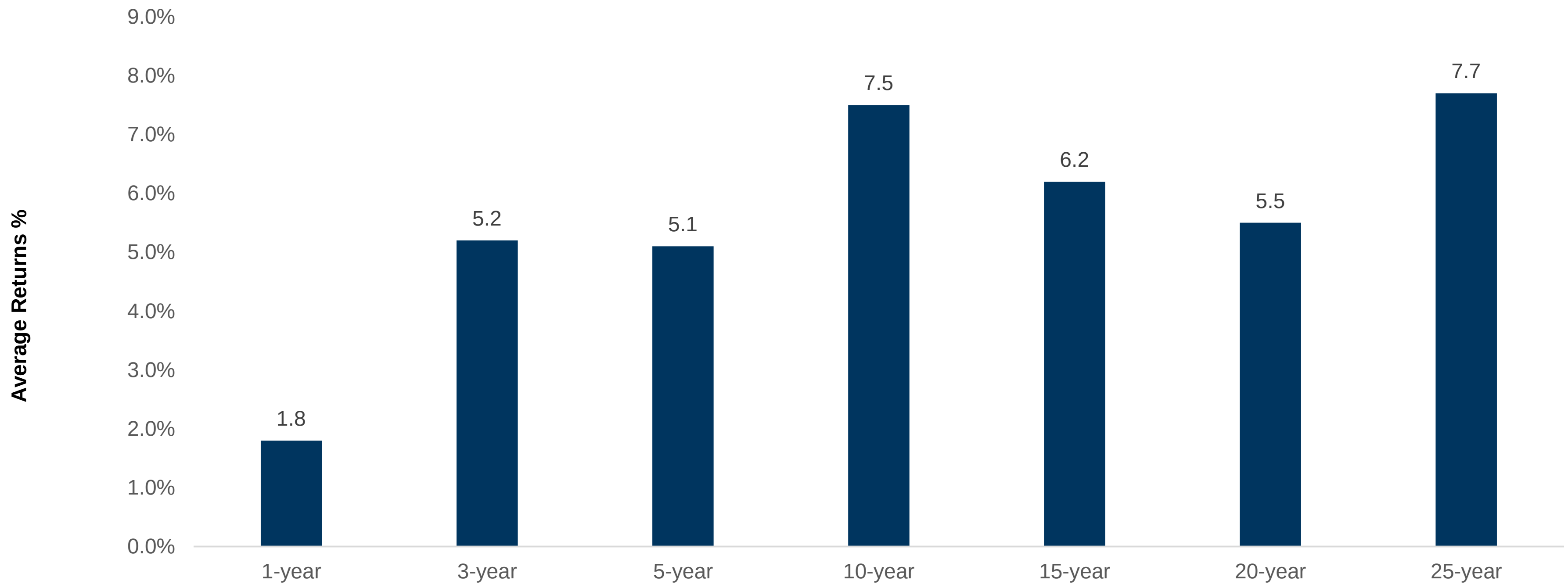


- U.S equities and investment grade active were the best performing asset classes in FY 2020.
- The primary detractor of performance in FY 2020 was having allocations to marketable real assets.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

Long-term Return Trends

Net Annualized Returns

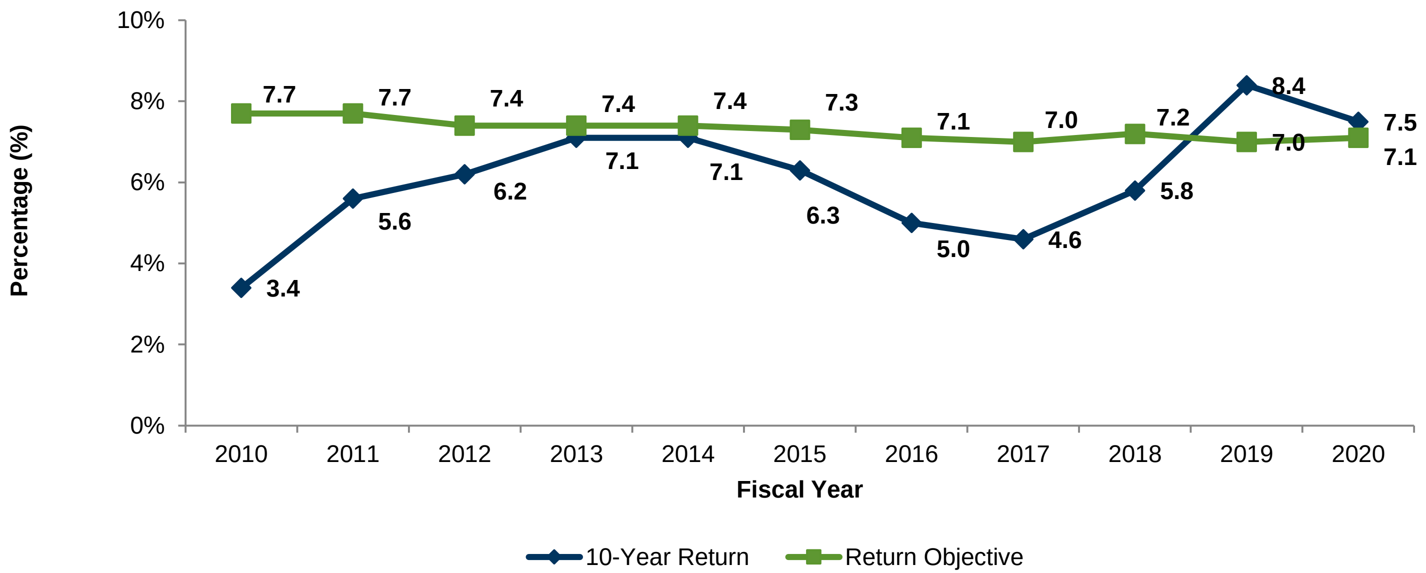


- Long-term endowment returns suggests the era of lower returns have arrived as evidenced by Endowments' one-year returns being significantly lower than their five and ten-year annualized returns.
- Longer performance periods are more reflective of endowments' positioning whereas shorter performance periods are susceptible to noise.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

10-Year Returns and Target Objectives Better Align in FY2020

10-Year Return vs. Return Objective



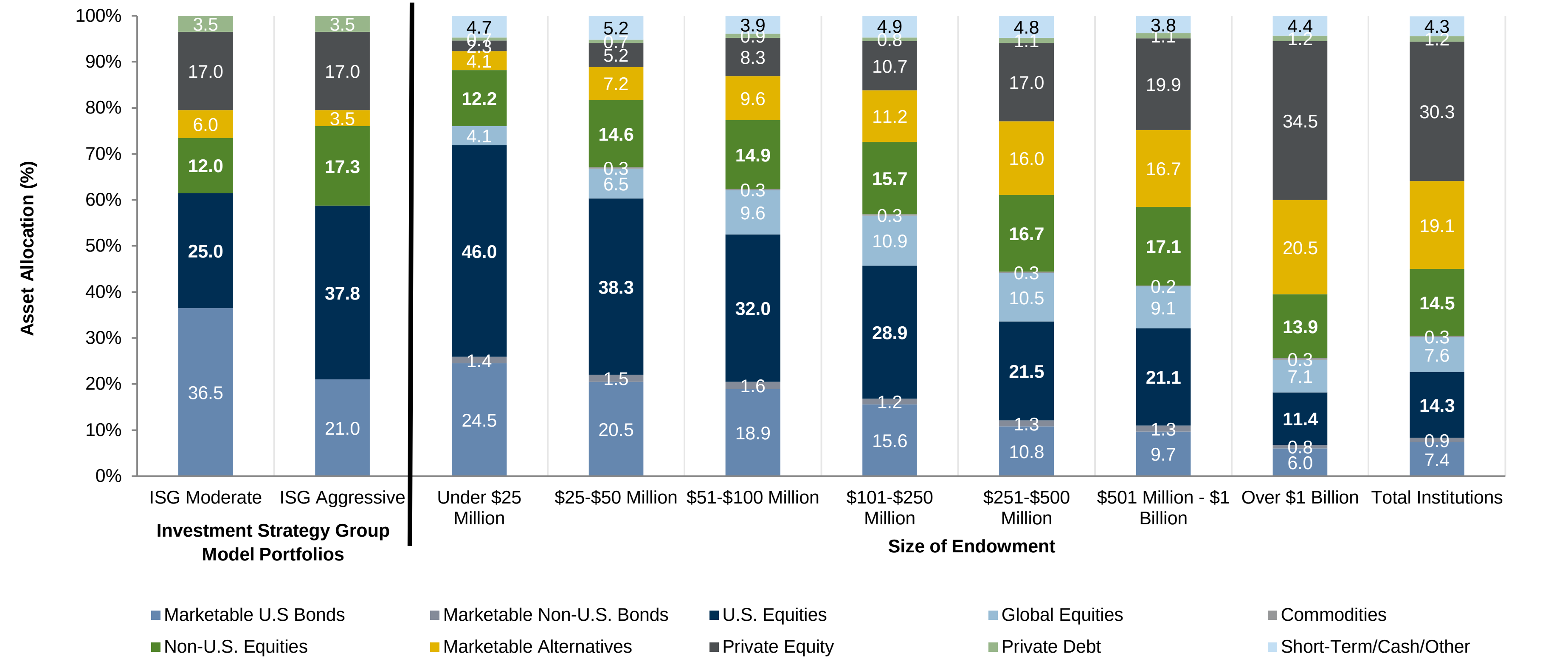
- 7.0-7.5% has long been the standard target return for most endowments. The target is comprised of spending requirements, inflation expectations, and fees.
- The expectation of a muted return environment going forward may explain the long-term trend of decline in the return target.

Source: 2019 NACUBO-TIAA Study of Endowments, as of June 30, 2019.

B. Asset Allocation and Implementation

Institutional Asset Allocation Comparison

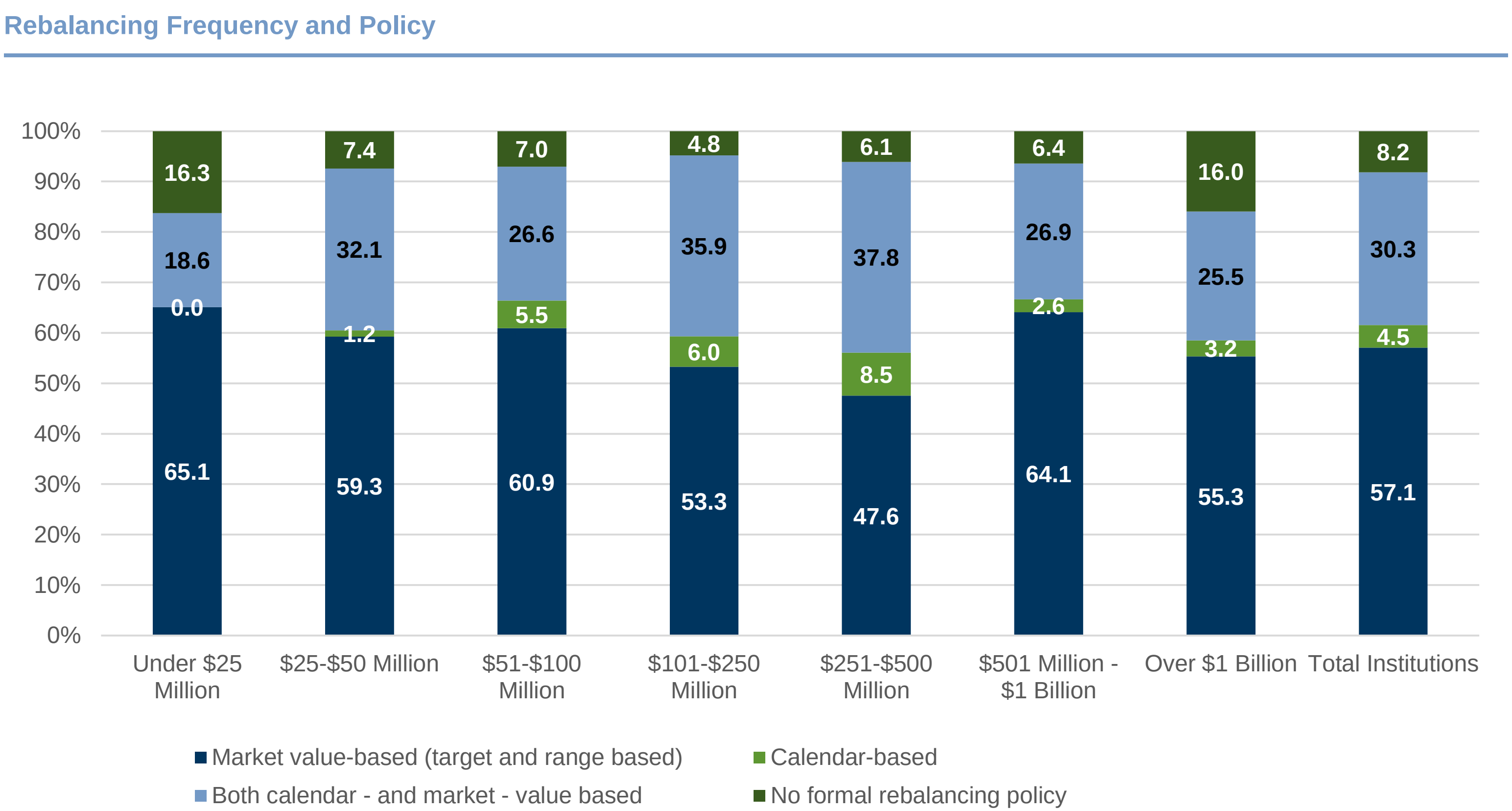
Asset Allocations for Fiscal Year 2020 - Consolidated Asset Classes as Shown in the Chart



- In FY 2020, there was little change in the asset allocations for the NTSE participants compared to FY 2019.
- Our Moderate and Aggressive allocation to non-Investment Strategy Group's (ISG) Moderate and Aggressive model portfolios have a lower allocation to marketable alternative strategies (i.e. hedge funds) compared to the $25 million+ cohorts. However, ISG's marketable alternative strategies (i.e. private assets) is in-line with the $250 million – $1 billion cohorts.
- Larger endowments tend to have lower exposure to US equities and fixed income and larger allocations to non-US equities, private equity, venture capital, real assets and marketable alternatives.

[1] Data is dollar-weighted for NACUBO asset allocation information. Due to rounding, details may not sum to 100%. Investment Strategy Group (ISG) model portfolios are as of June 2020 and shown for illustrative purposes only. Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

Rebalancing Frequency and Policy



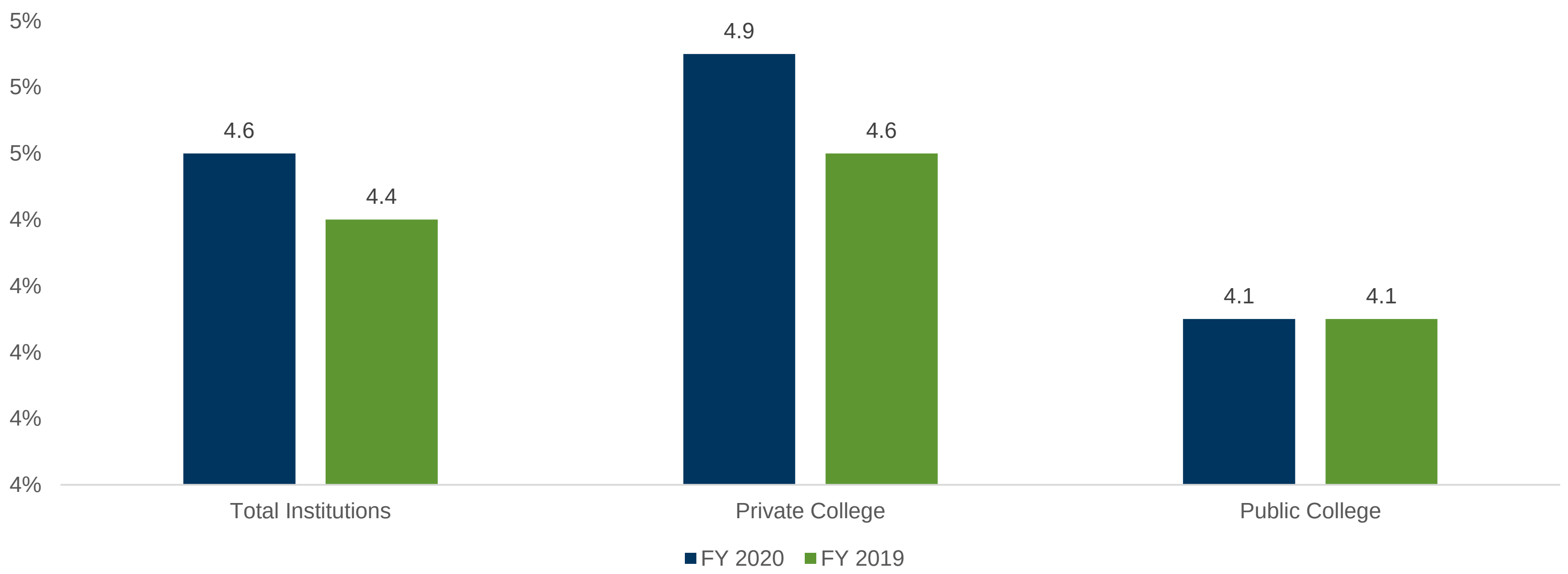
- Target and range based rebalancing is the most popular rebalancing methodology followed by both calendar and market value based rebalancing.
- Interestingly, cohort size does not seem to have an effect on rebalancing methodology.

[1] Data is dollar-weighted. Due to rounding, details may not sum to 100%.
Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

C. Spending

Higher Spending in FY 2020

Average Annual Effective Spending Rates, FY 2020 vs. FY 2019



- The average annual effective spending rate for total institutions was 4.59% in FY 2020, up from FY 2019's 4.36%.
- Endowments fells short of their goals to earn investment returns that exceed spend plus inflation. The average investment return net of fees was just 1.82%, lower than even the inflation rate of 1.90% (based on the Commonfund Higher Education Price Index).
- With spending rates plus inflation approaching 7.0%, institutions will need to be especially thoughtful about their strategic and tactical positioning.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

Increase in Percentage of Operating Budget Funded by Endowment

Percentage of Operating Budget Funded by Endowment

	Under $25 Million	$25-$50 Million	$51-$100 Million	$101-$250 Million	$251-$500 Million	$501-$1 Billion	Over $1 Billion	Total Institutions
Average	2.3	13.5	11.2	10.0	13.1	14.4	18.8	12.3
Median	0.0	3.6	3.3	4.5	7.0	5.8	9.0	4.4

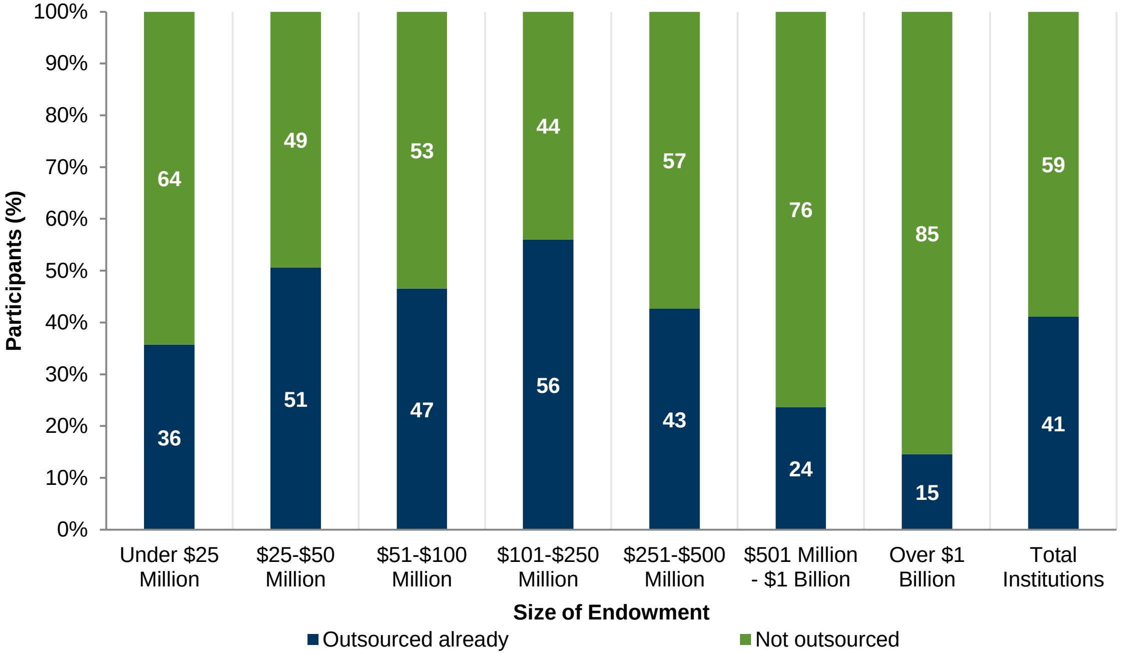
- The percentage of operating costs that are funded by endowment portfolios increased to 12.3% in FY 2020 from 11.9% in FY 2019. While the average percentage of the operating budget funded by endowments is 12.3%, there is significant dispersion among reporting institutions.
- Similar to previous years, larger institutions funded a higher percentage of operating costs with endowment assets than smaller institutions.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

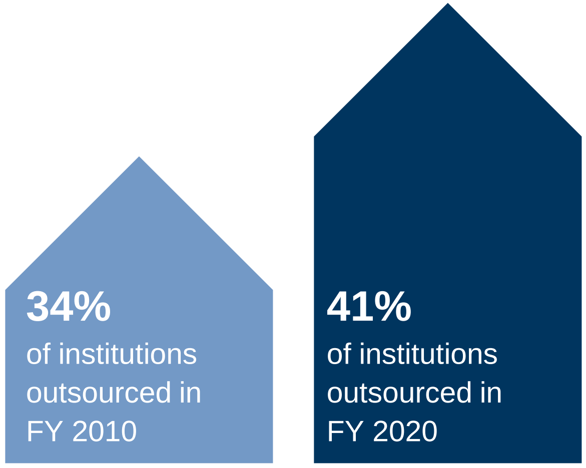
D. Governance

Demand for Outsourcing Investment Management Continues

Outsourcing of Investment Function



Outsourcing Trend Continues



- We continue to see increased adoption of the OCIO model with 41% of endowments reported using an outsourced chief investment officer (OCIO) in FY2020, up from 34% in FY 2010.
- Endowments at either end of the size spectrum are less likely to adopt. At the $500mm and above segment, endowment likely have enough internal resources. At the $25mm and below segment, OCIO trends are driven more by supply and demand. Asset managers are less likely to offer OCIO services at this level and endowments are less likely to be able to afford them as well.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

Responsible Investing Practices Continue to Evolve

Does responsible investing factor into your investment manager due diligence and evaluation process? (%)

	Under $25 Million	$25-$50 Million	$51-$100 Million	$101-$250 Million	$251-$500 Million	$501-$1 Billion	Over $1 Billion	Total Institutions
Yes	22%	27%	30%	35%	42%	58%	69%	40%
No	39%	49%	44%	45%	36%	28%	21%	39%
Uncertain	39%	24%	26%	20%	22%	14%	11%	22%

Percentage of endowments that have adopted various responsible investment practices in FY 2020

	Under $25 Million	$25-$50 Million	$51-$100 Million	$101-$250 Million	$251-$500 Million	$501-$1 Billion	Over $1 Billion	Total Institutions
Joined ESG Network	0%	10%	9%	17%	18%	15%	21%	16%
Appointed CSO	0%	0%	9%	10%	0%	9%	4%	6%
Proxy Voting Committee	0%	0%	5%	6%	5%	7%	15%	8%
ESG in Investment Policy	67%	90%	59%	50%	67%	56%	49%	57%
Offered ESG	33%	0%	18%	17%	10%	13%	11%	13%

- While the majority of endowments continue to remain in the early stages of implementing responsible investing, most have begun to take some steps towards incorporating responsible investing, primarily in their Investment Policy Statements
- With respect to investment manager due diligence and evaluation, a large number of respondents reported incorporating responsible investing into their decision making, however this practice was particularly high for the largest endowments (60-70%)
- In the case where endowments are incorporating responsible investing criteria into their portfolio, 19% do so in US equities and 16% in global equities.

Source: 2020 NACUBO-TIAA Study of Endowments, as of June 30, 2020.

Goldman Sachs

III. Appendix

Important Information

Thank you for reviewing this presentation. Please review the important information below.

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Investment Risks and Information. Risks vary by the type of investment. Additional information regarding investments and risks may be available in applicable product materials. Before transacting or investing, you should review and understand the terms of a transaction/investment and the nature and extent of the associated risks, and you should be satisfied the investment is appropriate for you in light of your individual circumstances and financial condition.

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Important Information

- ***Commodities***. Commodity investments may be less liquid and more volatile than other investments. The risk of loss in trading commodities can be substantial due, but not limited, to volatile political, market and economic conditions. An investor's returns may change radically at any time since commodities are subject to abrupt changes in price. Commodity prices are volatile because they respond to many unpredictable factors including weather, labor strikes, inflation, foreign exchange rates, etc. In a single account, because your position is leveraged, a small move against your position may result in a large loss. Losses may be larger than your initial deposit. No representation is made regarding the suitability of commodity investments.
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- ***Over-the-Counter ("OTC") Derivatives*** You should carefully review the Master Agreement, including any related schedules, credit support documents, addenda and exhibits. You may be requested to post margin or collateral at levels consistent with the internal policies of GS to support written OTC derivatives. Prior to entering into an OTC derivative transaction you should be aware of the below general risks associated with OTC derivative transactions:
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Important Information

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- ***Options.*** Options involve risk and are not suitable for all investors. The purchase of options can result in the loss of an entire investment and the risk of uncovered options is potentially unlimited. You must read and understand the current Options Disclosure Document before entering into any options transactions. The booklet entitled Characteristics and Risk of Standardized Options can be obtained from your PWM team or at http://www.theocc.com/about/publications/character-risks.jsp. A secondary market may not be available for all options. Transaction costs may be significant in option strategies that require multiple purchases and sales of options, such as spreads. Supporting documentation for any comparisons, recommendations, statistics, technical data, or other information will be supplied upon request.
- ***Real Estate.*** Real estate investments involve additional risks not typically associated with other asset classes, such as sensitivities to temporary or permanent reductions in property values for the geographic region(s) represented. Real estate investments (both through public and private markets) are also subject to changes in broader macroeconomic conditions, such as interest rates.
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- ***Tactical Tilts***. Tactical tilts may involve a high degree of risk. No assurance can be made that profits will be achieved or that substantial losses will not be incurred. Prior to investing, you must determine whether a particular tactical tilt is suitable for them.
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The following table provides an example of the effect of management and incentive fees on returns. The magnitude of the difference between gross-of fee and net-of-fee returns will depend on a variety of factors, and the example has been simplified.

Period	Gross Return	Net Return	Differential
1 year	6.17%	4.61%	1.56%
3 years	12.72%	9.43%	3.29%
10 years	81.94%	56.89%	25.05%

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