

NEVADA SYSTEM OF HIGHER EDUCATION

DISCUSSION MATERIALS



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2. OPERATING FUND



2. OPERATING FUND

A. ACTION ITEMS & PORTFOLIO UPDATE



Action Items and Executive Summary

ACTION ITEMS

We set forth Operating Fund performance estimates through March 25 along with rebalancing recommendations in the table following this summary. Our proposals reflect the following rebalancing actions:

- 1) Bring the sizing of the Long-Term Pool in line with its 60% policy target by executing the following transactions:
 - a) \$10 million trim from Vanguard Institutional Index
 - b) A net \$6.3 million trim from Global ex US Equities, as detailed in the recommendation in Section 2(B) to simplify the Global ex US Equity allocation by replacing both active managers with the Vanguard Developed Markets Index Fund:
 - i) Full redemption from Manning & Napier (est. \$56.8 million as of 3/25/19)
 - ii) Full redemption from MFS International (est. \$64.4 million as of 3/25/19)
 - iii) \$115 million initial investment in the Vanguard Developed Markets Index Fund
 - c) \$5 million trim from PIMCO Total Return
- 2) \$21.3 million proceeds from the above added to Short-Term Bonds & Cash, to bring the allocation closer to the 30% policy target.

EXECUTIVE SUMMARY

Operating Fund Performance and Asset Allocation as of February 28, 2019

The Operating Fund posted a return of 1.3% in the fiscal year to date, slightly below of the Policy Index return of 1.4%. U.S. Equity has led FYTD performance on an absolute basis with a 3.8% return, while the Global ex U.S. Equity allocation had the highest relative performance of 10 bps over the MSCI EAFE Index. On a trailing ten-year basis, the Operating Fund has generated an annualized return of 6.0%, outperforming the Long-Term Policy Index by 20 bps; since inception, the Operating Fund has returned 4.9% annualized, even with the Long-Term Policy Index.

As of February 28, 2019, adjusted for estimated returns through March 25, 2019, the Operating Fund was overweight Long Term Bonds, Intermediate Term Bonds and Total Equities (including Opportunistic), with offsetting underweights to TIPS, Short Term Bonds and Cash.

At the Committee's request, an accounting of manager/advisor fees paid in FY2018 from the Operating Fund is as follows:

	(\$,000)	(%)
FY return <u>net</u> of all fees	\$ 42,855	5.26%
C A Advisory fee	\$ 50	0.01%
<i>Investment manager fees:</i>		
Annual management fees	\$ 1,674	0.18%
Incentive fees	\$ 4	0.0%

Operating Fund Return Projections

As shown in the following pages, while the Operating Fund Policy has a 3.8% expected real compound return over the long term (i.e., 25+ years), there is a wide range of potential outcomes, particularly over shorter time periods. For example, over any given 3-year period, the Operating Fund



Action Items and Executive Summary

has a 50% likelihood of a real return between 0.9% and 6.7%, with a 25% likelihood of returns either above or below this range.

In addition to the general unpredictability of short-term returns, current market valuations pose additional headwinds to investors today: strong performance over recent years have brought assets to levels that we view as unsustainable, implying that intermediate-term returns will likely fall short of long-term expectations. In a hypothetical scenario in which all asset class valuations reverted to their historical averages over the next 10 years, we project that US Equities would return 0.1% real (far below C|A's long-term return assumption of 5.7%), and US Treasuries would return -0.3% real (similarly falling short of C|A's long-term return assumption of 2.8%). Looking across the Operating Fund, this "return to normal" thought exercise suggests a 10-year compound return of 1.3%.

We also present an analysis of returns in historical market downturns, showing that the Operating Fund could experience double-digit declines in environments like the Oil Shock of the early 1970s, the Tech Bubble Burst of the early 2000s or the Global Financial Crisis of 2007-2009.



Rebalancing Recommendations

Estimated as of March 25, 2019

	Allocation as of Feb 28, 2019		Mar 1, 2019 - Mar 25, 2019	Estimated Allocation as of Mar 25, 2019		Recommended Shifts		Pro Forma Allocation		Policy Targets	Allowable Range
	Assets (\$ mm)	(%) Allocation	Est Perf (%)	Assets (\$ mm)	(%) Allocation	(\$ mm)	(%)	Assets (\$ mm)	(%) Allocation	(%)	(%)
U.S. Equity											
Vanguard Institutional Index	\$179.1	23.3%	0.6%	\$180.3	23.8%	-\$10.0	-1.3%	\$170.3	22.5%		
Total U.S. Equity	\$179.1	23.3%	0.6%	\$180.3	23.8%	-\$10.0	-1.3%	\$170.3	22.5%	24.0%	20%-30%
Global ex U.S. Equity											
Manning & Napier	56.5	7.4	0.6	56.8	7.5	-\$56.8	-7.5	---	---		
MFS International	64.1	8.3	0.5	64.4	8.5	-\$64.4	-8.5	---	---		
Vanguard Developed Markets Index Fund	---	---	0.5	---	---	+\$115.0	15.2	115.0	15.2		
Total Global ex U.S. Equity	\$120.6	15.7%	0.5%	\$121.3	16.0%	-\$6.3	-0.8%	\$115.0	15.2%	16.0%	10%-20%
Marketable Alternatives											
Och-Ziff Overseas	0.2	0.0	0.6	0.2	0.0			0.2	0.0		
Farallon Capital	2.7	0.4	0.6	2.7	0.4			2.7	0.4		
Total Marketable Alternatives	\$2.9	0.4%	0.6%	\$2.9	0.4%	---	---	\$2.9	0.4%	0.0%	
Opportunistic											
PIMCO All Asset All Authority	21.0	2.7	-0.5	20.9	2.8			20.9	2.8		
Total Opportunistic	\$21.0	2.7%	-0.5%	\$20.9	2.8%	---	---	\$20.9	2.8%	0.0%	0%-10%
TOTAL EQUITIES (incl. Opportunistic)	\$323.6	42.1%	0.5%	\$325.2	43.0%	-\$16.3	-2.1%	\$309.0	40.9%	40.0%	30%-50%
TIPS											
Vanguard Inflation-Protected Securities	83.6	10.9	1.8	85.1	11.2			85.1	11.2		
Total TIPS	\$83.6	10.9%	1.8%	\$85.1	11.2%	---	---	\$85.1	11.2%	12.0%	5%-15%
Long Term Bonds											
PIMCO Total Return	39.9	5.2	0.0	39.9	5.3	-\$5.0	-0.7	34.9	4.6		
Wells Capital Montgomery	23.3	3.0	0.0	23.3	3.1			23.3	3.1		
Total Long Term Bonds	\$63.3	8.2%	0.0%	\$63.3	8.4%	-\$5.0	-0.7%	\$58.3	7.7%	8.0%	5%-15%
TOTAL LONG-TERM POOL	\$470.4	61.2%	0.7%	\$473.6	62.6%	-\$21.3	-2.8%	\$452.3	59.8%	60.0%	
Intermediate Term Bonds											
WellsCap Short Duration	92.4	12.0	0.0	92.4	12.2			92.4	12.2		
Total Intermediate Term Bonds	\$92.4	12.0%	0.0%	\$92.4	12.2%	---	---	\$92.4	12.2%	10.0%	5%-15%
Short Term Bonds and Cash											
Short Term Bonds and Cash *	205.4	26.7	---	190.3	25.2	+\$21.3	2.8	211.6	28.0		
Total Short Term Bonds and Cash	\$205.4	26.7%	---	\$190.3	25.2%	\$21.3	2.8%	\$211.6	28.0%	30.0%	25%-40%
TOTAL ASSETS	\$768.2	100.0%	0.4%	\$756.3	100.0%	---	---	\$756.3	100.0%	100.0%	

Note: Market values as of 03/25/2019 are estimated using manager preliminary or mutual fund returns or (if highlighted in peach) index proxies.

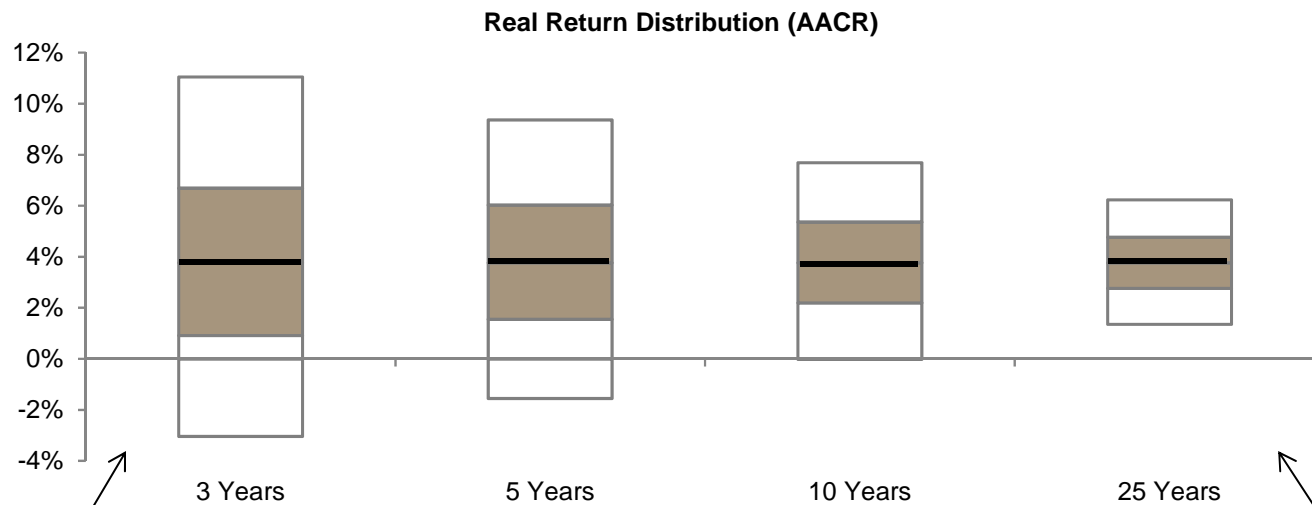
Actual client-specific returns may ultimately differ from managers' fund-level preliminary estimates. Cash accounts assume a 0% return for the period.

* Estimated Allocation to Short Term Bonds and Cash was provided by System Staff as of 3/21/2019.

Over Short-Term Periods the Operating Fund Has Meaningful Likelihood of Negative Returns

- While the Operating Fund Policy has a 3.8% expected real compound return over the long term (i.e. 25+ years), there is a wide range of potential outcomes, particularly over shorter time periods.

Real Return Expectations

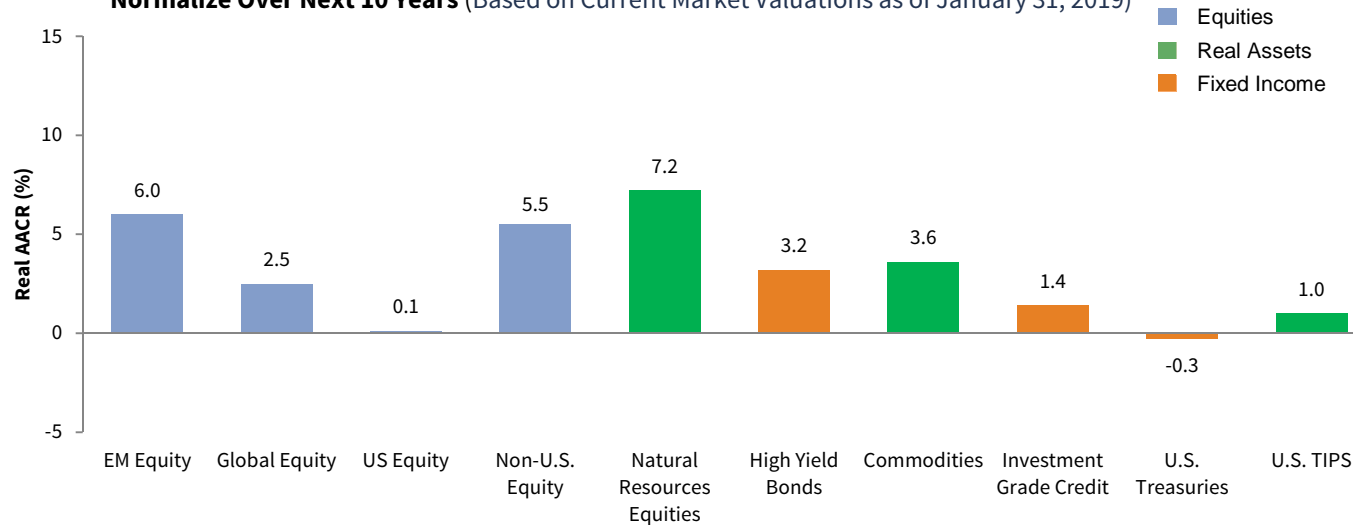


Over any given 3-year period the Operating Fund Policy has a 50% likelihood of a return between 0.9% and 6.7%

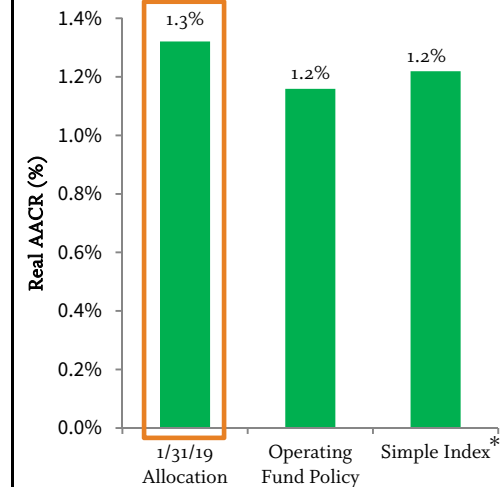
Over any given 25-year period the Operating Fund Policy has a 50% likelihood of a return between 2.8% and 4.8%

Current Valuations Will Likely Challenge Intermediate-Term Real Returns

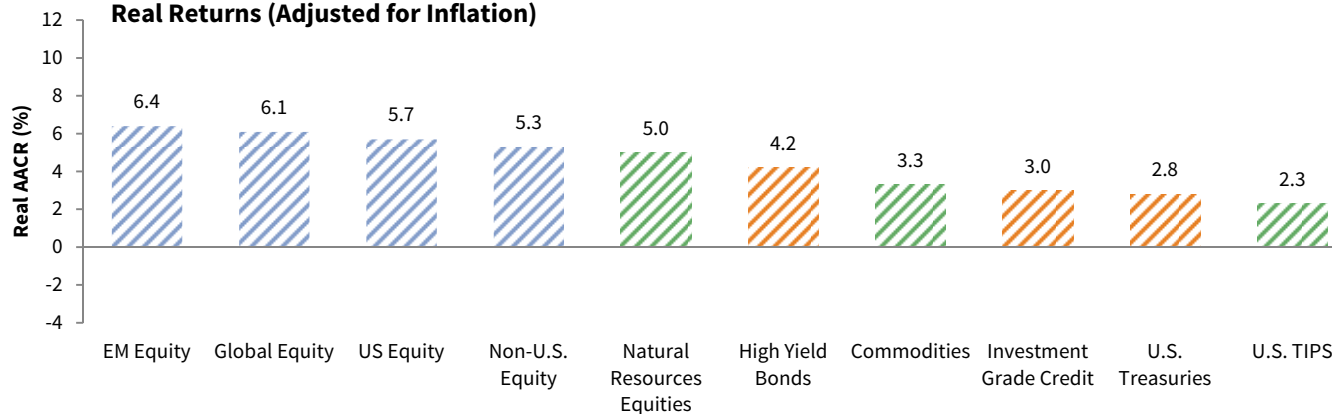
Intermediate-Term (10-Year) “Return to Normal” Scenario, Assuming that Valuations Normalize Over Next 10 Years (Based on Current Market Valuations as of January 31, 2019)



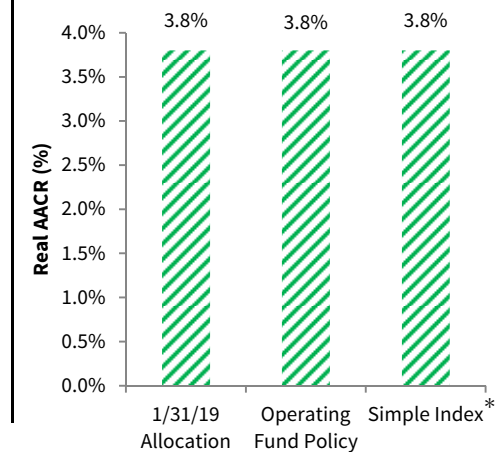
Intermediate-Term Real Return



Long-Term (25-Plus Year) Steady State “Equilibrium” Assumptions: Real Returns (Adjusted for Inflation)



Long Term Real Return



Key Assumptions: Inflation: 3%; Real EPS Growth: 2% for US and Dev ex US, 3% for EMs; Ending 10-Yr US Treasury Yield: 5.0%, Ending 10-Yr US TIPS yield: 2.0%

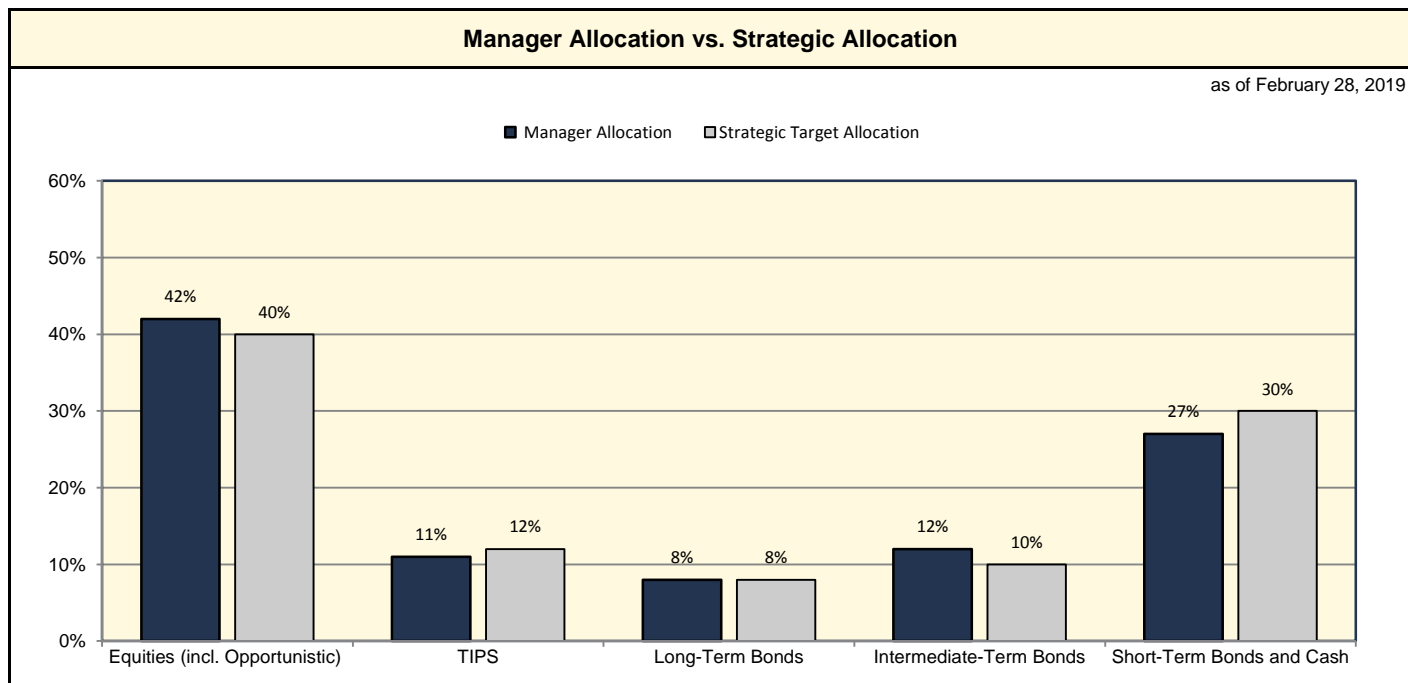
In Stress Environments Operating Fund Can Experience Double-Digit Declines

Current Operating Fund positioning would have held up relatively well in a variety of stress environments.

<u>Stress Name</u>	<u>Dates</u>	<u>Length of Period (Months)</u>	<u>Stress Period Estimates Cumulative Returns - Real</u>		
			<i>1/31/2019 Allocations</i>	<i>Operating Fund Policy</i>	<i>Simple Index*</i>
Oil Shock	January 1, 1973 - September 30, 1974	21	-25.4	-24.6	-26.4
Energy Crisis/Stagflation	September 1, 1979 - March 31, 1980	7	-9.8	-9.4	-11.4
Energy Crisis/Stagflation	March 1, 1980 - March 31, 1980	1	-5.2	-5.2	-5.3
Interest Rate Hikes	July 1, 1980 - September 30, 1981	15	-7.2	-6.5	-8.6
Interest Rate Hikes	August 1, 1981 - July 31, 1982	12	-2.9	-3.3	-1.5
Stock Market Crash	September 1, 1987 - November 30, 1987	3	-9.4	-9.4	-9.2
Japan Market Collapse	January 1, 1990 - September 30, 1990	9	-8.7	-9.5	-9.5
Mexican Peso Crisis	February 1, 1994 - January 31, 1995	12	-2.8	-2.6	-3.1
Russian Debt Default	August 1, 1998 - September 30, 1998	2	-3.4	-3.7	-3.0
Tech Bubble Burst	April 1, 2000 - September 30, 2002	30	-10.6	-11.7	-12.0
Credit Crisis/Great Recession	November 1, 2007 - February 28, 2009	16	-20.8	-21.3	-20.1

Nevada System of Higher Education Operating Fund
Asset Allocation Policy as of February 28, 2019

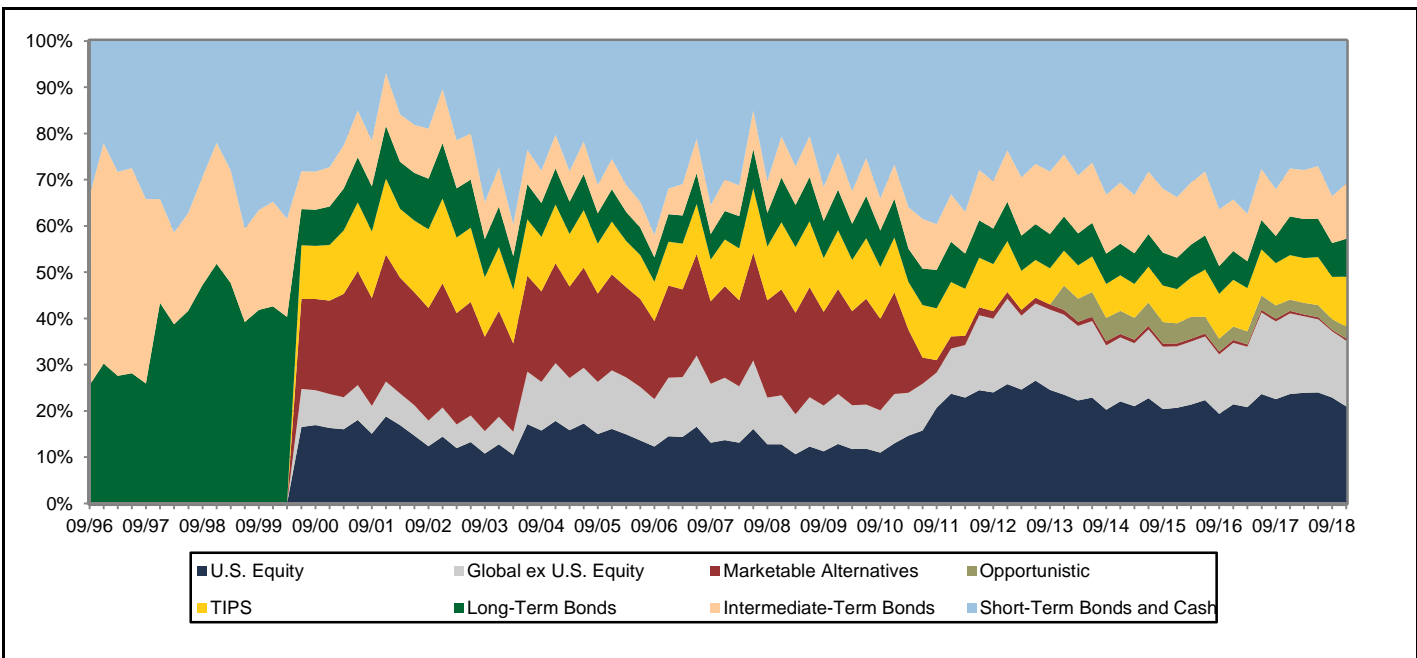
	Manager Allocation	Strategic Target Allocation	Strategic Target Range	Policy Variance (\$000)	%
Equities (incl. Opportunistic)	42.1%	40.0%		\$16,292	2.1%
U.S. Equity	23.3%	24.0%	20%-30%	-\$5,230	-0.7%
Global ex U.S. Equity	15.7%	16.0%	10%-20%	-\$2,292	-0.3%
Marketable Alternatives	0.4%	0.0%		\$2,855	0.4%
Opportunistic	2.7%	0.0%	0%-10%	\$20,960	2.7%
TIPS	10.9%	12.0%	5%-15%	-\$8,583	-1.1%
Long-Term Bonds	8.2%	8.0%	5%-15%	\$1,799	0.2%
Total Long-Term Pool	61.2%	60.0%		\$9,508	1.2%
Operating Liquidity Pools	38.8%	40.0%		-\$9,508	-1.2%
Intermediate-Term Bonds	12.0%	10.0%	5%-15%	\$15,582	2.0%
Short-Term Bonds and Cash	26.7%	30.0%	25%-40%	-\$25,089	-3.3%



Note: Manager Allocation includes discretionary cash held by individual managers.
Policy Variance equals the difference between Manager Allocation and Strategic Allocation.
Short-Term Bonds and Cash includes funds pending placement.

Nevada System of Higher Education Operating Fund
Asset Allocation Over Time as of February 28, 2019

	% of Portfolio				Market Value (\$)
	06/30/18	09/30/18	12/31/18	02/28/19	As Of 02/28/19
U.S. Equity	24.0%	22.9%	21.0%	23.3%	\$179,128,918
Global ex U.S. Equity	15.9	14.3	14.3	15.7	120,613,792
Marketable Alternatives	0.4	0.3	0.4	0.4	2,854,523
Opportunistic	2.6	2.3	2.6	2.7	20,959,946
TIPS	10.4	9.2	10.8	10.9	83,596,132
Long-Term Bonds	8.3	7.4	8.2	8.2	63,252,348
Total Long-Term Pool	61.6	56.3	57.2	61.2	470,405,658
Intermediate-Term Bonds	11.3	10.1	12.0	12.0	92,398,163
Short-Term Bonds and Cash	27.1	33.6	30.8	26.7	205,359,757
Total Operating Fund	100.0%	100.0%	100.0%	100.0%	\$768,163,579



Note: Actual Allocation is based on market value of assets at end of period. Values include discretionary cash held by managers. Short-Term Bonds and Cash includes funds pending placement.

Nevada System of Higher Education Operating Fund Investment Manager Allocation Over Time as of February 28, 2019

Investment Manager	% of Portfolio					Market Value (\$) 02/28/19
	03/31/18	06/30/18	09/30/18	12/31/18	02/28/19	
U.S. Equity						
Vanguard Institutional Index	23.9%	24.0%	22.9%	21.0%	23.3%	\$179,128,918
Global ex U.S. Equity						
Manning & Napier	8.2	7.8	7.0	6.6	7.4	56,494,343
MFS International	8.3	8.1	7.3	7.6	8.3	64,119,449
Subtotal	16.5	15.9	14.3	14.3	15.7	120,613,792
Marketable Alternatives						
Och-Ziff Overseas ⁽¹⁾	0.0	0.0	0.0	0.0	0.0	155,115
Farallon Capital ⁽²⁾	0.4	0.4	0.3	0.4	0.4	2,699,408
Subtotal	0.4	0.4	0.3	0.4	0.4	2,854,523
Opportunistic						
PIMCO All Asset	2.5	2.6	2.3	2.6	2.7	20,959,946
TIPS						
Vanguard Inflation-Protected Securities	9.7	10.4	9.2	10.8	10.9	83,596,132
Long-Term Bonds						
PIMCO Total Return	5.1	5.5	4.8	5.1	5.2	39,940,486
Wells Capital Montgomery	3.3	2.8	2.5	3.0	3.0	23,311,861
Subtotal	8.4	8.3	7.4	8.2	8.2	63,252,348
Total Long-Term Pool	61.5%	61.6%	56.3%	57.2%	61.2%	\$470,405,658
Intermediate-Term Bonds						
WellsCap U.S. Short Duration Strategy	10.6	11.3	10.1	12.0	12.0	92,398,163
Short-Term Bonds and Cash						
State Street Inst Gov't MM	7.1	7.6	6.7	8.0	8.0	61,568,697
JP Morgan U.S. Treasury Plus MM	10.7	8.9	5.0	12.2	6.8	52,180,711
Wells Fargo Treasury Money Market	10.7	10.0	21.5	10.3	11.8	90,267,645
BofA Checking Account	-0.7	0.6	0.3	0.2	0.1	720,178
Funds Pending Placement ⁽³⁾	0.1	0.1	0.1	0.1	0.1	622,527
Subtotal	27.9	27.1	33.6	30.8	26.7	205,359,757
Total Operating Fund	100.0%	100.0%	100.0%	100.0%	100.0%	\$768,163,579

(1) Och-Ziff Overseas fully redeemed on 06/30/11. Market value represents holdback amount to be paid out after final audit and Special Situations Accounts. Fund has been rolled forward with a 0% return assumed for February 2019.

(2) Farallon Capital fully redeemed on 12/31/10. Market value represents holdback amount to be paid out after final audit and Special Situations Accounts.

(3) Funds Pending Placement is preliminary and includes the value of liquidations from Och-Ziff awaiting cash distribution.

Nevada System of Higher Education Operating Fund
Investment Returns by Composite (net of fees) as of February 28, 2019

Composite (Inception Date)	Assets \$ mil	Total Return (%)					
		CYTD 12/31/18- 02/28/19	FYTD 06/30/18- 02/28/19	Cumulative Trailing 1 Year	Annualized Trailing 5 Years	Annualized Trailing 10 Years	Annualized Since Inception
U.S. Equity (06/30/00)	179.1	11.5	3.8	4.9	10.7	16.7	5.8
S&P 500 Index (06/30/00)		11.5	3.8	4.7	10.7	16.7	5.6
Value Added		0.0	-0.1	0.2	0.0	0.0	0.3
Global ex U.S. Equity (06/30/00)	120.6	10.3	-3.0	-4.8	2.0	9.0	3.3
MSCI EAFE Index (N) (06/30/00)		9.3	-3.1	-6.0	2.1	9.6	3.2
Value Added		1.0	0.1	1.2	-0.1	-0.6	0.1
Marketable Alternatives (06/30/00)	2.9	1.1	-3.6	-5.3	3.1	4.6	5.8
HFRI Fund of Funds Diversified Index (06/30/00)		3.8	-0.4	-0.2	1.9	3.5	3.2
Value Added		-2.6	-3.1	-5.1	1.1	1.2	2.7
BofA ML T-Bill + 6% (06/30/00)		1.3	5.4	8.0	6.7	6.4	7.6
Value Added		-0.2	-8.9	-13.4	-3.6	-1.8	-1.8
Opportunistic (12/11/13)	21.0	3.7	0.4	-2.0	1.1	---	1.2
Opportunistic Custom Benchmark (11/30/13) ⁽¹⁾		4.8	1.8	2.0	3.6	---	3.8
Value Added		-1.1	-1.5	-4.0	-2.6	---	-2.6
TIPS (06/30/00)	83.6	1.3	-0.0	1.8	1.6	3.6	5.1
BBG Barc US TIPS Index (06/30/00)		1.3	0.1	1.9	1.5	3.8	5.2
Value Added		0.0	-0.1	-0.1	0.1	-0.2	-0.1
Long-Term Bonds (06/30/96)	63.3	1.2	2.6	2.7	2.3	4.7	5.9
BBG Barc Aggregate Bond Index (06/30/96)		1.0	2.7	3.2	2.3	3.7	5.1
Value Added		0.2	0.0	-0.5	0.0	1.0	0.8
Total Long-Term Pool (06/30/96)	470.4	7.4	1.0	1.1	5.2	9.5	6.5
Intermediate-Term Bonds (06/30/96)	92.4	0.4	1.6	2.0	0.9	3.2	4.1
BofA ML 1-3 Yr Treasury Bond Index (06/30/96)		0.4	1.9	2.3	0.8	1.0	3.3
Value Added		0.1	-0.2	-0.3	0.1	2.2	0.8
Short-Term Bonds and Cash (06/30/96)⁽²⁾	205.4	0.4	1.2	1.7	0.5	0.5	2.3
BofA ML 91-Day Treasury Bills (06/30/96)		0.4	1.4	2.0	0.7	0.4	2.3
Value Added		0.0	-0.3	-0.3	-0.2	0.1	0.0

(1) For benchmark details, please refer to the Custom Benchmark Composition exhibit in the Reference section.

(2) Includes Funds Pending Placement.

Nevada System of Higher Education Operating Fund
Investment Returns by Composite (net of fees) as of February 28, 2019

Composite (Inception Date)	Assets \$ mil	Total Return (%)					
		CYTD 12/31/18- 02/28/19	FYTD 06/30/18- 02/28/19	Cumulative Trailing 1 Year	Annualized Trailing 5 Years	Annualized Trailing 10 Years	Annualized Since Inception
Total Operating Fund (06/30/96)	768.2	4.7	1.3	1.6	3.3	6.0	4.9
Policy Index (06/30/96) ⁽³⁾		4.8	1.4	1.8	3.6	5.9	4.4
Value Added		-0.1	-0.1	-0.2	-0.3	0.1	0.4
Long-Term Policy Index (06/30/96) ⁽³⁾		4.8	1.4	1.8	3.6	5.8	4.9
Value Added		-0.1	-0.1	-0.2	-0.3	0.2	0.0
Consumer Price Index - U (06/30/96)		0.6	0.3	1.5	1.5	1.8	2.1

(3) For benchmark details, please refer to the Custom Benchmark Composition exhibit in the Reference section.

2. OPERATING FUND

B. GLOBAL EX US EQUITY RECOMMENDATION



Global ex US Equity Recommendation

- The Operating Fund has a 16% policy target to Global ex US Equity. Since the end of 2011 through February 28, 2019, that allocation has been filled by two complementary active managers, with mixed results:
 - MFS International (8.3%/\$64.1 million) – 8.1% annualized return (120bps ahead of EAFE Index)
 - Manning & Napier (7.4%/\$56.5 million) – 5.3% annualized return (160bps behind EAFE Index)
- We recommend terminating Manning & Napier:
 - We are increasingly concerned about organizational stability: firm assets are currently standing at approximately \$20 billion (down from a peak of approx. \$54 billion), the equity share price trading at less than \$3 (down from a peak of \$17.70/share), and strategy assets at \$1.85B (down from a peak of \$18B).
 - Despite these setbacks (and especially with a low turnover strategy), we have strived to remain patient to capture a performance recovery, so we don't "fire at the bottom of a cycle". In late 2018, 3-year rolling excess return figures (plotted against a broad swath of other global ex US managers) returned back to neutral. We are keen to seize this opportunity to move on.
- On the following pages, we present options to replace Manning & Napier:
 - **We recommend simplifying the Global ex US Equity allocation by replacing both active managers with the Vanguard Developed Markets Index Fund.** (For comparison purposes, we also present details on the BlackRock EAFE Equity Index Non-Lending Fund.)
 - Should the Committee feel more comfortable maintaining active managers in the Global ex US Equity allocation, we also present information about two value managers that we view as complementary to MFS International: Orbis & Mondrian. Of those two, we view Mondrian's relatively less volatile return profile and lower exposure to Emerging Markets as a better fit for the NSHE Operating Fund.

Comparison Matrix

	Current Managers		Value Managers (replace Manning & Napier)		Index Funds (replace both active managers)	
Firm	MFS Investment Management	Manning & Napier Advisors, LLC	Orbis Investment Management Limited	Mondrian Investment Partners Limited	The Vanguard Group, Inc.	BlackRock, Inc.
Firm Founded	1924	1970	1989	1990	1975	1988
Firm Assets	\$ 426,639.74 M (as of 12/31/2018)	\$ 20,163.60 M (as of 12/31/2018)	\$ 32,823.00 M (as of 12/31/2018)	\$ 47,789.48 M (as of 12/31/2018)	\$ 4,933,563.00 M (as of 12/31/2018)	\$ 5,975,818.00 M (as of 12/31/2018)
Location	Boston, MA	Fairport, NY	Hamilton, HM11, Bermuda	London, United Kingdom	Malvern, PA	New York, NY
Product/Strategy	MFS International Equity Strategy	Manning & Napier Core Non-U.S. Equity Strategy	Orbis International Equity Strategy	Mondrian International Equity Strategy	Vanguard Developed Markets Index Fund	EAFE Equity Index Non-Lending Fund
Investment Philosophy/Strategy	Global ex U.S. Growth	Global ex U.S. Equity	Global ex U.S. Equity	Global ex U.S. Value	Global ex U.S. Equity Index	Global ex U.S. Equity Index
Index	MSCI EAFE Index (N)	MSCI ACWI ex US Index (N)	MSCI ACWI ex US Index (N)	MSCI EAFE Index (N)	Vanguard Spliced Dev ex US	MSCI EAFE Index (N)
Product/Strategy Inception Date	03/01/1996	10/01/1996	01/01/2009	10/01/1991	08/17/1999	12/31/1985
Product/Strategy Assets	\$ 20,891.64 M (as of 12/31/2018)	\$ 1,850.40 M (as of 12/31/2018)	\$ 2,427.00 M (as of 12/31/2018)	\$ 15,298.65 M (as of 12/31/2018)	\$ 100,704.64 M (as of 12/31/2018)	\$ 152,697.00 M (as of 12/31/2018)
Vehicle and Fees	Mutual Fund	Mutual Fund	Limited Partnership	Limited Partnership ²	Mutual Fund	Commingled Account
Vehicle Status (date of vehicle information)	Open (12/31/2018)	Open (12/31/2018)	Open (12/31/2018)	Open (12/31/2018)	Open (12/31/2018)	Open (12/31/2018)
Minimum New Account Size	\$3.00 M	\$1.00 M	\$20.00 M	\$5.00 M	\$100.00 M	-
Domicile	United States	United States	United States	United States	United States	United States
Fee Description	Ticker: MIEIX	Class I Shares (Ticker: EXOSX)	Entity Type: Limited Partnership Share Class: Core Refundable Reserve Fee	Entity Type: Limited Partnership	Share Class: Institutional Plus Shares Ticker: VDIPX	
Fee Schedule	Total Annual Expenses: 0.700% (as of 11/15/18)	Total Annual Expenses: 0.75%	Annual Management Fee: 0.45% on first USD 100 mm Performance Fee: 25% of benchmark outperformance ¹ Plus fund expenses (0.08% as of 12/31/2018)	Blended Management Fee: 0.58% 0.630% on first \$30 M 0.500% on next \$20 M 0.400% on next \$50 M Admin Fee (2017): 0.02% Estimated TER: 0.60%	Total Annual Expenses: 0.050% (as of 02/28/19)	Annual Management Fee: 0.040% on all assets Total Estimated Admin Fee: 0.018% Estimated TER: 0.058%
Entry	Daily, on any business day, with no required notice. Sales/Subsription Charge: None Anti-Dilution Levy: None	Daily, on any business day, with no required notice.	Daily, on any business day, with one business day's written notice and subject to completing onboarding documentation in good order. Sales/Subsription Charge: None	Monthly, on the first business day, with written required notice delivered on or before the 15th day of the prior month. Sales/Subsription Charge: 0.300%	Daily, on any business day, with no required notice. Sales/Subsription Charge: None.	Daily, on any business day, with 2 business days' written notice. Sales/Subsription Charge: None Anti-Dilution Levy: Yes
Exit	Daily, on any business day, with no required notice. Lock-up Period: None Redemption Fee: None Anti-Dilution Levy: None Gate: None	Daily, on any business day, with no required notice.	Daily, on any business day, with one business day's written notice. Sales/Subsription Charge: None Lock-Up Period: None Anti-Dilution Levy: Yes	Monthly, on the first business day, with written required notice delivered on or before the 15th day of the prior month. Redemption Fee: 0.150%	Daily, on any business day, with no required notice. Lock-up Period: None. Redemption Fee: None.	Daily, on any business day, with 2 business days' written notice. Lock-up Period: None Redemption Fee: None Anti-Dilution Levy: Yes Gate: None


¹ (Net of base fee) versus the MSCI ACWI Index ex-USA net of withholding taxes, subject to a refund for subsequent underperformance

² Mondrian also offers a mutual fund (DPIEX) with total annual expenses of 0.79%.

Firm	Current Managers		Value Managers (replace Manning & Napier)		Index Funds (replace both active managers)	
	MFS Investment Management	Manning & Napier Advisors, LLC	Orbis Investment Management Limited	Mondrian Investment Partners Limited	The Vanguard Group, Inc.	BlackRock, Inc.
Portfolio Characteristics (as of 12/31/2018)						
Market Cap (M) - Wtd Avg	\$ 66,150.8	\$ 70,733.0	\$ 43,215.8	\$ 52,874.3	\$ 48,250.4	\$ 45,930.0
Market Cap (M) - Median	\$ 44,563.2	\$ 15,027.4	\$ 20,631.2	\$ 31,463.3	\$ 25,074.4	\$ 26,230.0
Trailing P/E - Trailing 12 Mo. Wtd Avg	16.8	15.8	14.5	11.7	12.0	12.6
Forward P/E - Forward 12 Mo. Wtd Avg	14.9	15.2	10.7	12.0	12.2	12.5
Price/Book - Trailing 12 Mo. Wtd Avg	2.3	2.3	1.1	1.2	1.4	1.5
Earnings Growth Rate (%) - Trailing 5 Yr. Wtd Avg	7.8	16.6	---3	3.7	7.8	6.2
ROE (%) - Trailing 5 Yr. Wtd Avg	---3	14.6	13.0 ⁵	11.1	11.4	16.2
Dividend Yield (%) - Wtd Avg	2.9	2.6	3.6	4.6	3.4	3.7
Number of Holdings in Portfolio	74.0	64.0	57.0	55.0	3965.0	928.0
Annual Portfolio Turnover Rate (%) - Trailing 12 Mo.	13.9	50.6	52.4	14.3	2.8	4.6
Active Share (%)	80.4	91.5	91.5	84.9	---	---
Equity (GICS) Sector Allocation (% of Total Equity)						
Energy	2.6	4.6	11.8	9.9	6.4	5.9
Materials	8.6	8.9	7.8	1.2	8.1	7.4
Industrials	15.9	9.9	13.7	15.9	14.9	14.3
Consumer Discretionary	8.1	5.4	9.9	10.8	10.9	11.2
Consumer Staples	18.6	24.9	5.0	6.1	10.1	11.6
Health Care	17.3	14.2	3.8	10.8	9.9	11.2
Financials	14.6	12.2	18.3	17.0	19.8	19.5
Information Technology	10.6	8.5	5.7	5.0	7.1	6.0
Communication Services	2.6	9.9	20.3	12.6	5.3	5.6
Utilities	1.2	0.0	2.2	9.7	3.4	3.8
Real Estate	-	1.5	1.6	1.1	4.0	3.7
Regional Allocations (% of Total Assets)						
North America	4.4	7.5	5.1	-	8.1	-
Europe & Middle East	69.2	70.2	31.0	63.6	53.6	62.8
Asia/Asia Pacific	18.6	5.3	27.4	31.4	33.3	37.2
Emerging South/Latin American	0.6	5.8	0.9	-	-	-
-	-	-	3.7	-	0.4	-
-	-	-	2.2	-	-	-
Emerging Asia/Asia Pacific	6.3	5.3	26.5	3.7	4.5	-
Cash	1.0	6.0	3.2	1.3	0.1	-
Total	100.0	100.0	100.0	100.0	100.0	100.0
Market Capitalization (% of Total Equity)						
Mega-Cap (>\$50.0B)	39.3	38.7	23.8	38.9	30.3	30.3
Large-Cap (\$15.0B - \$50.0B)	51.4	23.6	39.8	38.5	32.3	37.5
Mid-Cap (\$2.5B - \$15.0B)	9.2	34.3	28.6	22.6	28.2	32.1
Small-Cap (\$0.5B - \$2.5B)	-	3.5	7.7	-	8.3	0.04
Micro-Cap (<\$0.5B)	-	-	-	-	1.0	0.01

³ Information is not available.⁴ Market capitalization allocation ranges specific to BlackRock.⁵ Orbis provided a "Long-term ROE", rather than Trailing 5 Yr. As of December 31, 2018.

Vanguard Developed Markets Index Fund

Overview

- Summary: Vanguard's international and global equity index strategies are a strong option for investors seeking passive market exposure and performance with low fees. Tracking error is low as well, though it can deviate fairly significantly for short periods of time due to the effect of fair value pricing (FVP), which takes into account events occurring between the close of foreign markets and the fund's pricing time, as well as short-term currency effects. Depending on the liquidity of the underlying index, Vanguard will either use full replication or a sampling method to best represent the characteristics of the benchmark.
- Organization: Vanguard operates on slim earnings and is a low-cost provider. As of December 30th, 2018, Vanguard had over \$4.9 trillion in assets under management (AUM), over half of which was in equity index funds. Over 65% of Vanguard AUM belonged to institutional investors and less than 35% belonged to retail investors. Over the last several years, Vanguard has experienced growth in all asset classes, but particularly in exchange-traded funds (ETFs) and international products.
- Strategy: Vanguard uses full replication for many of its index products, but it will use sampling and optimization techniques for indices that are especially large or illiquid. Sampling is the technique of holding a broadly diversified collection of securities that in aggregate approximates the full index in terms of key characteristics. The PMs seek to match index attributes such as country weightings, industry weightings, market cap, price/earnings ratio, and dividend yield. The number of securities held in a sampled portfolio is typically near the number held by the benchmark and can actually exceed it, depending on the market environment. Tracking error should remain minimal. The Vanguard team is continually working on refining their techniques for reducing tracking error.

Vanguard Developed Markets Index Fund

Highlights & Considerations

Highlights

Organization—Philosophy and Culture The firm takes a conservative, consistent, and low-cost approach to managing assets. Unlike many of Vanguard's primary competitors, the firm is not a major global bank.

Organization—Specializes in Indexing The firm has a long history and depth of experience managing index funds—since 1976. Vanguard has broad and deep resources focused on indexing.

Organization—Well-Developed Risk Management

Program Vanguard employs extensive risk management tools and a well-thought-out risk management program.

Organization—Team Longevity Many Vanguard investment professionals have had long tenures with the firm.

Investment Strategy—Securities Lending Vanguard's securities lending program is best in class due to its cash collateral being held almost entirely in Treasuries and its limited scope—mostly hard-to-borrow stocks. All revenue proceeds solely benefit investors, rather than being split between Vanguard and investors.

Terms—Low Fees The total annual fees are attractive. The firm's mission is to lower costs for investors so their investment dollars work harder. With very large funds and a huge asset base, Vanguard can command some of the lowest commission costs in the industry.

Considerations

Organization—Issues with Customer Service Institutional customer service is Vanguard's weakness. Though the company is trying to improve service, operations and phone staff have not been as responsive to investors as other index fund providers have been.

Organization—Lower Compensation Compensation for team members is probably lower than at competing firms, but staff turnover is negligible. This stability should support the team in reaching its investment objectives.

Investment Strategy—Benchmark Changes In 2013, Vanguard changed many of the international products' benchmarks from MSCI to FTSE. One of the largest affects was the categorization of South Korea – MSCI classifies the country as an emerging market country while FTSE classifies it as a developed country. In late 2015, Vanguard also changed several product benchmarks to include small cap stocks, Canada and China A shares.

Investment Strategy—Internal Cross-Trading Vanguard does less cross-trading of stocks internally, resulting in fewer transaction-cost savings from the practice compared to its competitors.

Investment Strategy—Lack of Customization Vanguard offers only commingled funds for its index products, so there is a lack of customization. (Though in some foreign markets, separate accounts are available with a \$1 billion minimum investment.)

Investment Strategy—Fair Value Pricing It is important to understand that unlike many other index providers, Vanguard uses fair value pricing (FVP), which means Vanguard's international indices have higher tracking error than peers. Over time, the variance evens out, but there can be fairly significant short-term deviations.

Annual Returns (%)

As of Feb 28, 2019 • USD

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD (2 months)
Current Managers												
MFS Int'l Equity Fund	-35.0	33.1	11.0	-9.6	22.6	18.6	-4.2	0.0	0.3	28.0	-10.7	9.6
MSCI EAFE Index (N)	-43.4	31.8	7.8	-12.1	17.3	22.8	-4.9	-0.8	1.0	25.0	-13.8	9.3
Manning & Napier	-41.4	39.5	9.5	-15.6	19.3	19.4	-9.3	-5.0	3.5	23.9	-17.2	11.2
MSCI ACWI ex US Index (N)	-45.5	41.4	11.2	-13.7	16.8	15.3	-3.9	-5.7	4.5	27.2	-14.2	9.7
Prospective Value Managers												
Orbis Int'l Equity L.P.	---	48.6	10.7	-11.3	23.9	28.8	-8.7	-2.2	16.0	29.9	-17.1	8.9
MSCI ACWI ex US Index (N)	-45.5	41.4	11.2	-13.7	16.8	15.3	-3.9	-5.7	4.5	27.2	-14.2	9.7
Mondrian Int'l Equity Fund	-37.9	23.9	2.7	-4.2	8.7	23.1	-2.2	-3.8	3.8	21.6	-11.8	8.6
MSCI EAFE Index (N)	-43.4	31.8	7.8	-12.1	17.3	22.8	-4.9	-0.8	1.0	25.0	-13.8	9.3
Index Funds												
BlackRock EAFE Non-Lending Fund	-43.1	32.3	8.1	-11.9	17.7	23.1	-4.7	-0.6	1.4	25.5	-14.0	9.1
MSCI EAFE Index (N)	-43.4	31.8	7.8	-12.1	17.3	22.8	-4.9	-0.8	1.0	25.0	-13.8	9.3
Vanguard Dev. Mkts. Index *	-40.7	27.5	8.4	-12.3	18.6	21.9	-6.0	-0.4	2.7	26.4	-14.8	9.8
Vanguard Spliced Dev ex US Index **	-43.4	31.8	7.8	-12.1	17.3	22.7	-4.9	-0.3	2.3	26.3	-14.8	9.8

Please see the Return Source Details pages for information on return data sources

* Effective April 4, 2014, Vanguard Developed Markets Index Fund merged into Vanguard Tax-Managed International Fund, and the combined fund was renamed Vanguard Developed Markets Index Fund. Performance prior to April 4, 2014, is that of the former Vanguard Tax-Managed International Fund. The fund retains the same historical performance, portfolio manager, and risks as it did prior to its reorganization.

** MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.

Trailing Annualized Returns (%)

As of Feb 28, 2019 • USD

	11Y	10Y	9Y	8Y	7Y	6Y	5Y	4Y	3Y	2Y	1Y
Current Managers											
MFS Int'l Equity Fund	4.5	11.3	7.1	5.4	6.5	5.7	3.8	4.0	11.0	9.5	-2.2
MSCI EAFE Index (N)	2.0	9.6	5.4	3.8	5.5	4.8	2.1	2.6	9.3	6.2	-6.0
Manning & Napier	1.6	8.4	3.7	1.8	3.3	2.6	-0.1	1.7	7.0	4.2	-7.8
MSCI ACWI ex US Index (N)	1.8	9.6	4.9	3.1	4.4	4.1	2.5	2.9	10.7	6.7	-6.5
Prospective Value Managers											
Orbis Int'l Equity L.P.	---	12.9	7.8	6.1	8.2	6.7	3.7	6.2	12.7	5.7	-10.5
MSCI ACWI ex US Index (N)	1.8	9.6	4.9	3.1	4.4	4.1	2.5	2.9	10.7	6.7	-6.5
Mondrian Int'l Equity Fund	2.0	8.7	5.3	4.0	5.3	5.3	2.1	2.2	8.5	5.9	-4.6
MSCI EAFE Index (N)	2.0	9.6	5.4	3.8	5.5	4.8	2.1	2.6	9.3	6.2	-6.0
Index Funds											
BlackRock EAFE Non-Lending Fund	2.2	9.8	5.7	4.0	5.7	4.9	2.2	2.7	9.4	6.2	-6.5
MSCI EAFE Index (N)	2.0	9.6	5.4	3.8	5.5	4.8	2.1	2.6	9.3	6.2	-6.0
Vanguard Dev. Mkts. Index *	2.3	9.9	5.6	3.9	5.8	5.1	2.5	3.1	9.9	6.3	-5.9
Vanguard Spliced Dev ex US Index **	2.2	9.8	5.7	4.0	5.8	5.1	2.6	3.2	9.8	6.3	-6.1

Please see the Return Source Details pages for information on return data sources

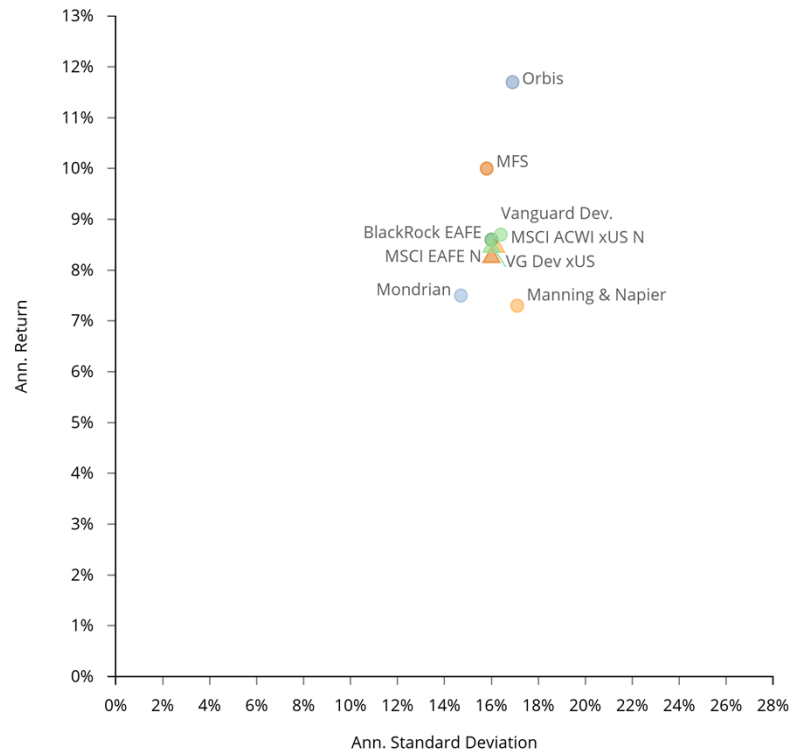
* Effective April 4, 2014, Vanguard Developed Markets Index Fund merged into Vanguard Tax-Managed International Fund, and the combined fund was renamed Vanguard Developed Markets Index Fund. Performance prior to April 4, 2014, is that of the former Vanguard Tax-Managed International Fund. The fund retains the same historical performance, portfolio manager, and risks as it did prior to its reorganization.

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Risk vs. Return

Since Orbis Inception

Trailing 121 Months • Feb 01, 2009 - Feb 28, 2019 • USD

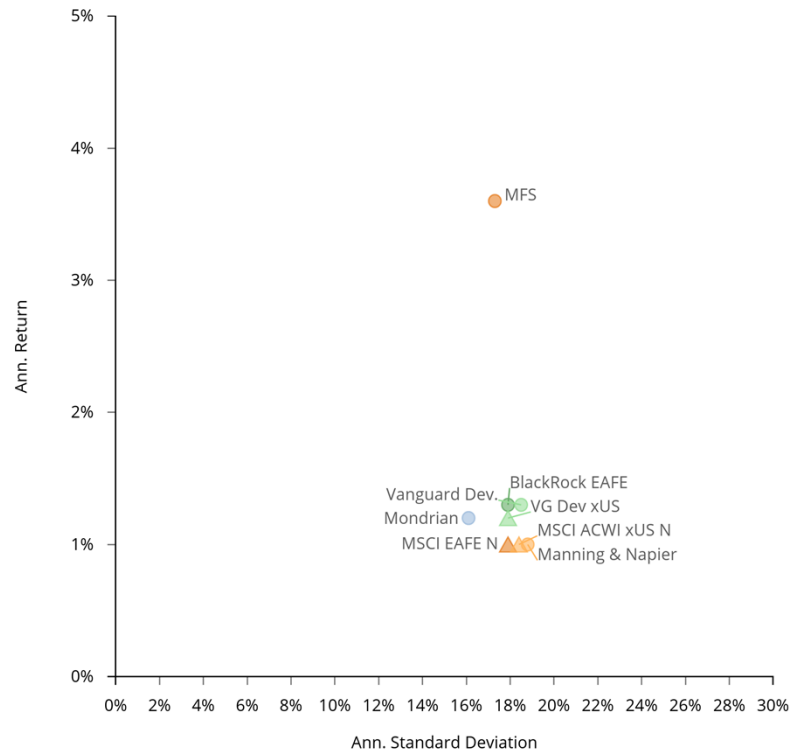


	Ann. Return (%)	Ann. Standard Dev (%)	Sharpe Ratio	Market Beta to MSCI EAFE Index (N)
Current Managers				
MFS Int'l Equity Fund	10.0	15.8	0.7	0.96
MSCI EAFE Index (N)	8.3	16.0	0.6	1.00
Manning & Napier	7.3	17.1	0.5	1.02
MSCI ACWI ex US Index (N)	8.5	16.2	0.6	1.00
Prospective Value Managers				
Orbis Int'l Equity L.P.	11.7	16.9	0.7	1.01
MSCI ACWI ex US Index (N)	8.5	16.2	0.6	1.00
Mondrian Int'l Equity Fund	7.5	14.7	0.5	0.89
MSCI EAFE Index (N)	8.3	16.0	0.6	1.00
Index Funds				
BlackRock EAFE Non-Lending Fund	8.6	16.0	0.6	1.00
MSCI EAFE Index (N)	8.3	16.0	0.6	1.00
Vanguard Dev. Mkts. Index	8.7	16.4	0.6	1.01
Vanguard Spliced Dev ex US Index	8.5	16.0	0.6	1.00

Risk vs. Return

Since EAFE market peak before Global Financial Crisis

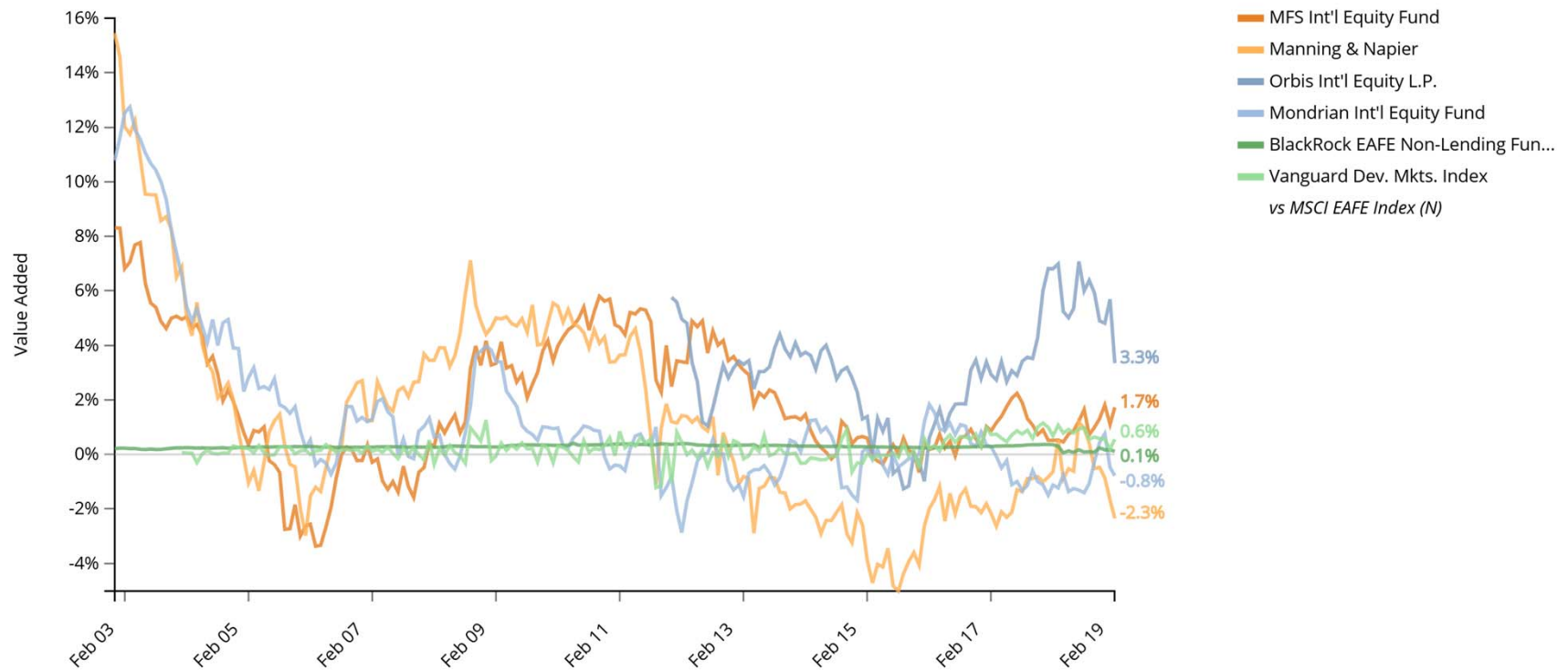
Trailing 137 Months • Oct 01, 2007 - Feb 28, 2019 • USD



	Ann. Return (%)	Ann. Standard Dev (%)	Sharpe Ratio	Market Beta to MSCI EAFE Index (N)
Current Managers				
MFS Int'l Equity Fund	3.6	17.3	0.3	0.94
MSCI EAFE Index (N)	1.0	17.9	0.1	1.00
Manning & Napier	1.0	18.8	0.1	1.00
MSCI ACWI ex US Index (N)	1.0	18.4	0.1	1.02
Prospective Value Managers				
Orbis Int'l Equity L.P.	---	---	---	---
MSCI ACWI ex US Index (N)	1.0	18.4	0.1	1.02
Mondrian Int'l Equity Fund	1.2	16.1	0.1	0.88
MSCI EAFE Index (N)	1.0	17.9	0.1	1.00
Index Funds				
BlackRock EAFE Non-Lending Fund	1.3	17.9	0.1	1.00
MSCI EAFE Index (N)	1.0	17.9	0.1	1.00
Vanguard Dev. Mkts. Index	1.3	18.5	0.1	1.01
Vanguard Spliced Dev ex US Index	1.2	17.9	0.1	1.00

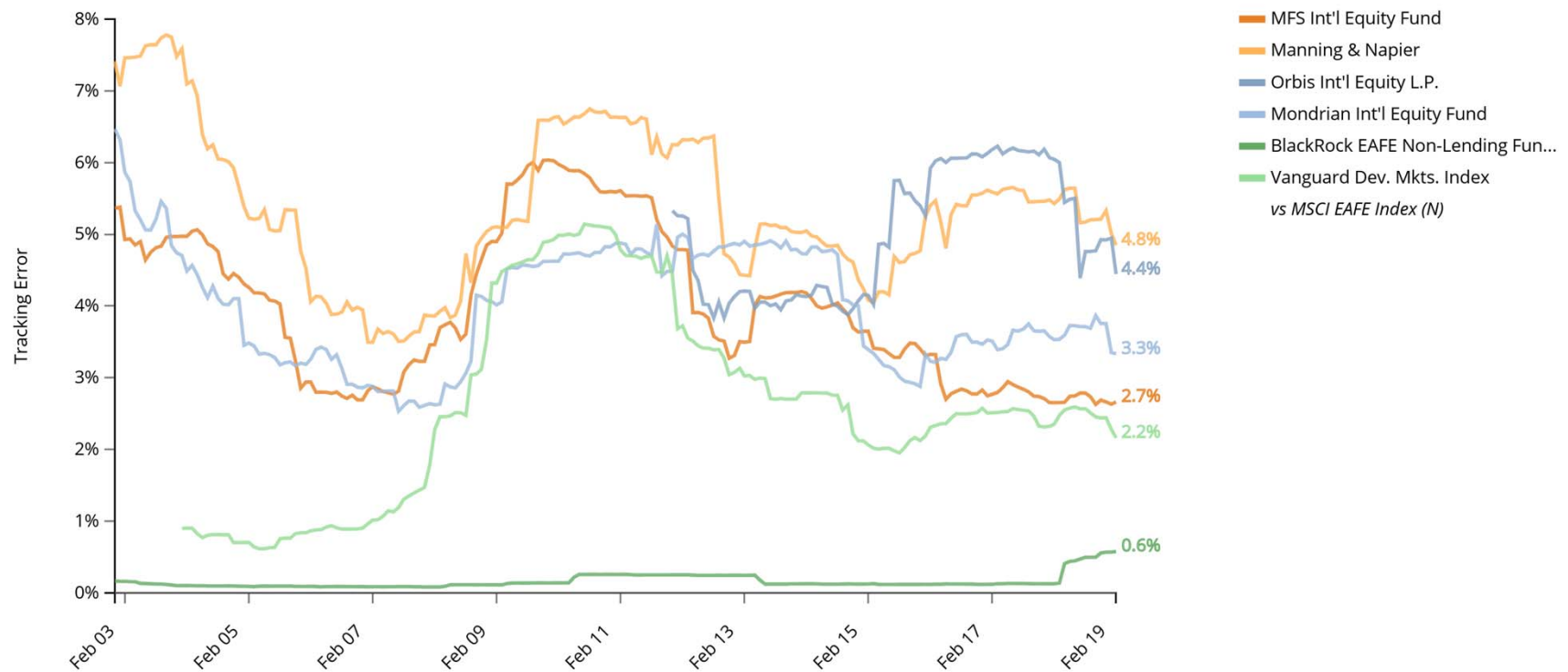
Value Added (%) vs. MSCI EAFE Index (N)

Rolling 3 Years • Jan 01, 2000 - Feb 28, 2019 • USD



Ann. Tracking Error (%) vs. MSCI EAFE Index (N)

Rolling 3 Years • Jan 01, 2000 - Feb 28, 2019 • USD



Correlations

Correlation of Excess Return vs. MSCI EAFE Index (N)

Trailing 121 Months • Feb 01, 2009 - Feb 28, 2019 • USD • Since Orbis Inception



Correlation of Excess Return vs. MSCI EAFE Index (N)

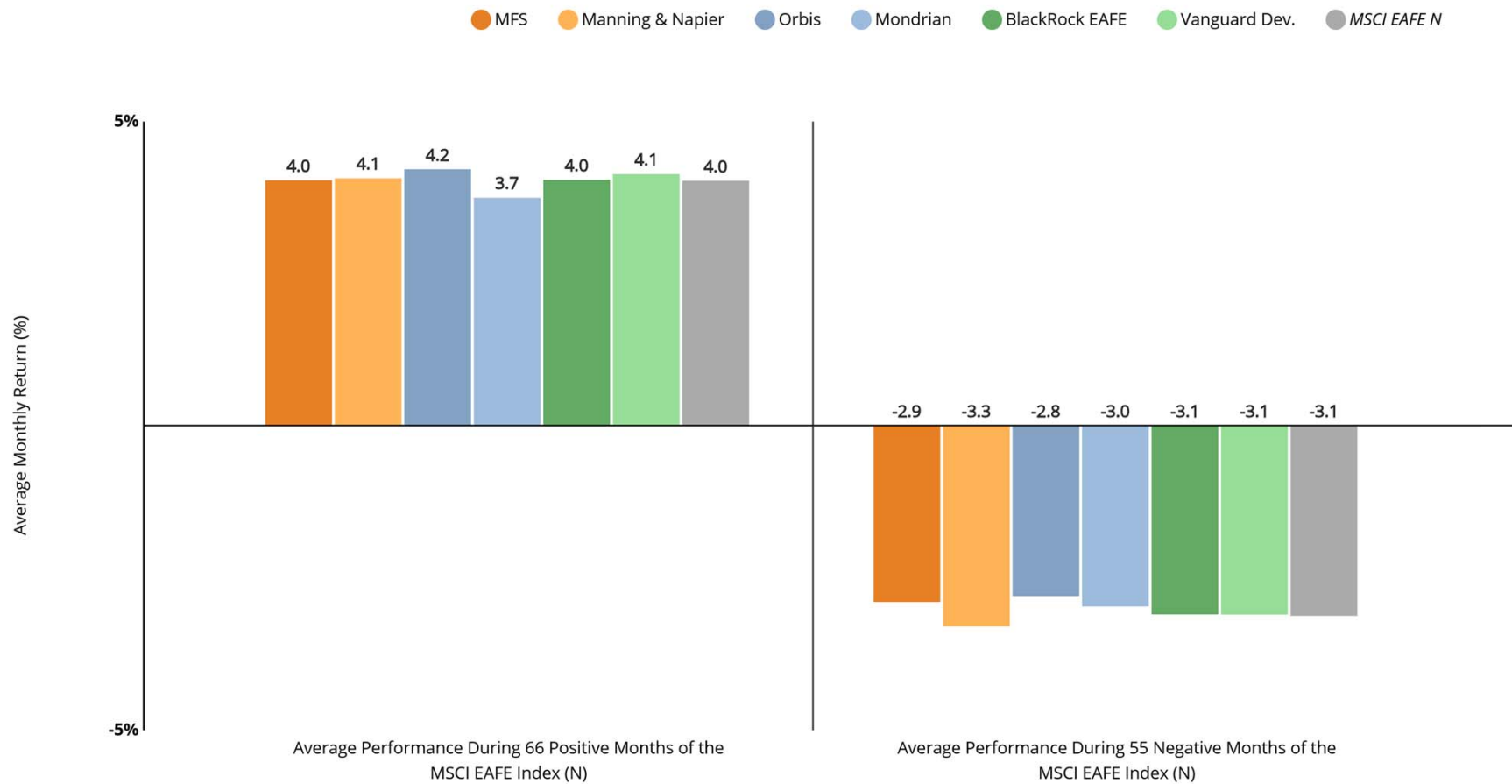
Trailing 137 Months • Oct 01, 2007 - Feb 28, 2019 • USD • Since EAFE market peak before Global Financial Crisis



Average Returns During Up/Down Months

Since Orbis Inception

Trailing 121 Months • Feb 01, 2009 - Feb 28, 2019 • USD

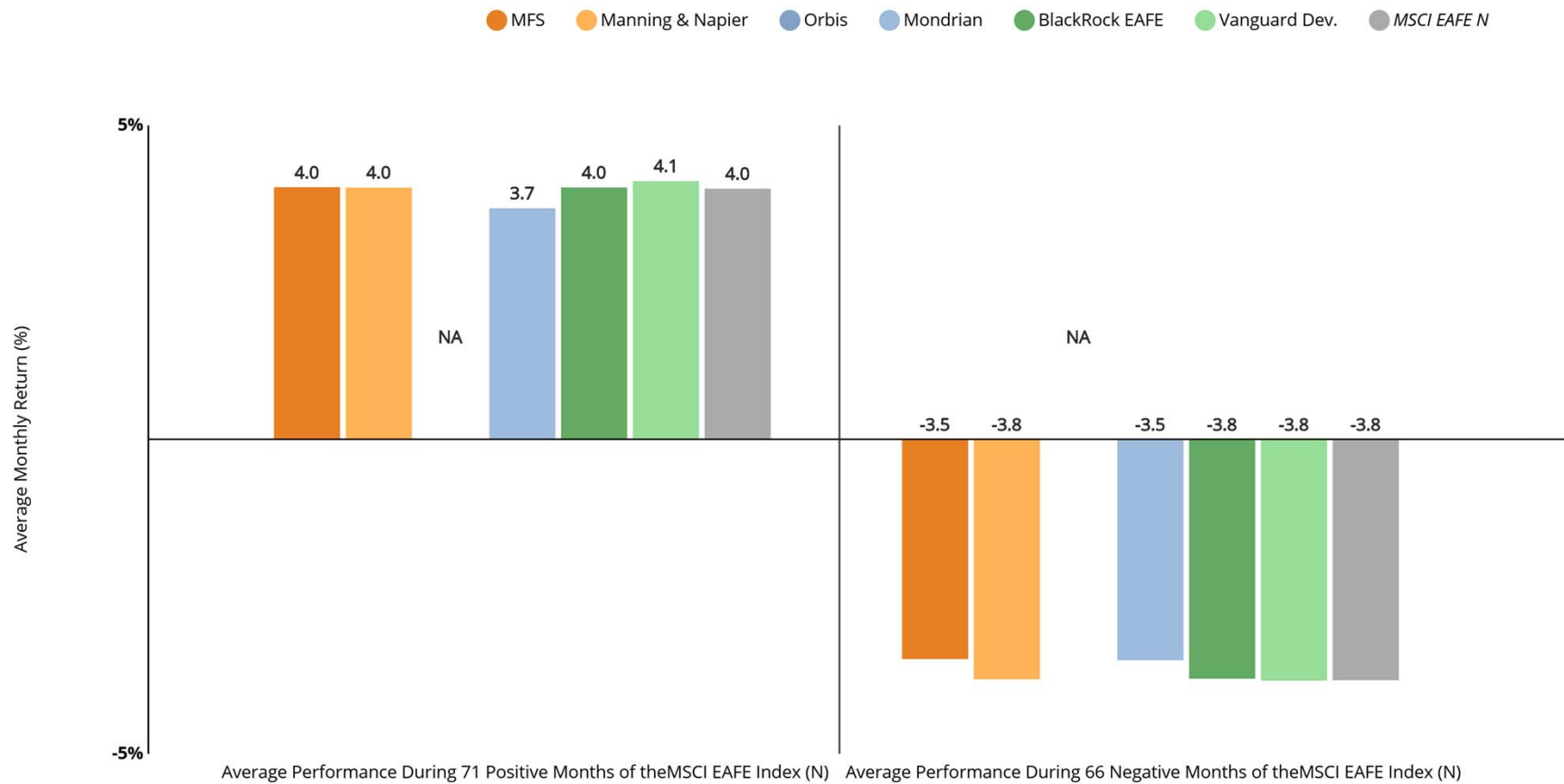


This statistic should not be interpreted as sensitivity to the market (beta) as it does not account for alpha. The range of positive and negative benchmark returns may be limited and may or may not include extreme returns. This describes a purely historical experience and should not be extrapolated to future behavior.

Average Returns During Up/Down Months

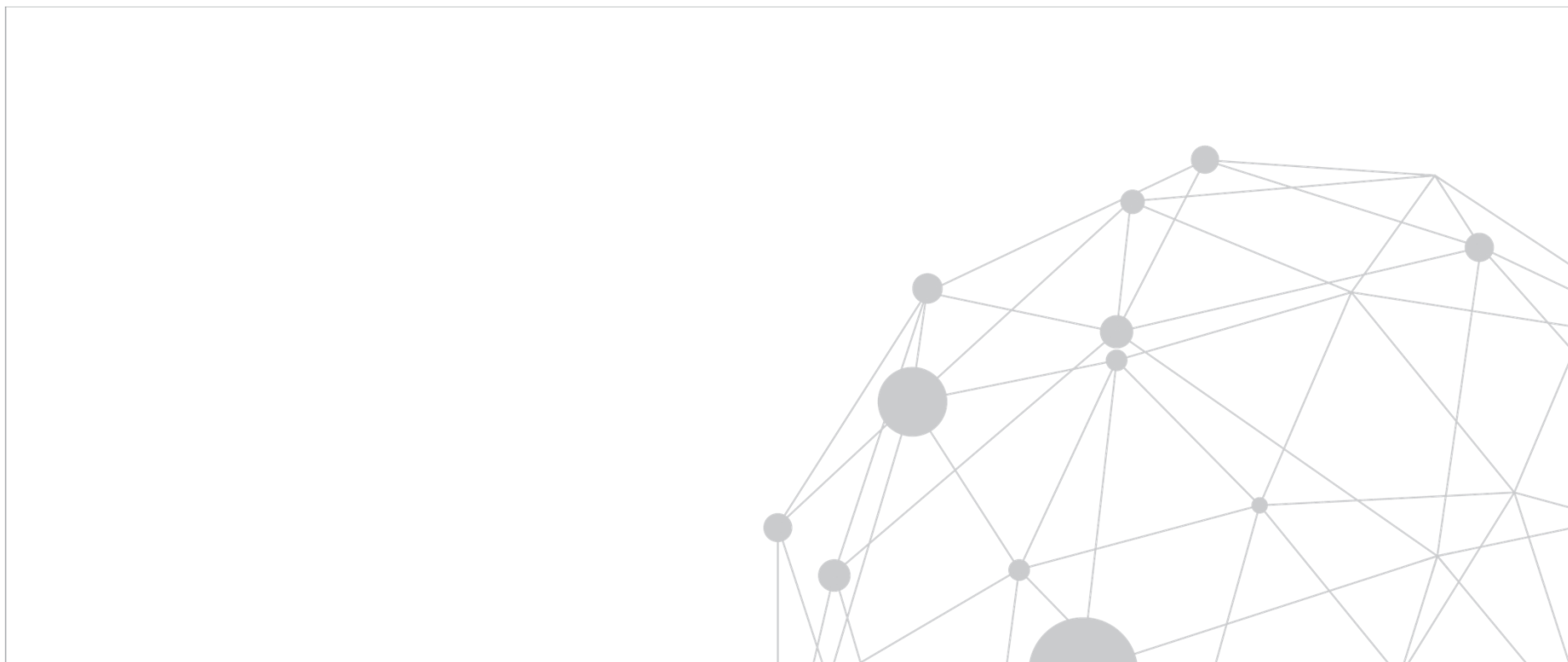
Since EAFE market peak before Global Financial Crisis

Trailing 137 Months • Oct 01, 2007 - Feb 28, 2019 • USD



This statistic should not be interpreted as sensitivity to the market (beta) as it does not account for alpha. The range of positive and negative benchmark returns may be limited and may or may not include extreme returns. This describes a purely historical experience and should not be extrapolated to future behavior.

APPENDIX



Orbis Institutional International Equity Strategy

Overview

- Summary: The firm targets high standards of excellence in company research and stock selection. The culture is demanding but highly desirable for intense investment professionals. While the concept of contrarian intrinsic value investing is familiar, Orbis executes it in an unusual and comprehensive manner. The approach emphasizes the power of an analyst-driven research portfolio combined with an overlay of modest portfolio construction, currency management, and attentive trading. The portfolios are not linked to benchmarks but are diversified among about 40 to 90 mid-to-large-cap stocks. Tracking error, active share, volatility, and beta can all be high.
- Organization: This unconstrained International Equity Strategy is powered by a premier global analyst platform. Orbis focuses on bottom-up, contrarian stock picking with a long time horizon and has embraced investing from a global perspective ever since the inception of this well-established firm over 25 years ago. The competitive edge at Orbis can be found in its combination of organizational design and culture, investment process, and the team's tight execution.
- Strategy: The investment philosophy focuses on the search for undervalued companies where stock prices do not reflect the intrinsic value of the business. They seek a 25%-to-50% margin of safety from intrinsic value. The team views risk as a permanent loss of capital as opposed to risk relative to the benchmark. The investment process centers on the teams of analysts who are organized either by region or global sector. Internally, Orbis targets an unheard-of 10% alpha to drive its investment professionals to excellence.

Orbis International Equity Strategy

Highlights

Organization—Thoughtful Design The organization is extremely well designed. Thanks to a culture that emphasizes high integrity and transparency, Orbis maintains a client-centric and performance-driven orientation. In many ways Orbis has demonstrated its intent to forge a high-quality and lasting partnership with Cambridge Associates and its clients.

Organization—Independent Ownership Beyond employee ownership stakes, Orbis is majority owned by a foundation established by its founder, Allan Gray. The firm recently completed succession planning to cement a long-term private ownership structure.

Organization—Analyst Platform Orbis leverages a large analyst team located in multiple locations worldwide, employing a universal investment philosophy. Their stock picks form the foundation for the global and global ex US equity portfolios.

Investment Strategy—Rigorous Accountability The strategy does not employ consensus decision making but instead emphasizes individual contributions. There is clearly defined individual accountability at the analyst, portfolio construction, currency, and trading levels.

Investment Strategy—Notable Emerging Markets Exposure More than most other ACWI ex US strategies, Orbis International Equity has a meaningful portion of the portfolio invested in mid caps and large caps across emerging markets. Specifically, this portion has ranged from 23%—approximately a neutral weight to the MSCI ACWI ex US Index—to 47%—a significant overweight.

Investment Strategy—Tax Aware Making a relevant effort for US-based taxable investors, the team follows several steps to minimize tax liabilities.

Investment Performance—Long Record and Successful Investment Approach The firm has a multi-decade track record in the broader global equity strategy, which has been in the top quartile over medium and longer time periods.

Terms—Good Access Orbis has launched a variety of strategy vehicles, poised to accommodate US-based and non-US-based investors. Such options are rather rare in the segment.

Orbis International Equity Strategy

Considerations

Investment Strategy—Conventional Contrarian Value Investing This is mid-to-large-cap Buffett-inspired value investing. The concept is not original; however, the execution is tightly managed, and the portfolio construction based on the key analysts' paper portfolios is a differentiated framework.

Investment Strategy—Complicated Setup and Investment Process Orbis has lots of moving parts that can be complicated to explain. The team also tinkers with aspects of the process, a healthy form of evolution. Graeme Forster constructs the International Equity portfolios using the four key analysts' paper portfolios and with direct input from the bottom-up, fundamental research of dozens of other analysts. There are tremendous resources brought to bear on all aspects of running the firm.

Terms—Higher Fees Orbis offers a modest management fee plus a performance fee applied to excess returns over the index. This higher total cost is partially mitigated by a high-water mark and a clawback feature that is not common among long-only managers; we also find the alignment of incentives appealing, given that the manager will not be paid the performance fee when lagging the benchmark. The manager has offered preferential terms to certain C|A clients; please check with your investment team to see if you are eligible.

Terms—Anti-Dilution Levies For entry and exit cash transactions representing more than 5% of the funds, Orbis applies an anti-dilution levy of 40 basis points.

Mondrian International Equity Fund

Overview

- Summary: Mondrian's International Equity strategy is a reliable low-volatility value offering. The firm takes a conservative approach to managing its business and its portfolios. Mondrian has been amazingly stable and recently improved its standing by becoming 100% independent and employee owned by purchasing the remaining interest held by the private equity firm Hellman & Friedman (H&F). The strategy offers low volatility, low beta, and generally above-average yield. It may not capture all of the upside in bull markets, but it is designed to protect on the downside. Given its expected performance profile and low turnover attributes, this strategy should be suitable for taxable investors in addition to other institutional clients.
- Organization: London-based Mondrian was established by ex-Hill Samuel professionals in 1990. The group was formed as Delaware International, a subsidiary of Delaware Investments, which was bought by insurance company Lincoln National in the mid-1990s. Over the years, there were strains over various topics, including the alignment of incentives provided by parent Lincoln National. In 2004, with the help of private equity investor H&F, Delaware International did a management buyout and became Mondrian.
- Strategy: Mondrian applies the same value-oriented, defensive, fundamental stock selection process to all of their equity strategies. They are seeking a minimum 5% to 6% real rate of return for their stocks. The mainstream International Equity strategy is 60% bottom up and 40% top down. Mondrian uses an inflation-adjusted, four-stage dividend discount model (DDM) to evaluate securities and countries over the long term. Attractive stock candidates are subject to fundamental research by regional and country specialists. They seek to understand the business operation within the industry. It is important to note that team members explore best- and worst-case scenarios to understand the scope of the risk–return profile of individual stocks, which in turn affects position sizing. Portfolios hold 35 to 55 stocks. Turnover is low, in the 10% to 20% range.

Mondrian International Equity Fund

Highlights

Investment Strategy Time Tested Mondrian's value-oriented investment process has been tested over time with a track record which dates back to 1991.

Organization Newly Independent Mondrian as a firm is even more stable than it has been historically. The firm earned its freedom from private equity investor H&F and is now 100% independent. Cambridge Associates supported this group through the somewhat trying years at Delaware, when they were under the oversight of Lincoln National. The MBO in 2004 was positive, and Mondrian's 2011 move to full independence was a significant accomplishment. The firm is truly in charge of its own destiny and has proper equity incentives in place.

Organization Experienced Team Staff turnover is low. With the exception of a few senior-level professionals, the tenured people at Mondrian have been working together for 20+ years, at Delaware, then Mondrian and even longer if you consider their Hill Samuel experience. The culture allows for autonomous product areas to operate within the larger organization. The senior professionals on International Equity have been in place at the firm for most of their careers.

Organization Firmwide Experience The larger organization has plenty of depth in the developed and emerging markets.

Organization Capacity Conscious The firm has demonstrated a commitment to closing strategies once they reach capacity.

Terms Competitive Fees for the commingled fund are attractive for the asset class (and were improved in 2016) with a management fee of 63 bps on the first \$30M.

Investment Performance Style-True Consistent and relatively predictable performance pattern.

Mondrian International Equity Fund

Considerations

Organization Limited Capacity The LP and mutual fund are the only open vehicles to new business.

Investment Strategy Large Program Limitations The international equity strategy has much more assets under management (AUM) than it did in the 1990s. As with its peers, repercussions from the credit crisis lopped off a sizable portion of AUM (about \$10 billion in this case). Nevertheless, the program remains sizable because the firm manages other non-US equity strategies as well. They have slowed down growth of the product significantly by closing to new separate accounts. Given the mid- to large-cap nature of the product, the larger assets are not a deal killer, but capacity is something to think about.

Organization Debt Mondrian financed the purchase of H&F's final ownership stake with debt, though they have claimed they are ahead of schedule with the payments.

Investment Performance Significant Tracking Error The portfolio is not index oriented and can have extended periods when its performance will not keep up with the benchmark.

Entry and Exit Fees Cash contribution and withdrawal charges may be assessed upon entry and exit of the LP vehicle.

BlackRock EAFE Equity Index Non-Lending Fund

Overview

- Summary: BlackRock, Inc. (BlackRock), the largest index manager worldwide, has sophisticated indexing operations. BlackRock's indexing team focuses on obtaining the best investment outcome for clients by managing benchmark risk and minimizing transaction costs. The firm has a dedicated research team that focuses on the benchmarks—predicting forthcoming index changes, auditing daily updates from index providers, and developing trade strategies to thoughtfully incorporate index events. Some indices are fully replicated, while others are optimized. When constructing portfolios, BlackRock accounts for traditional Barra risk factors, internal risk factors, and trading costs to ensure the best portfolio decisions. The firm maintains a large internal crossing network, adding value through low-cost trades.
- Organization: BlackRock is well known as the largest money manager in the world. Founded as Blackstone Financial Management in 1988, the firm changed its name to BlackRock in 1992. BlackRock is headquartered in New York and listed on the New York Stock Exchange. It has no single majority stockholder, and more than half of its directors are independent. The firm has a wide range of investment products and more than 65 office locations worldwide.
- Strategy: BlackRock is a pure-play asset manager, which means the firm operates no other businesses such as custody management or proprietary trading. Index portfolios are managed by the index equity team, which focuses on achieving the best investment outcome through managing risk—tracking error—and minimizing transaction costs. BlackRock is able to minimize tracking error by obtaining deep-level knowledge of the benchmark.
- Overall, these products are appropriate for clients interested in passive tightly tracking strategies managed in a cost-effective manner.

BlackRock EAFE Equity Index Non-Lending Fund

Highlights & Considerations

Highlights

Organization—Long Track Record Managing Index Strategies BlackRock has a long and well-established track record of managing equity index products for both retail and institutional clients. Passive management remains an important part of the firm's business focus.

Organization—Firm Resources BlackRock allocates significant resources to broaden and deepen the firm's already robust investment and risk management capabilities.

Investment Strategy—Trading Costs Savings Internal crossing opportunities that arise due to BlackRock's size provide a significant source of cost savings.

Organization—Experienced Team The BlackRock ETF and Index Investments Group is led by Mark Weidman and his team of experienced PMs. BlackRock also has deep and experienced research and trading teams.

Investment Performance—Tight Tracking

Error Strategy tracking errors relative to their relevant benchmarks are very tight.

Considerations

Organization—Securities Lending There is prevalent securities lending from BlackRock index products. BlackRock takes approximately 50% of the profit from lending clients' securities and is aggressive about selling the lending vehicles. Investors should use non-securities-lending vehicles when possible.

Organization—Ownership BlackRock is a large publicly traded asset manager with the associated pressures of a publicly traded firm.

MFS Institutional International Equity Fund

Highlights

Organization Excellent Culture MFS has a great culture with low professional turnover. For several years, it placed on the *Fortune Magazine* "100 Best Companies to Work For" list. More recently, the company has become more streamlined and a bit more of a meritocracy.

Team Efficient Communication Channels MFS offers deep resources in terms of stock picking yet is not so large that communication hinders information flows or decision-making. This is a co-portfolio manager-led product with dozens of analysts feeding stock ideas.

Strategy Sound Leadership Given the prominence of the International Equity portfolio within the MFS lineup, the Co-PMs harness the full power of the analyst team's efforts.

Team Experienced Resources Analyst and portfolio management retention on the non-U.S. side has been very good. This is a function of many factors including great culture, collegial work environment, and competitive compensation.

Performance Consistent Long-term Results MFS' International Equity team has established one of the most consistent and longstanding track records in the global ex U.S. asset class.

Terms Attractive Fees The commingled vehicle is attractively priced. Total annual expenses are 72 bps.

MFS Institutional International Equity Fund

Considerations

Organization Outside Ownership There is an element of parental unpredictability. SunLife owns 80% of the firm as they have for more than two decades. About a decade ago, SLF contemplated selling MFS but quickly reconsidered. More recently, SLF acquired McLean Budden and forced it under MFS leadership. This is new territory for MFS as the firm had always grown organically.

Team PM Retirement In 2017, Co-PM Marcus Smith retired from MFS and the industry. Daniel Ling and Filipe Benzinho continue as the Co-PMs on the strategy. We are encouraged by the strength of the Global Research Platform and the fact that Ling accumulated more than 7 1/2 years of experience working alongside Smith in a Co-PM capacity before assuming the senior role on the team.

Organization Broad Spectrum of Products & Clients Though the institutional business is the main avenue of growth for the firm, MFS is still managing lots of asset for retail channels. They are covering wide angles of distribution.

Performance Consistent Performance Profile Portfolio performance may not keep up during, narrow and/or liquidity fueled, low quality rallies, such as in 2007, 2009, and 2013 when it dipped to the lower quartiles. Strong value-oriented markets may provide a headwind as well.

Team Limited PM Access Ling is articulate, but given their broad reaching client list, MFS tends to offer competent Institutional PMs to represent the strategy instead of the lead PMs.

Return Source Details

This page shows the composition and sources of monthly return streams used in return analytics.



Return Source Details

This page shows the composition and sources of monthly return streams used in return analytics.

Long Name	Return series details [to Jan 31, 2019]	Earliest Common Date: 01/2009
MFS Int'l Equity Fund	Short Name: MFS Series #1: Dec 2011 / MFS Institutional International Equity Fund - Shares/ Mutual Fund/ Portfolio specific returns / USD / ref#MP92051 Series #2: Jan 1996 / MFS International Equity Strategy/ Performance represents the MFS Institutional International Equity Fund - (MIEIX)./ Net / USD / ref#IC30914	
Manning & Napier	Short Name: Manning & Napier Series #1: Dec 2011 / Manning & Napier Fund, Inc. Overseas Series - Series/ Other - Mutual Fund/ Portfolio specific returns / USD / ref#MP92050 Series #2: Sep 1998 / Manning & Napier Fund, Inc. Overseas Series - Series/ Performance represents the Manning & Napier Fund, Inc. Overseas Series Class I mutual fund./ Net / USD / ref#IC37238	
Orbis Int'l Equity L.P.	Short Name: Orbis Series #1: Jan 2009 / Orbis Institutional International Equity L.P. - Core Refundable Reserve Fee/ Performance represents the Orbis International Equity Composite - Base Refundable Reserve Fee./ NetNet / USD / ref#IC50578	
Mondrian Int'l Equity Fund	Short Name: Mondrian Series #1: Oct 1997 / Mondrian International Equity Fund/ Performance represents the Mondrian International Equity Fund, L.P./ Gross / USD -/ 60bps / ref#IC38295	
BlackRock EAFE Non-Lending Fund	Short Name: BlackRock EAFE Series #1: Jan 1988 / EAFE Equity Index Fund B/ Performance represents the EAFE Equity Index Fund - Class A Interests - USD (Unhedged)./ Gross / USD -/ 5.8bps / ref#IC20668 Series #2: May 1997 / EAFE Equity Index Fund B/ Performance represents the iShares MSCI EAFE International Index Fund - MAIIX - Institutional Shares./ Net / USD / ref#IC48755	
Vanguard Dev. Mkts. Index	Short Name: Vanguard Dev. Series #1: Aug 2007 / Vanguard Developed Markets Index Fund/ Performance represents the Vanguard FTSE Developed Markets ETF - VEA./ Net / USD / ref#IC47685 Series #2: May 2000 / Vanguard Developed Markets Index Fund - Institutional Plus/ Performance represents the Vanguard Developed Markets Index Fund - VTMNX - Institutional Shares./ Net / USD / ref#IC35927	
MSCI ACWI ex US Index (N)	Short Name: MSCI ACWI xUS N Legal Name: MSCI All Country World ex US Index (Net) Jan 2001 / Benchmark / USD / ref#CI8402	
Vanguard Spliced Dev ex US Index	Short Name: VG Dev xUS Legal Name: Vanguard Spliced Developed ex US Index Jan 1999 / Benchmark / USD / ref#CI21557	



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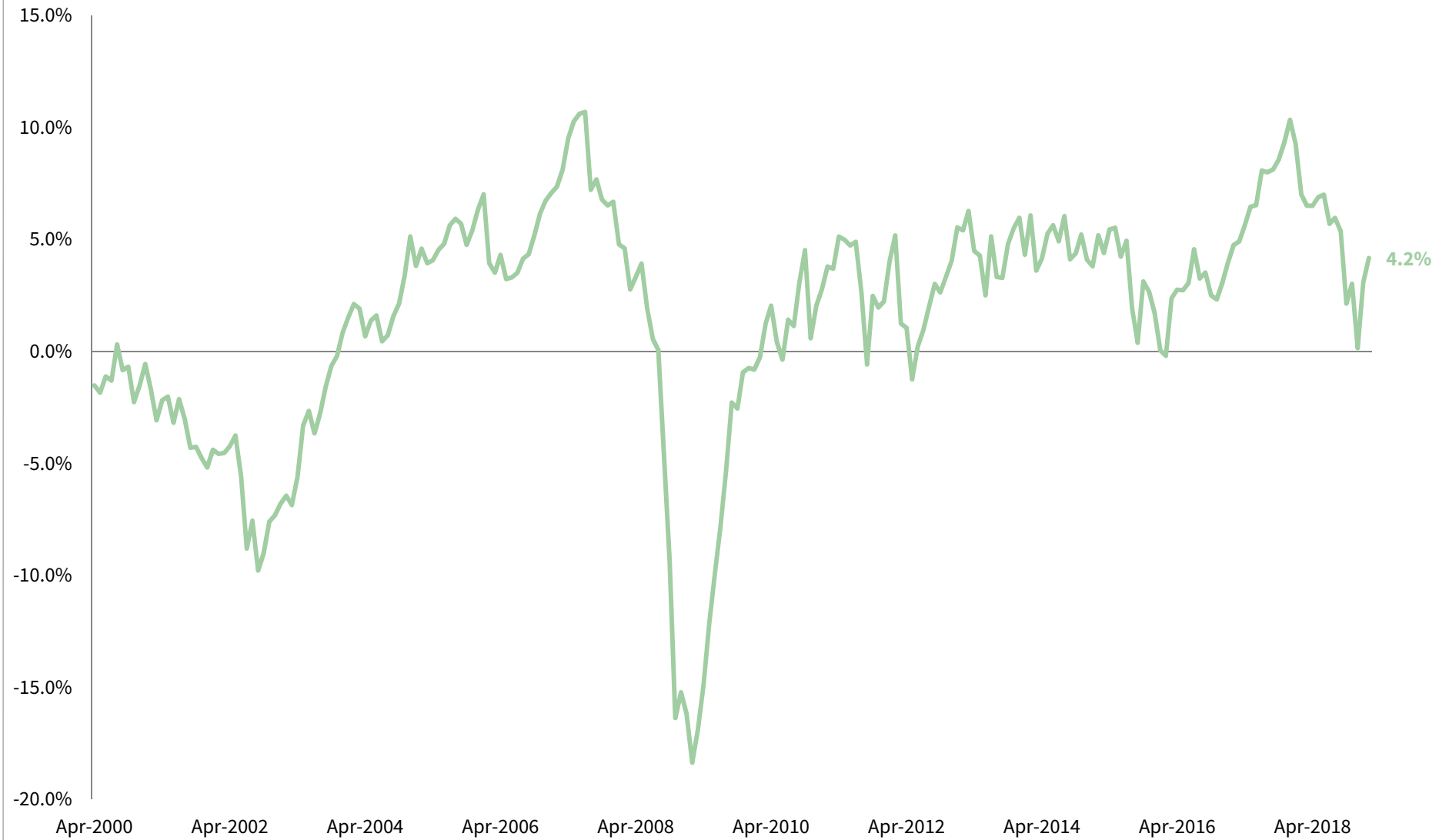
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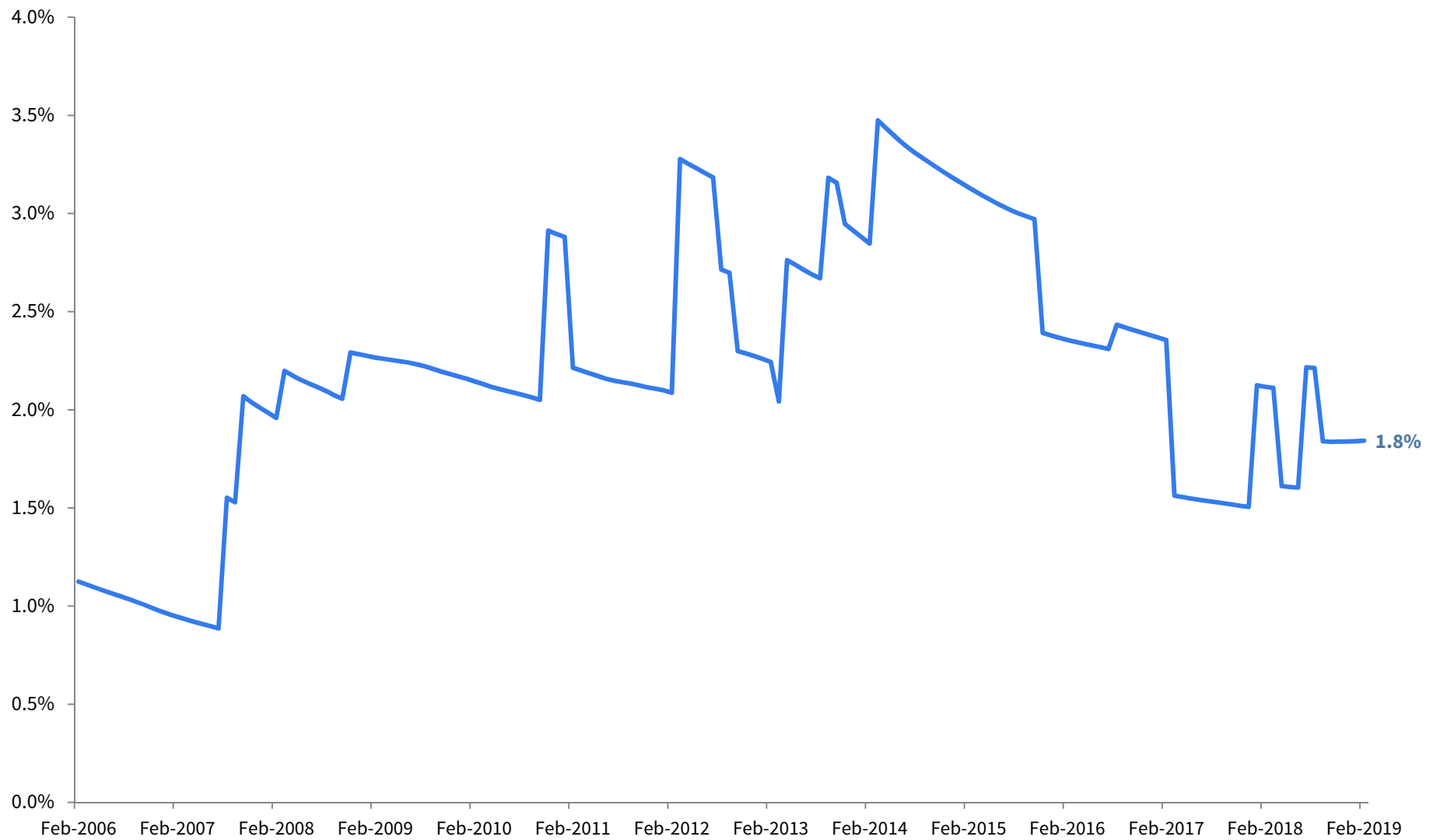
3. OPERATING FUND STATUS



Reserve/(Deficit) as % of Total Operating Pool



5-Yr Special Distribution as % of 5-Yr Average Market Value



NEVADA SYSTEM OF HIGHER EDUCATION
RESERVE ACCOUNT ANALYSIS
April 2000 - February 2019

	<u>Operating Fund Market Value*</u>	<u>Investment Income Earned</u>	<u>Investment Income Distributed</u>	<u>Reserve Account Ending Balance</u>	<u>Reserve/(Deficit) as % of Total Operating Fund</u>
Apr-2000 ^[1]	190,603,064	131,861	- 3,012,039	- 2,880,266	-1.51
May-2000	211,846,354	163,167	- 1,162,937	- 3,880,036	-1.83
Jun-2000	205,824,654	2,542,870	- 939,750	- 2,276,916	-1.11
Jul-2000	221,886,621	282,084	- 873,438	- 2,868,270	-1.29
Aug-2000	224,788,824	4,493,952	- 904,024	721,658	0.32
Sep-2000	210,004,756	- 1,229,654	- 1,231,755	- 1,739,751	-0.83
Oct-2000 ^[2]	207,797,786	1,506,098	- 1,164,746	- 1,398,399	-0.67
Nov-2000	200,269,779	- 1,984,486	- 1,141,711	- 4,524,596	-2.26
Dec-2000	208,182,114	2,418,755	- 1,049,935	- 3,155,776	-1.52
Jan-2001	217,937,307	3,123,733	- 1,167,002	- 1,199,045	-0.55
Feb-2001	206,043,730	- 1,074,401	- 1,194,381	- 3,467,826	-1.68
Mar-2001	194,803,547	- 1,391,260	- 1,114,499	- 5,973,585	-3.07
Apr-2001	187,311,217	3,000,904	- 1,100,876	- 4,073,557	-2.17
May-2001 ^[3]	195,326,437	1,255,172	- 1,106,330	- 3,924,715	-2.01
Jun-2001	181,680,689	- 742,900	- 1,102,094	- 5,769,709	-3.18
Jul-2001	202,347,577	1,445,927	- 847,180	- 4,282,488	-2.12
Aug-2001	209,448,723	- 1,130,375	- 859,295	- 6,299,894	-3.01
Sep-2001	222,633,859	- 2,329,410	- 902,965	- 9,566,420	-4.30
Oct-2001	221,768,653	1,000,136	- 829,611	- 9,427,304	-4.25
Nov-2001	172,568,948	2,019,519	- 813,644	- 8,221,748	-4.76
Dec-2001	167,605,959	329,048	- 781,211	- 8,673,911	-5.18
Jan-2002 ^[4]	202,807,058	529,077	- 740,482	- 8,885,317	-4.38
Feb-2002	198,414,963	574,482	- 745,550	- 9,056,385	-4.56
Mar-2002	187,854,679	1,267,945	- 715,383	- 8,503,822	-4.53
Apr-2002	194,483,372	1,031,063	- 730,349	- 8,203,110	-4.22
May-2002	199,428,572	1,470,532	- 739,859	- 7,472,437	-3.75
Jun-2002	190,274,431	- 2,383,454	- 729,181	- 10,585,072	-5.56
Jul-2002 ^[5]	164,908,334	- 3,330,103	- 585,121	- 14,500,296	-8.79
Aug-2002	200,314,802	- 25,511	- 591,599	- 15,117,406	-7.55
Sep-2002	186,307,147	- 2,456,156	- 638,849	- 18,212,411	-9.78
Oct-2002 ^[6]	187,872,082	1,902,625	- 610,407	- 16,920,193	-9.01
Nov-2002	199,286,311	2,082,786	- 581,252	- 15,132,310	-7.59
Dec-2002	197,101,437	1,301,796	- 574,879	- 14,405,394	-7.31
Jan-2003	216,042,889	373,621	- 630,125	- 14,661,898	-6.79
Feb-2003	223,873,793	913,271	- 652,965	- 14,401,592	-6.43
Mar-2003	227,320,382	- 504,203	- 663,018	- 15,568,813	-6.85
Apr-2003	225,055,464	3,621,910	- 656,412	- 12,603,315	-5.60
May-2003	218,291,356	6,046,346	- 636,683	- 7,193,530	-3.30
Jun-2003	235,523,055	1,647,556	- 686,942	- 6,232,829	-2.65
Jul-2003	225,061,174	- 1,305,304	- 674,445	- 8,212,420	-3.65
Aug-2003	241,526,531	2,223,696	- 719,494	- 6,707,917	-2.78
Sep-2003	284,905,882	3,067,753	- 835,773	- 4,475,866	-1.57
Oct-2003	284,905,882	3,463,060	- 815,074	- 1,827,815	-0.64
Nov-2003	267,256,457	2,085,338	- 785,343	- 527,777	-0.20
Dec-2003	270,053,685	3,621,731	- 792,490	2,301,522	0.85
Jan-2004	304,898,705	3,239,296	- 899,911	4,641,067	1.52
Feb-2004	306,353,392	2,786,761	- 925,891	6,501,985	2.12
Mar-2004	334,140,321	880,979	- 959,699	6,423,321	1.92
Apr-2004	323,733,799	- 3,271,914	- 935,653	2,215,804	0.68
May-2004	310,820,065	2,978,607	- 884,508	4,308,156	1.39
Jun-2004	319,089,113	1,756,998	- 924,163	5,141,050	1.61
Jul-2004	276,525,679	- 3,003,616	- 853,527	1,284,158	0.46

* Average Market Value for the month
See endnotes at the end of this exhibit

NEVADA SYSTEM OF HIGHER EDUCATION
RESERVE ACCOUNT ANALYSIS
April 2000 - February 2019

	<u>Operating Fund Market Value*</u>	<u>Investment Income Earned</u>	<u>Investment Income Distributed</u>	<u>Reserve Account Ending Balance</u>	<u>Reserve/(Deficit) as % of Total Operating Fund</u>
Aug-2004	300,350,870	1,787,372	- 878,380	2,193,830	0.73
Sep-2004	329,175,987	3,970,031	- 946,862	5,217,350	1.58
Oct-2004	325,280,731	2,674,159	- 906,294	6,985,541	2.15
Nov-2004	325,501,494	4,944,533	- 927,189	11,003,523	3.38
Dec-2004	317,086,382	6,159,801	- 863,703	16,300,918	5.14
Jan-2005	358,775,910	- 1,537,890	- 1,012,932	13,752,561	3.83
Feb-2005	368,348,060	4,214,824	- 1,034,309	16,933,741	4.60
Mar-2005	368,184,915	- 1,390,602	- 998,491	14,545,251	3.95
Apr-2005	322,747,036	- 373,270	- 997,321	13,175,791	4.08
May-2005	351,522,927	3,172,862	- 986,250	15,968,809	4.54
Jun-2005	350,676,848	1,881,696	- 980,355	16,872,276	4.81
Jul-2005	324,372,566	2,325,199	- 894,849	18,303,775	5.64
Aug-2005	336,278,510	2,577,885	- 935,037	19,950,951	5.93
Sep-2005	380,767,534	2,845,247	- 1,022,572	21,774,810	5.72
Oct-2005	382,463,815	- 2,503,281	- 1,031,408	18,241,926	4.77
Nov-2005	370,575,423	2,876,089	- 1,026,612	20,092,768	5.42
Dec-2005	362,198,735	3,886,306	- 996,500	22,984,930	6.35
Jan-2006	400,119,473	6,214,511	- 1,101,206	28,104,444	7.02
Feb-2006 ^[7]	363,661,874	2,407,655	- 1,158,882	14,359,096	3.95
Mar-2006	421,741,479	1,870,205	- 1,104,085	14,862,142	3.52
Apr-2006	412,409,442	4,126,708	- 1,189,962	17,807,634	4.32
May-2006	428,050,405	- 2,712,303	- 1,229,022	13,874,468	3.24
Jun-2006	397,038,132	759,423	- 1,472,632	13,168,597	3.32
Jul-2006	426,778,295	3,170,187	- 1,232,828	15,016,412	3.52
Aug-2006	446,949,399	4,809,494	- 1,280,842	18,545,951	4.15
Sep-2006	485,309,106	3,886,176	- 1,339,432	21,098,900	4.35
Oct-2006	491,077,464	5,745,522	- 1,336,522	25,515,258	5.20
Nov-2006	479,641,782	5,384,183	- 1,357,014	29,564,126	6.16
Dec-2006	469,227,138	3,423,923	- 1,349,797	31,627,934	6.74
Jan-2007	476,690,202	3,514,501	- 1,309,708	33,761,919	7.08
Feb-2007	463,957,730	1,793,443	- 1,376,674	34,183,412	7.37
Mar-2007	456,916,695	4,250,674	- 1,339,581	37,099,388	8.12
Apr-2007	447,774,841	6,834,702	- 1,300,756	42,652,711	9.53
May-2007	443,169,778	4,304,247	- 1,283,507	45,557,251	10.28
Jun-2007	429,014,210	1,318,682	- 1,276,064	45,562,802	10.62
Jul-2007	422,800,379	978,076	- 1,294,859	45,256,506	10.70
Aug-2007 ^[8]	463,287,774	1,141,142	- 1,327,393	33,468,232	7.22
Sep-2007	503,693,516	6,725,006	- 1,471,903	38,732,523	7.69
Oct-2007 ^[9]	532,953,405	8,939,371	- 1,484,274	36,196,965	6.79
Nov-2007	524,833,392	- 474,987	- 1,455,000	34,269,215	6.53
Dec-2007	488,058,329	- 163,714	- 1,438,155	32,669,497	6.69
Jan-2008	498,662,871	- 7,274,704	- 1,525,533	23,871,592	4.79
Feb-2008	522,429,681	1,770,738	- 1,538,431	24,110,273	4.62
Mar-2008 ^[10]	508,017,279	- 3,288,747	- 1,483,288	14,100,201	2.78
Apr-2008	480,885,277	3,415,203	- 1,461,259	16,054,657	3.34
May-2008	461,741,980	3,456,286	- 1,382,621	18,150,032	3.93
Jun-2008	429,413,850	- 8,450,547	- 1,386,824	8,313,390	1.94
Jul-2008	410,663,405	- 4,628,107	- 1,344,792	2,340,375	0.57
Aug-2008	475,058,191	- 725,811	- 1,301,470	313,725	0.07
Sep-2008	528,357,492	- 24,682,230	0	- 24,368,505	-4.61
Oct-2008	499,948,331	- 22,338,217	0	- 46,706,721	-9.34
Nov-2008 ^[10.5]	384,017,951	- 10,810,207	0	- 62,831,615	-16.36

* Average Market Value for the month
See endnotes at the end of this exhibit

NEVADA SYSTEM OF HIGHER EDUCATION
RESERVE ACCOUNT ANALYSIS
April 2000 - February 2019

	<u>Operating Fund Market Value*</u>	<u>Investment Income Earned</u>	<u>Investment Income Distributed</u>	<u>Reserve Account Ending Balance</u>	<u>Reserve/(Deficit) as % of Total Operating Fund</u>
Dec-2008	365,149,131	7,289,401	0	- 55,562,986	-15.22
Jan-2009	395,078,444	- 8,312,962	0	- 63,898,394	-16.17
Feb-2009	412,489,609	- 11,778,961	0	- 75,700,296	-18.35
Mar-2009	394,110,706	9,195,194	0	- 66,527,948	-16.88
Apr-2009	385,281,546	9,210,151	0	- 57,339,861	-14.88
May-2009	386,438,273	10,367,154	0	- 46,963,715	-12.15
Jun-2009	388,504,496	8,396,302	0	- 38,691,756	-9.96
Jul-2009	379,884,652	8,920,793	0	- 29,791,574	-7.84
Aug-2009	417,718,890	7,745,266	0	- 22,211,230	-5.32
Sep-2009	476,920,474	11,390,789	0	- 10,848,845	-2.27
Oct-2009	478,206,217	- 1,260,470	0	- 12,134,968	-2.54
Nov-2009	467,981,428	7,816,435	0	- 4,339,904	-0.93
Dec-2009	460,887,939	978,601	0	- 3,386,044	-0.73
Jan-2010	494,113,754	- 536,799	0	- 3,954,220	-0.80
Feb-2010	536,415,257	2,629,875	0	- 1,350,564	-0.25
Mar-2010	529,962,831	7,950,695	0	6,592,916	1.24
Apr-2010	505,028,620	3,769,231	0	10,366,971	2.05
May-2010	495,723,958	- 8,178,556	0	2,164,107	0.44
Jun-2010	483,015,094	- 3,741,998	0	- 1,715,881	-0.36
Jul-2010	454,152,490	8,216,789	0	6,477,955	1.43
Aug-2010	478,983,837	- 954,095	0	5,493,768	1.15
Sep-2010	531,289,764	11,065,950	0	16,376,944	3.08
Oct-2010	545,098,997	8,352,517	0	24,701,594	4.53
Nov-2010 ^[11]	537,632,325	- 1,485,861	0	3,191,638	0.59
Dec-2010	526,037,834	7,596,878	0	10,761,836	2.05
Jan-2011	543,100,034	4,427,520	0	15,156,209	2.79
Feb-2011	584,582,290	7,036,994	0	22,226,373	3.80
Mar-2011	602,634,879	168,183	0	22,316,281	3.70
Apr-2011	602,899,146	8,660,352	0	30,976,656	5.14
May-2011	600,527,414	- 1,003,816	0	30,000,368	5.00
Jun-2011	584,153,071	- 2,244,871	0	27,687,521	4.74
Jul-2011	553,620,075	383,544	- 909,098	27,161,999	4.91
Aug-2011	550,357,944	- 11,607,805	- 902,641	14,651,568	2.66
Sep-2011	580,320,257	- 16,972,235	- 1,011,187	- 3,331,839	-0.57
Oct-2011	616,014,627	19,660,977	- 1,022,377	15,306,775	2.48
Nov-2011	614,641,484	- 2,138,517	- 1,051,805	12,116,473	1.97
Dec-2011	570,282,703	1,812,147	- 1,017,403	12,758,773	2.24
Jan-2012	588,887,714	12,029,128	- 1,001,701	23,759,216	4.03
Feb-2012	640,696,614	10,597,480	- 1,075,899	33,258,187	5.19
Mar-2012 ^[12]	665,476,106	6,211,504	- 1,076,596	8,322,216	1.25
Apr-2012	675,583,556	- 46,605	- 1,088,493	7,168,811	1.06
May-2012	650,891,109	- 14,138,289	- 1,072,313	- 8,061,857	-1.24
Jun-2012	651,130,437	10,716,945	- 1,037,938	1,471,157	0.23
Jul-2012	646,978,870	5,879,922	- 998,094	6,258,602	0.97
Aug-2012	649,388,408	7,839,154	- 970,634	13,104,020	2.02
Sep-2012	696,232,882	8,049,795	- 1,050,089	21,081,049	3.03
Oct-2012	710,358,991	- 1,197,576	- 1,067,091	18,810,096	2.65
Nov-2012	691,059,345	5,398,282	- 1,042,304	23,118,256	3.35
Dec-2012	676,084,453	5,351,934	- 1,023,111	27,408,223	4.05
Jan-2013	698,562,775	12,404,710	- 1,017,830	38,765,511	5.55
Feb-2013	734,583,537	2,136,815	- 1,110,373	39,781,379	5.42
Mar-2013	741,356,785	7,909,680	- 1,118,897	46,560,042	6.28

* Average Market Value for the month
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NEVADA SYSTEM OF HIGHER EDUCATION
RESERVE ACCOUNT ANALYSIS
April 2000 - February 2019

	<u>Operating Fund Market Value*</u>	<u>Investment Income Earned</u>	<u>Investment Income Distributed</u>	<u>Reserve Account Ending Balance</u>	<u>Reserve/(Deficit) as % of Total Operating Fund</u>
Apr-2013 ^[13]	746,499,564	8,176,059	- 1,098,001	33,597,353	4.50
May-2013	749,121,650	- 232,068	- 1,086,419	32,122,561	4.29
Jun-2013	730,655,804	- 11,399,623	- 1,070,174	18,372,158	2.51
Jul-2013	699,864,927	17,517,869	- 995,266	35,972,372	5.14
Aug-2013	722,698,696	- 10,850,330	- 1,017,100	24,104,402	3.34
Sep-2013 ^[14]	757,589,559	16,932,055	- 1,113,457	24,944,753	3.29
Oct-2013	773,300,230	13,389,288	- 1,110,570	37,198,388	4.81
Nov-2013	782,311,772	7,133,796	- 1,126,357	43,114,980	5.51
Dec-2013	766,348,636	3,839,932	- 1,096,572	45,808,074	5.98
Jan-2014	794,356,651	- 10,323,902	- 1,103,315	34,364,198	4.33
Feb-2014	832,429,376	17,369,351	- 1,199,782	50,609,052	6.08
Mar-2014 ^[15]	827,743,406	658,708	- 1,232,998	29,973,696	3.62
Apr-2014	811,778,308	5,011,098	- 1,192,620	33,733,052	4.16
May-2014	802,766,371	9,865,028	- 1,167,436	42,329,115	5.27
Jun-2014	796,867,536	5,137,303	- 1,132,848	44,988,631	5.65
Jul-2014	769,443,193	- 7,085,988	- 1,088,507	37,893,670	4.92
Aug-2014	768,458,918	9,717,438	- 1,074,041	46,500,161	6.05
Sep-2014	799,195,918	- 12,343,439	- 1,174,737	32,956,777	4.12
Oct-2014	809,138,417	3,728,437	- 1,179,110	35,489,183	4.39
Nov-2014	803,360,295	7,715,321	- 1,179,110	42,007,603	5.23
Dec-2014	787,894,117	- 8,447,678	- 1,162,452	32,373,324	4.11
Jan-2015	817,081,803	- 76,950	- 1,146,238	31,126,582	3.81
Feb-2015	861,706,208	14,825,760	- 1,173,599	44,758,231	5.19
Mar-2015	846,665,997	- 6,106,183	- 1,266,477	37,276,172	4.40
Apr-2015	816,988,387	8,550,962	- 1,236,365	44,571,763	5.46
May-2015	800,253,288	878,840	- 1,180,152	44,251,472	5.53
Jun-2015	775,206,818	- 8,971,779	- 2,277,378	32,851,768	4.24
Jul-2015	741,262,295	3,882,734	0	36,716,269	4.95
Aug-2015	730,652,584	- 21,602,156	- 1,044,825	14,046,895	1.92
Sep-2015	743,692,218	- 9,918,574	- 1,053,121	2,945,392	0.40
Oct-2015	763,715,634	22,165,405	- 1,145,809	23,945,040	3.14
Nov-2015	773,032,685	- 1,931,303	- 1,153,337	20,734,926	2.68
Dec-2015	757,261,248	- 6,511,571	- 1,159,535	12,989,860	1.72
Jan-2016	753,972,401	- 11,441,815	- 1,155,539	370,580	0.05
Feb-2016	790,998,777	- 681,126	- 1,124,930	- 1,455,417	-0.18
Mar-2016	797,575,047	21,771,860	- 1,224,413	18,964,772	2.38
Apr-2016	766,518,822	3,441,429	- 1,170,933	21,216,478	2.77
May-2016	757,996,550	701,573	- 1,125,582	20,774,029	2.74
Jun-2016	755,484,888	3,775,103	- 1,098,587	23,146,343	3.06
Jul-2016	733,302,986	11,461,092	- 1,059,136	33,491,949	4.57
Aug-2016 ^[16]	766,724,276	- 2,118,513	- 1,045,608	25,041,315	3.27
Sep-2016	842,005,030	5,780,022	- 1,194,237	29,752,500	3.53
Oct-2016	862,418,660	- 6,852,761	- 1,202,643	21,682,310	2.51
Nov-2016	845,771,679	- 741,201	- 1,181,669	19,718,479	2.33
Dec-2016	817,936,437	6,570,718	- 1,128,775	25,086,318	3.07
Jan-2017	830,799,148	9,054,706	- 1,084,201	32,985,285	3.97
Feb-2017	880,425,266	10,058,347	- 1,242,283	41,938,224	4.76
Mar-2017	893,424,246	3,300,433	- 1,232,302	43,973,971	4.92
Apr-2017	887,806,037	7,463,148	- 1,217,247	50,184,988	5.65
May-2017	887,269,645	8,464,067	- 1,198,145	57,369,255	6.47
Jun-2017	847,739,260	675,163	- 1,143,788	55,459,088	6.54
Jul-2017	813,856,671	10,359,659	- 1,076,066	65,797,343	8.08

* Average Market Value for the month
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NEVADA SYSTEM OF HIGHER EDUCATION
RESERVE ACCOUNT ANALYSIS
April 2000 - February 2019

	<u>Operating Fund Market Value*</u>	<u>Investment Income Earned</u>	<u>Investment Income Distributed</u>	<u>Reserve Account Ending Balance</u>	<u>Reserve/(Deficit) as % of Total Operating Fund</u>
Aug-2017	839,204,422	2,535,845	- 1,066,881	67,230,046	8.01
Sep-2017	881,692,900	5,616,527	- 1,202,797	71,754,200	8.14
Oct-2017	901,627,087	6,727,263	- 1,229,105	77,279,939	8.57
Nov-2017	897,702,172	7,822,907	- 1,153,420	83,851,878	9.34
Dec-2017	855,516,473	5,905,871	- 1,073,414	88,582,274	10.35
Jan-2018 ^[17]	870,092,454	18,446,268	- 1,084,399	80,652,619	9.27
Feb-2018	895,531,308	- 16,708,736	- 1,163,952	62,862,530	7.02
Mar-2018	866,802,937	- 5,188,184	- 1,208,065	56,484,006	6.52
Apr-2018	869,750,629	1,383,567	- 1,207,801	56,632,529	6.51
May-2018	868,282,529	4,480,231	- 1,010,580	59,885,226	6.90
Jun-2018	828,275,019	504,749	- 1,105,523	58,061,099	7.01
Jul-2018 ^[18]	781,211,535	11,568,283	- 1,004,059	44,605,676	5.71
Aug-2018	810,642,123	4,837,891	- 1,076,126	48,410,834	5.97
Sep-2018	879,381,343	- 14,451	- 1,137,144	47,294,965	5.38
Oct-2018	843,212,368	- 27,059,717	- 1,137,144	18,072,015	2.14
Nov-2018	762,699,933	6,136,519	- 1,136,756	23,111,191	3.03
Dec-2018	752,705,668	- 20,825,049	- 1,078,367	1,167,391	0.16
Jan-2019 ^[19]	753,528,570	23,632,965	- 1,096,327	23,296,550	3.09
Feb-2019	754,807,467	9,824,828	- 1,452,664	31,564,140	4.18

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April 2000 - February 2019

<u>Operating Fund Market Value*</u>	<u>Investment Income Earned</u>	<u>Investment Income Distributed</u>	<u>Reserve Account Ending Balance</u>	<u>Reserve/(Deficit) as % of Total Operating Fund</u>
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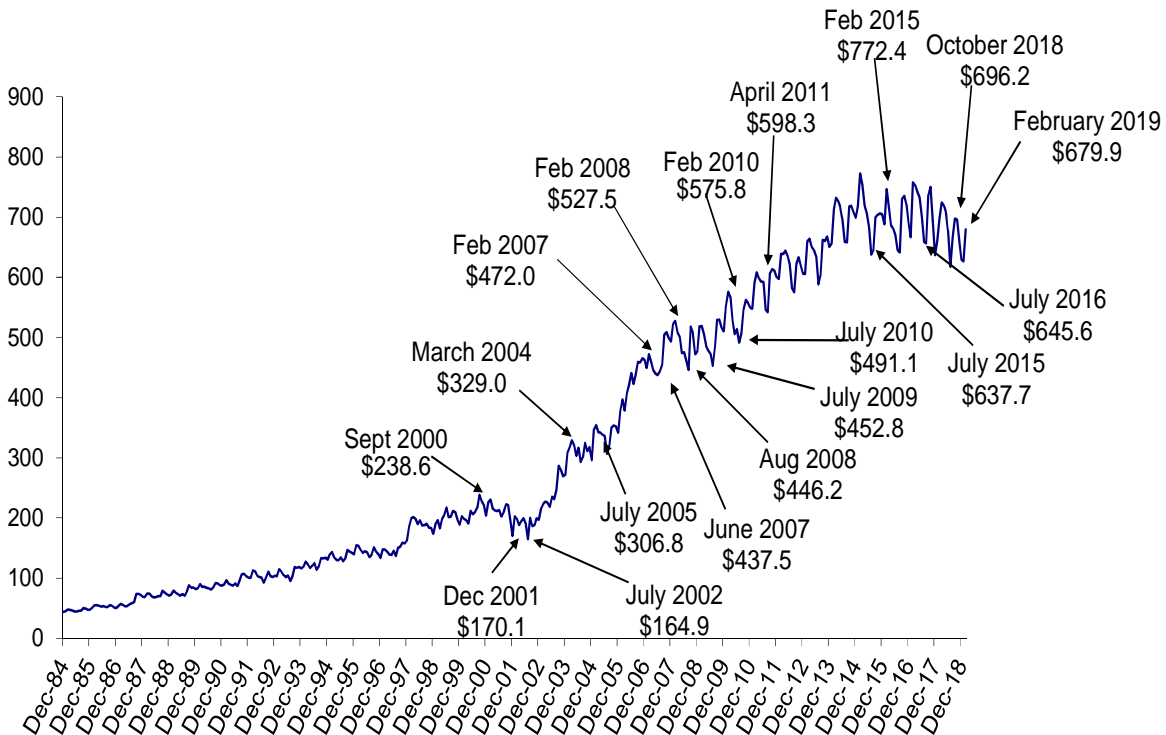
ENDNOTES

- [1] New Board policy to distribute 5.0% of the average cash balance was approved at the March 2000 Investment Committee meeting, and made retroactive to January 2000. A special cash distribution was made in April to adjust the year to date campus investment income allocation.
- [2] Annual distribution rate increased to 6.2%.
- [3] Annual distribution rate cut to 5.0%, effective July 2001.
- [4] Annual distribution rate cut to 4.0%, effective January 1, 2002.
- [5] Annual distribution rate cut to 3.5%, effective July 1, 2002.
- [6] At the Oct 2002 mtg, the Committee established a "trigger" point for the Operating Fund. The distribution rate would be automatically reduced to 1.8% should the reserve account deficit exceed \$20M.
- [7] Includes a \$15.0 mm distribution to the iNtegrate project.
- [8] Includes a distribution of \$10.0 mm to the campuses, \$1.5 mm to Health Science, and \$107,000 to WNC for Athletic Fee Waiver.
- [9] Includes a distribution of \$10.0 mm to the campuses.
- [10] Includes a distribution of \$5.2 mm to integrate.
- [10.5] Includes a distribution of \$5.0 mm to the campuses.
- [11] Includes a distribution of \$20.0 mm to the iNtegrate project, as approved by the Investment Committee at the December 2010 meeting.
- [12] At the March 2012 meeting, the committee approved to decrease the Reserve Account by \$30.0 mm for reallocation into the Market Fluctuation account.
- [13] Includes a further decrease of the Reserve Account of \$20.0 mm for reallocation into the Market Fluctuation account.
- [14] Includes a distribution of \$15.0 mm to address formula implementation and budgetary items otherwise foregone or delayed without this funding.
- [15] Includes a distribution of \$20.0 mm to the iNtegrate project.
- [16] Includes a distribution of \$5.0 mm for campus initiatives such as the medical education transition in Las Vegas, program start-up and other budgetary opportunities.
- [17] Includes a special distribution of \$25.0 mm to the campuses.
- [18] Includes a special distribution of \$25.0 mm to the campuses.
- [19] At the November 2018 meeting, the Committee increased the annual distribution rate from 2.0% to 2.75%.



Operating Fund Average Daily Balances

January 1985 through February 2019



	<u>\$ (mm)</u>	<u>Date</u>
Largest Monthly Decline	-59.4	July 2018
Largest Quarterly Decline	-102.4	Fourth Quarter 2017
Largest Peak to Valley	-134.7	February 2015 - July 2015