

January 24, 2024

U.S. Equity Structure Review

Santa Barbara County Employees' Retirement System

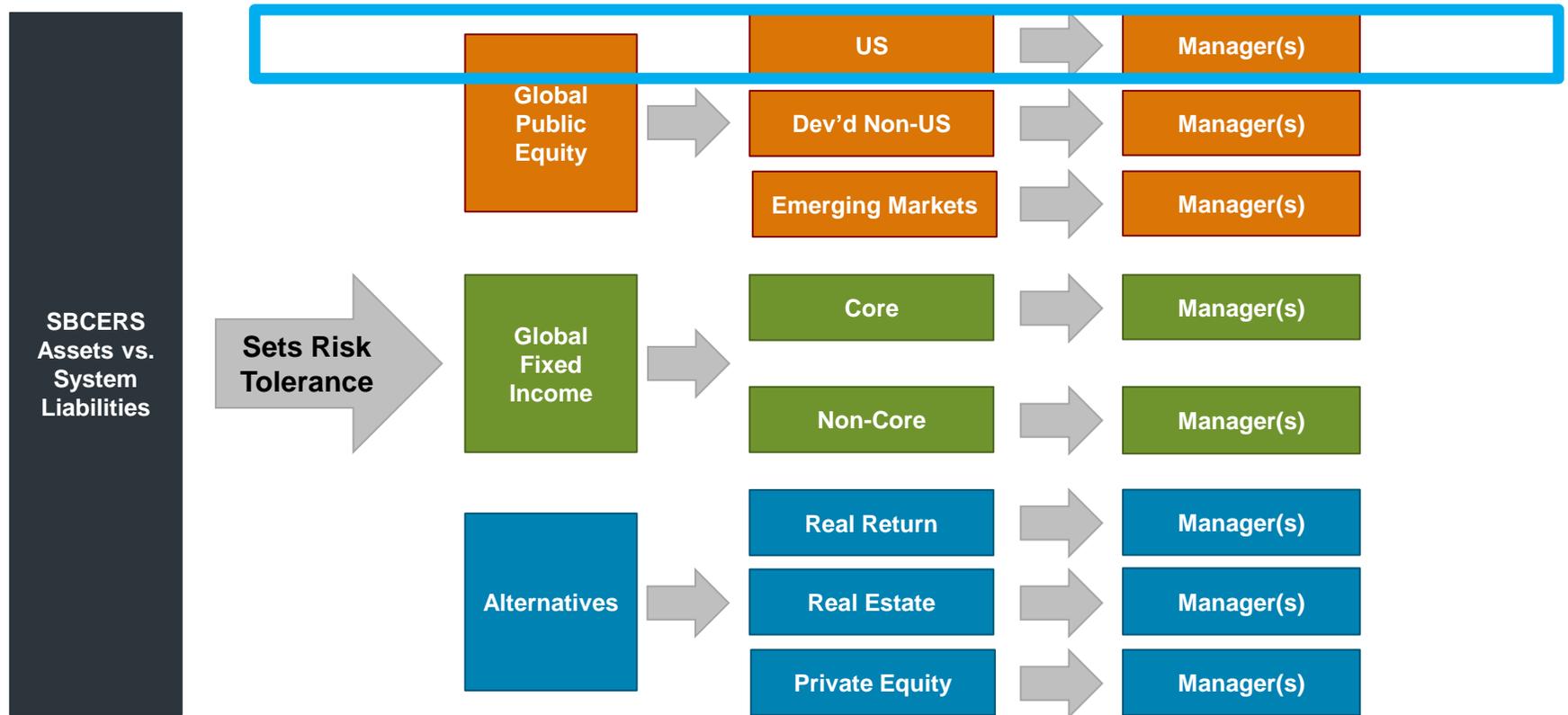


Introduction



Introduction

Investment Decision Making Hierarchy



Asset/Liability Study

- Assesses health of Plan
- Models general risk and return parameters
- Links Investment Policy, Contribution Policy, and Benefit Policy

Asset Allocation Study

- Models specific targets to asset classes
- Used to select overall target allocation
- Uses passive assumptions

Asset Class Structure Studies

- Implementation guide with targets to sub-asset classes
- Mix of active and passive investments determined
- Optimal mix of managers

Introduction

Objective of SBCERS U.S. Equity Structure Review

The objective of this analysis is to review the current U.S Equity structure and evaluate whether current diversification, risk characteristics, and fees remain appropriate.

Key Decision Drivers

1. **Capitalization and Style Biases** – Evaluate portfolio exposures relative to appropriate indices.
2. **Active/Passive Management** – Evaluate use of active management to determine if potential excess return is commensurate with fees.
3. **Fees** – Assess appropriateness of current manager fees.

SBCERS Current U.S. Equity Portfolio



SBCERS Current U.S. Equity Portfolio

Observations

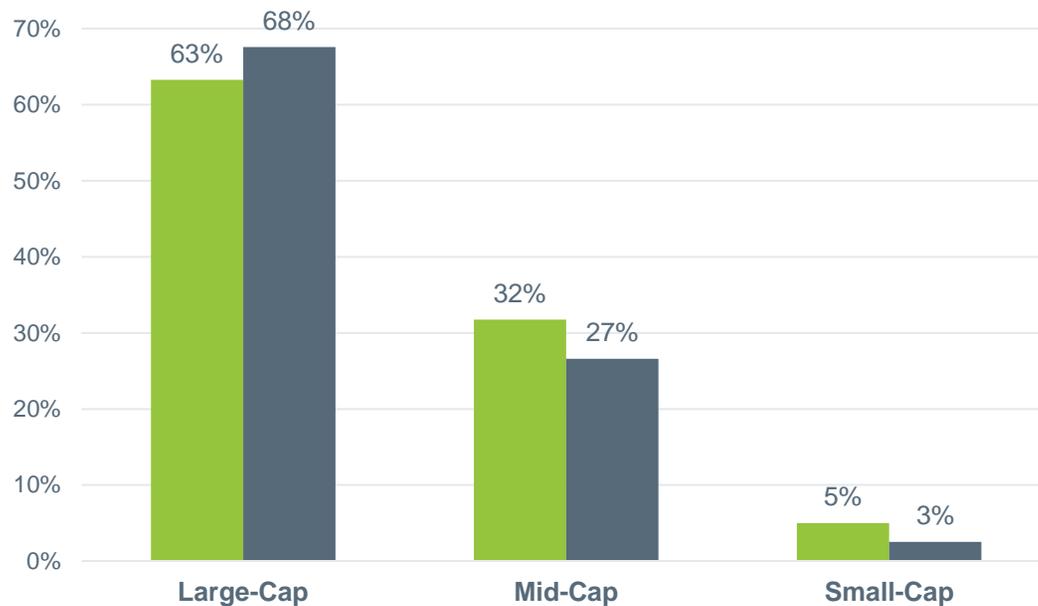
- **SBCERS Current U.S. Equity Portfolio**
 - Four investment managers (two large/mid-cap and two small-cap)
 - Heavily weighted to passive management (90% passive/10% active).
 - Approximately 90% large/mid cap and 10% small cap
 - Favorable fees compared to peers.

Composite/Manager	Market Value	Total Equity Target	Composite Target	Active / Passive	Effective Fee	Fee Percentile Rank
Domestic Equity	\$ 692,960,781	51.4%		10% / 90%	0.07%	
BNY Mellon HEDI (SA)	\$ 277,184,312	20.5%	40.0%	Passive	0.02%	1
BNY Mellon R1000 Index - NL (CF)	\$ 346,480,390	25.7%	50.0%	Passive	0.01%	1
DFA Small Cap Value (CF)	\$ 34,648,039	2.6%	5.0%	Active	0.28%	2
RHJ Small Cap Growth (SA)	\$ 34,648,039	2.6%	5.0%	Active	0.80%	27

Data shown is as of September 30, 2023. Manager market values and weights are based on current composite structure targets.

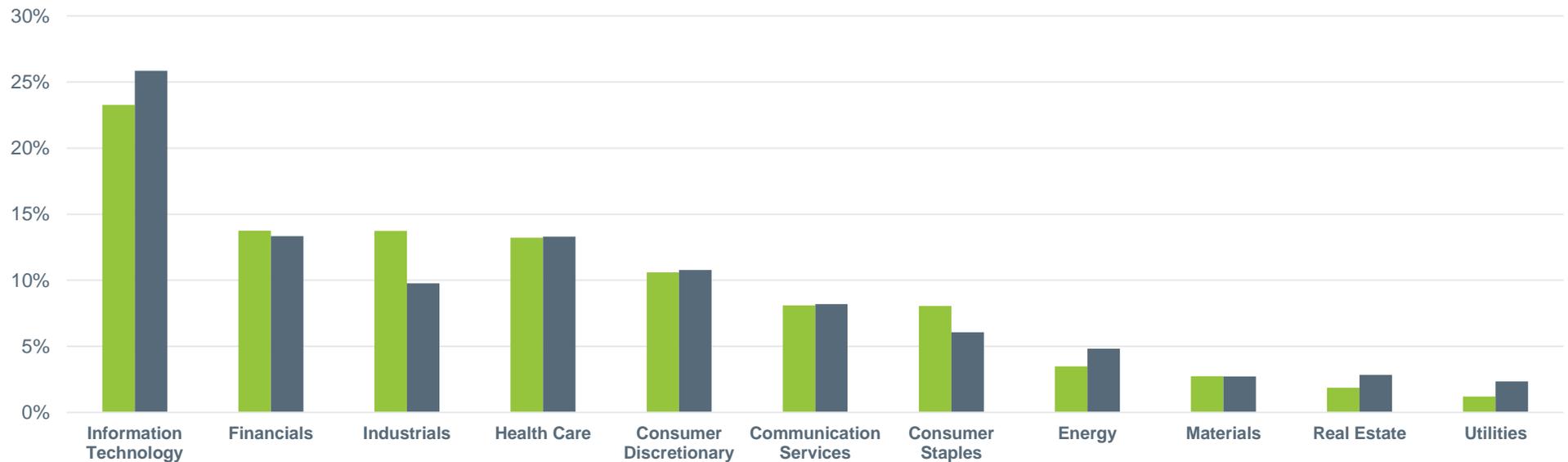
SBCERS Current U.S. Equity Portfolio

U.S. Equity Market Capitalization Structure (Holdings Based)



SBCERS Current Exposures

- **Overweight:** U.S. mid-cap and small-cap equities
- **Underweight:** U.S. large-cap equities
- **Sectors:** Overweight industrials and consumer staples. Underweight technology, energy, real estate and utilities.

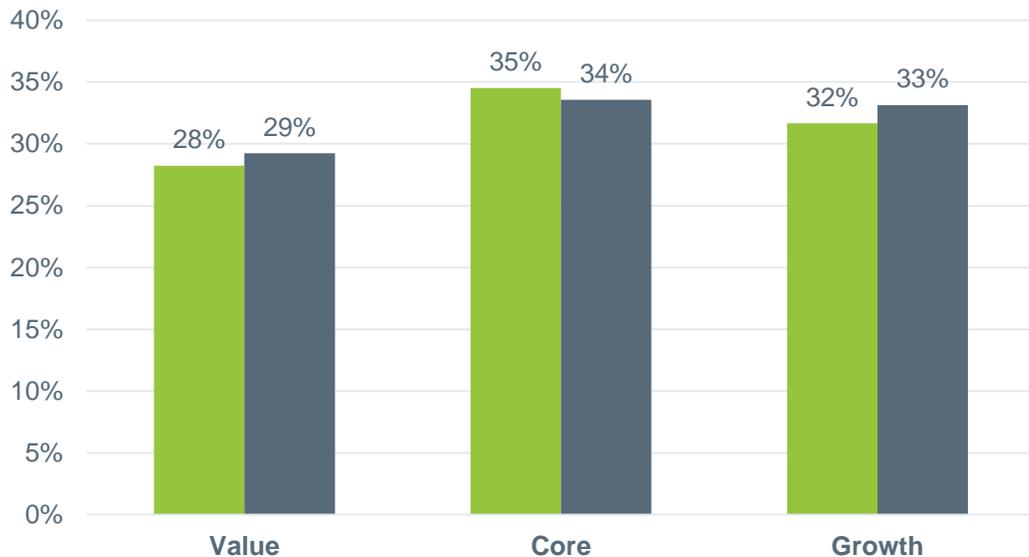


■ Current Structure ■ Russell 3000 Index

Data shown is as of September 30, 2023.

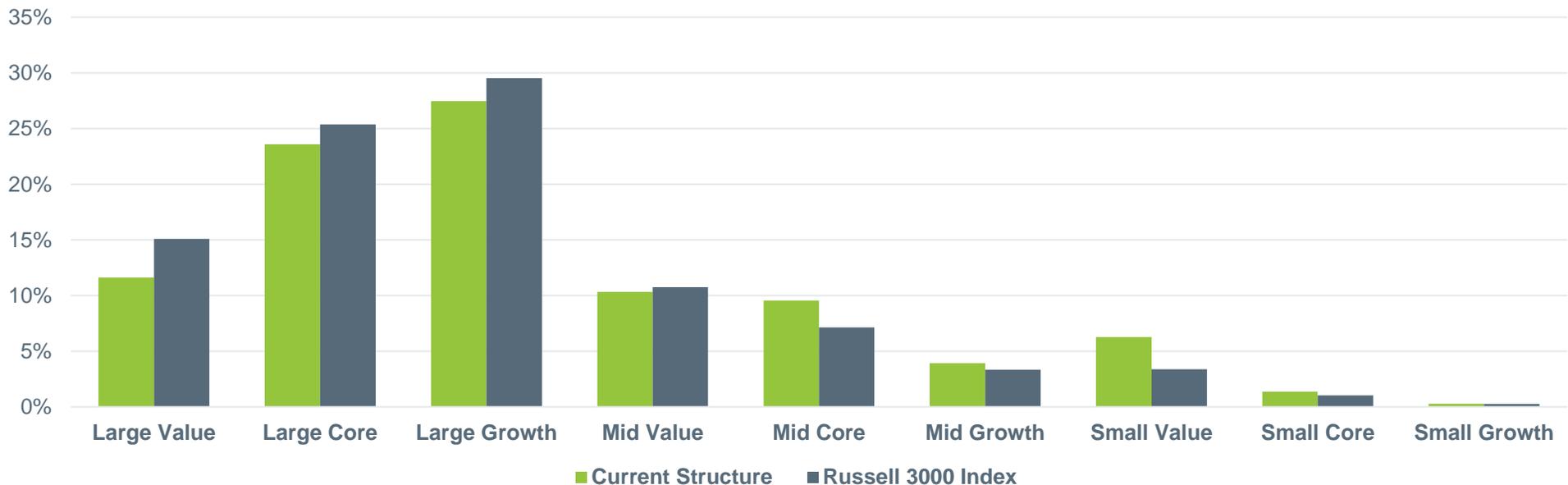
SBCERS Current U.S. Equity Portfolio

U.S. Equity Style Structure (Holdings Based)



SBCERS Current Exposures

- Exposures are similar to the Russell 3000 Index



Data shown is as of September 30, 2023.

SBCERS Current U.S. Equity Portfolio

Performance & Risk Statistics

Historical Performance – as of 9/30/2023

	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2022	2021	2020	2019	2018
Current Structure	20.13	9.88	9.58	12.08	11.85	-16.99	26.16	19.64	30.60	-3.48
Russell 3000 Index	20.46	9.38	9.14	11.64	11.28	-19.21	25.66	20.89	31.02	-5.24
Difference	-0.33	0.50	0.44	0.44	0.57	2.22	0.50	-1.25	-0.42	1.76

Historical Risk Statistics – 10 Years as of 9/30/2023

	Current Structure	Russell 3000 Index	Comments
Standard Deviation	14.7%	15.3%	Lower total volatility
Beta*	0.96	1.00	Lower systematic risk
Tracking Error*	1.3%	--	-
Up Mkt. Capture*	98.2%	100.0%	Good participation in up markets
Down Mkt. Capture*	93.9%	100.0%	Lower downside participation
Sharpe Ratio**	0.76	0.70	Higher return per unit of risk

Performance shown is net of fees and annualized for periods greater than one year.

*Calculated vs. Russell 3000 Index

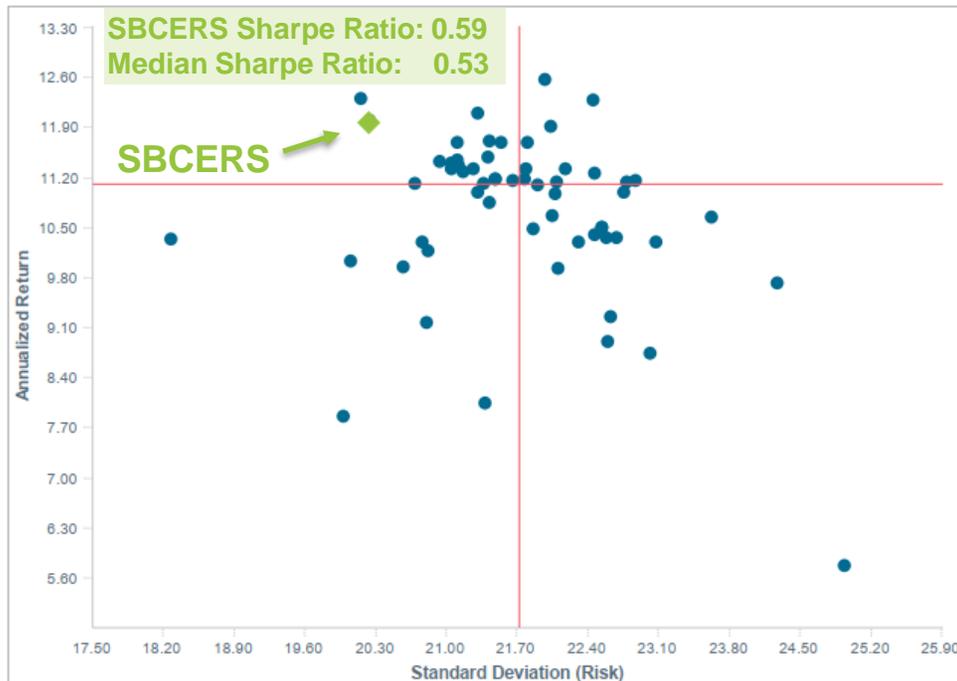
**Calculated vs. ICE BofAML 3 Mo US T-Bill Index

SBCERS Current U.S. Equity Portfolio

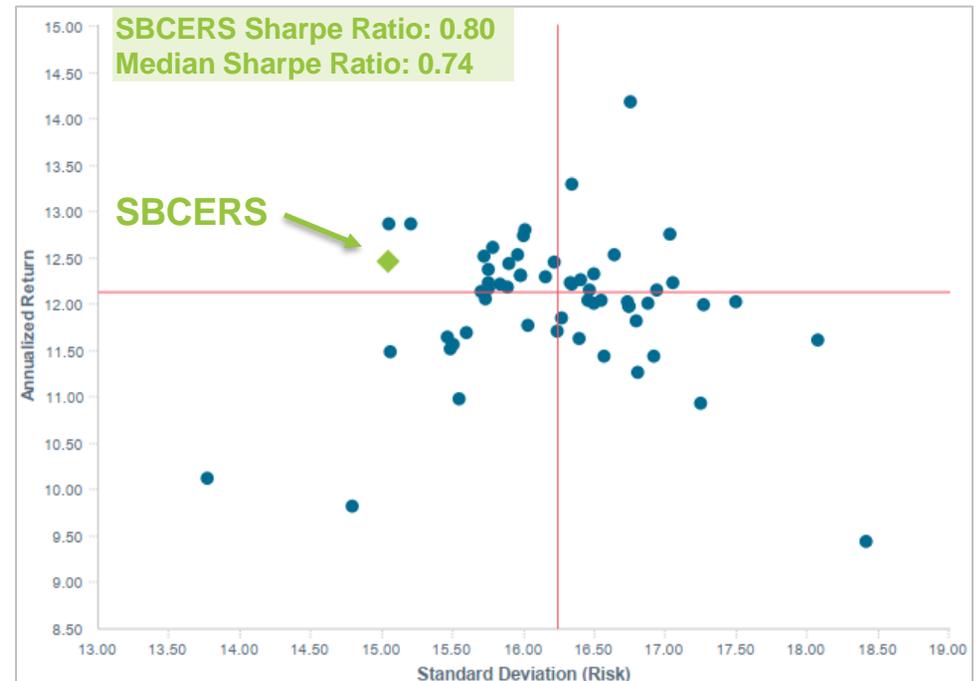
Public Fund Peer Comparison

- For trailing five and ten-year periods, SBCERS' U.S. Equity Portfolio had **higher returns** and **less risk** than median.

5 Yr. Annualized Returns vs. Std. Dev.



10 Yr. Annualized Returns vs. Std. Dev.



Data as of June 30, 2023, and is sourced from the RVK Public Fund report.
Universe consists of all funds from the survey, no constraints on fund size have been applied to the universe.
5 Yr. Universe Size = 60, 10 Yr. Universe Size = 59

SBCERS Recommended U.S. Equity Portfolio



SBCERS Recommended U.S. Equity Portfolio

Recommendations

- **RVK believes the current structure remains appropriate.**
 - Provides broad exposure similar to the Russell 3000 Index at a very reasonable price.
 - Includes active management in segments of the market we believe offer alpha opportunities.
 - Meaningful levels of passive management, reducing total management fees.
 - Inclusion of the BNY Mellon HEDI mandate has provided meaningful downside protection.
- **However, we recommend consolidating from two active style specific small cap managers to one active core small cap manager.**
- **Specifically, we recommend terminating Rice Hall James Small Cap Growth and revising the DFA Small Cap Value mandate to a DFA Small Cap Core mandate.**
 - Simplifies the portfolio while maintaining similar market exposure and expected risk and return characteristics.
 - Reduces total U.S. Equity management fees from 7 to 4 basis points.
 - Maintains active management in the small cap space which is an area of the market that we believe offers alpha opportunities.

SBCERS Recommended U.S. Equity Portfolio

DFA US Small Cap Fund Profile

Firm and Team: Created in 1981, Dimensional Fund Advisors (DFA) is headquartered in Austin, TX and has 1,400+ employees across 13 global offices. The firm is 70% owned by current and former employees. DFA offers a broad range of equity and fixed income solutions, the largest concentration of AUM being in US equities. All equity strategies are managed by the same investment team and in a similar fashion. The team is made up of 43 portfolio managers with an average of 12 years of experience, supported by 29 research analysts and 17 traders. The firm's core principles are that market prices contain reliable information, diversification is essential, and managing tradeoffs adds value.

Product Snapshot

RVK Rank:	Positive
Firm/Product AUM:	\$618.2 billion / \$23.9 billion
Vehicle:	Mutual Fund (DFSTX)
Benchmark:	Russell 2000
Fee:	0.27% (Median: 0.76%)
Management Style:	Active
Investment Approach:	Fundamental
Security Selection:	Diversified (2,000-2,500 holdings)
Sector Exposure:	Broad Diversification

Strategy Overview: The US Small Cap fund is designed to cost-effectively target premiums along the dimensions of expected returns, mitigating risk and uncertainty by offering broad diversification across sectors and securities. The research process utilizes close ties to academia, internal technology capabilities, and a proprietary securities database. The strategy attempts to capture the small cap premium by investing in the smallest 10% of the stock universe as defined by market capitalization. The strategy also emphasizes companies with higher profitability by excluding names with the lowest profitability that are trading at high relative prices. To narrow the universe, exclusions are used on securities such as REITs, event-driven securities, as well as companies with insufficient data or limited operating history. To ensure broad diversification, industry weights are capped at 25% at the time of purchase, individual security weights are capped at 4% at the time of purchase, and cash allocation is typically less than 1% in order to be fully invested.

Rationale for Retaining DFA: (1) Firm with significant resources, technology and assets under management. (2) Proven model-driven investment process results in a highly diversified portfolio. (3) Attractive risk-adjusted returns over the long term. (4) Low tracking error. (5) Very competitive pricing relative to the universe of available investment options.

Comparative Fund Performance

(Period Ending September 30, 2023)

	QTD	YTD	1-Year	3-Year	5-Year	7-Year	10-Year
DFA Small Cap Core	-3.9	3.4	14.0	14.4	4.8	8.0	7.8
Russell 2000 Index	-5.1	2.5	8.9	7.2	2.4	6.6	6.6
Difference	1.2	0.9	5.1	7.2	2.4	1.4	1.2
Rank	36	46	37	17	25	25	26

Data shown is as of September 30, 2023. Peer universe is Morningstar U.S. Small Blend Equity managers.



SBCERS Recommended U.S. Equity Portfolio

Observations

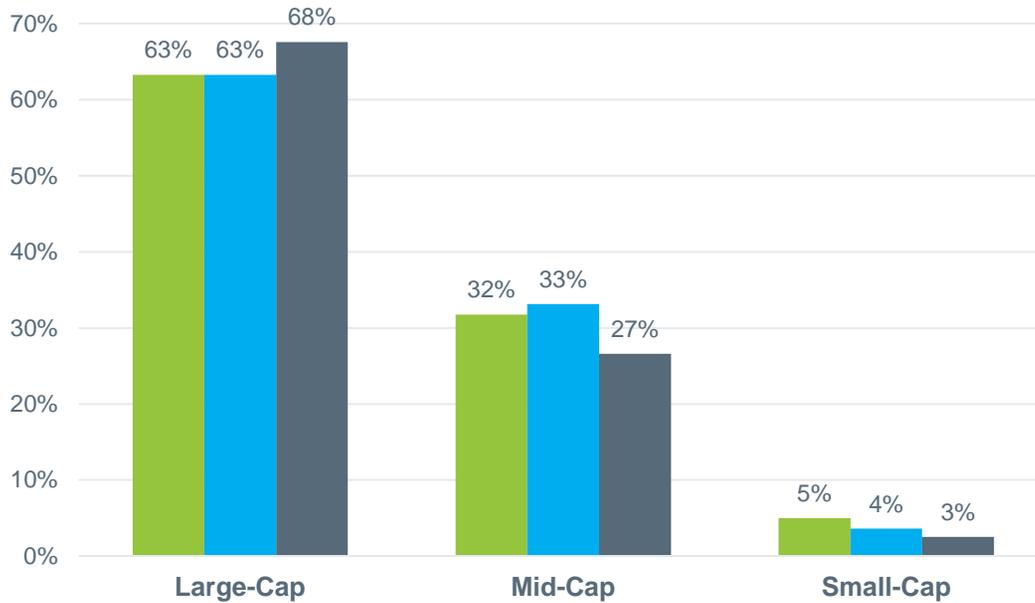
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BNY Mellon R1000 Index - NL (CF)	\$ 346,480,390	25.7%	50.0%	Passive	0.01%	1
DFA Small Cap Core (DFSTX)	\$ 69,296,078	5.1%	10.0%	Active	0.27%	5

Data shown is as of September 30, 2023. Manager market values and weights are based on current composite structure targets.

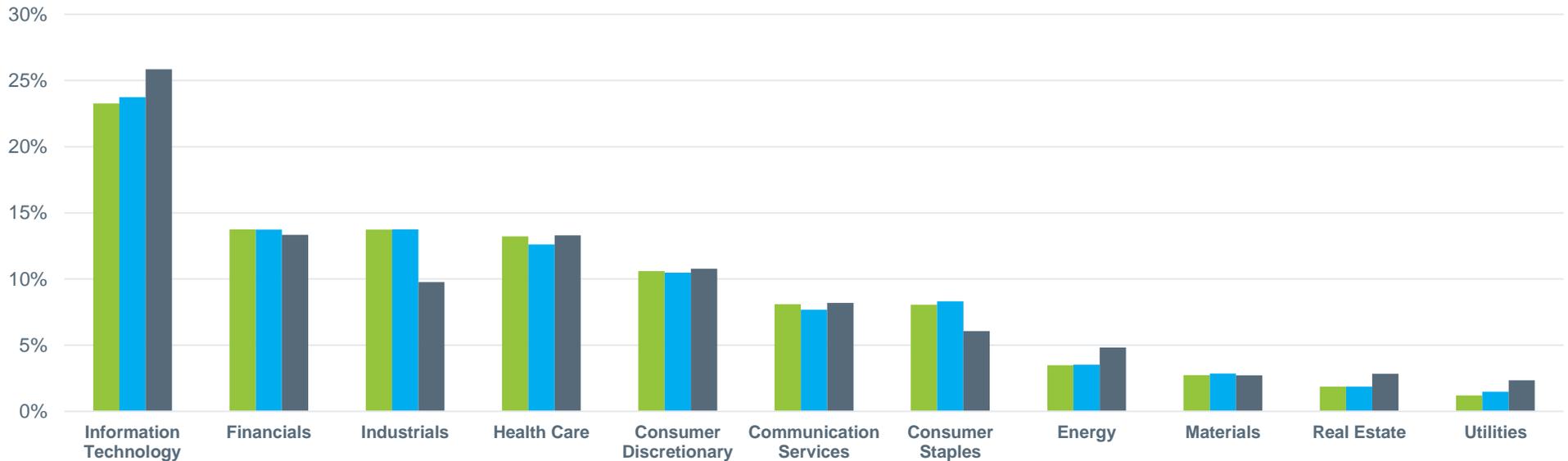
SBCERS Recommended U.S. Equity Portfolio

U.S. Equity Market Capitalization Structure (Holdings Based)



SBCERS Recommended Exposures

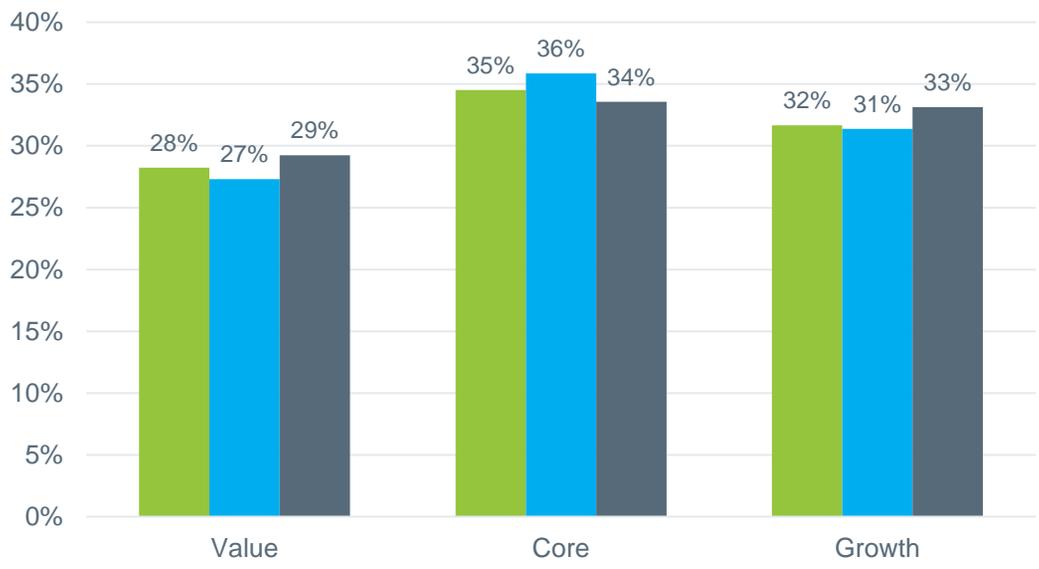
- **Overweight:** U.S. mid-cap equities and small-cap equities
- **Underweight:** U.S. large-cap equities
- **Sectors:** Overweight industrials and consumer staples. Underweight technology, energy, real estate and utilities.



Data shown is as of September 30, 2023. ■ Current Structure ■ Recommended Portfolio ■ Russell 3000 Index

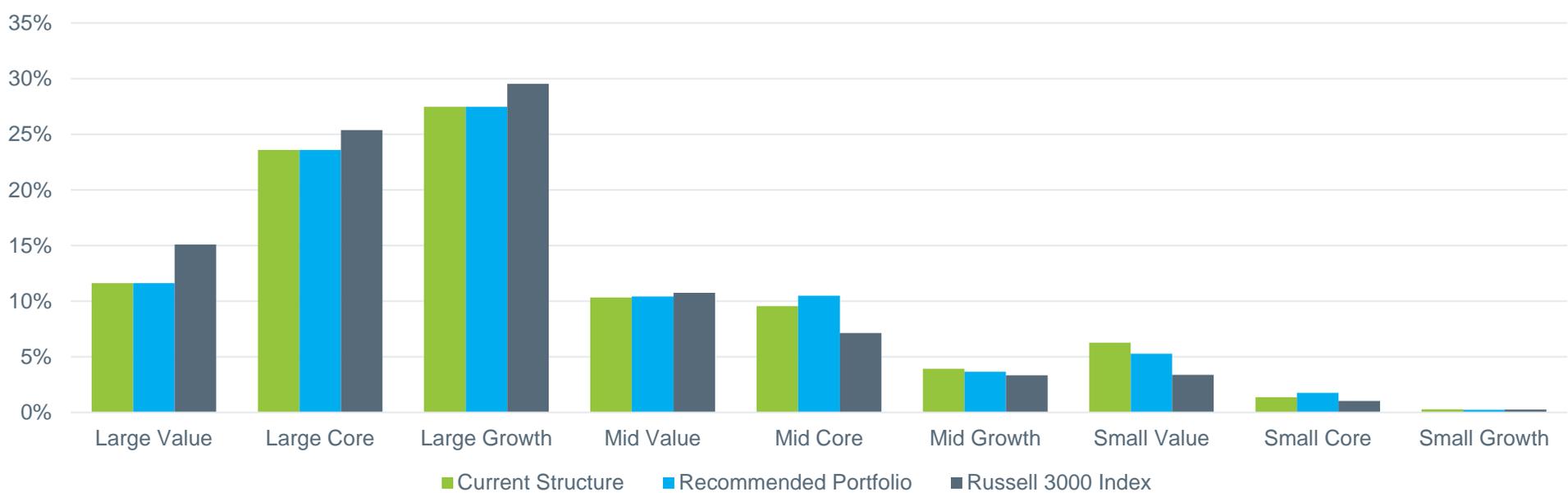
SBCERS Recommended U.S. Equity Portfolio

U.S. Equity Style Structure (Holdings Based)



SBCERS Recommended Exposures

- Exposures remain similar to the Russell 3000 Index



Data shown is as of September 30, 2023.

SBCERS Recommended U.S. Equity Portfolio

Performance & Risk Statistics

Historical Performance – as of 9/30/2023

	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2022	2021	2020	2019	2018
Current Structure	20.13	9.88	9.58	12.08	11.85	-16.99	26.16	19.64	30.60	-3.48
Recommended Portfolio	20.30	10.03	9.68	12.04	11.86	-16.96	26.49	19.37	30.97	-3.70
Russell 3000 Index	20.46	9.38	9.14	11.64	11.28	-19.21	25.66	20.89	31.02	-5.24

Historical Risk Statistics – 10 Years as of 9/30/2023

	Current Structure	Recommended Portfolio	Russell 3000 Index	Comments (relative to R. 3000 Index)
Standard Deviation	14.7%	14.7%	15.3%	Lower total volatility
Beta*	0.96	0.96	1.00	Lower systematic risk
Tracking Error*	1.3%	1.4%	--	-
Up Mkt. Capture*	98.2%	98.0%	100.0%	Good participation in up markets
Down Mkt. Capture*	93.9%	93.8%	100.0%	Lower downside participation
Sharpe Ratio**	0.76	0.76	0.70	Higher return per unit of risk

Performance shown is net of fees and annualized for periods greater than one year.

*Calculated vs. Russell 3000 Index

**Calculated vs. ICE BofAML 3 Mo US T-Bill Index

Appendix

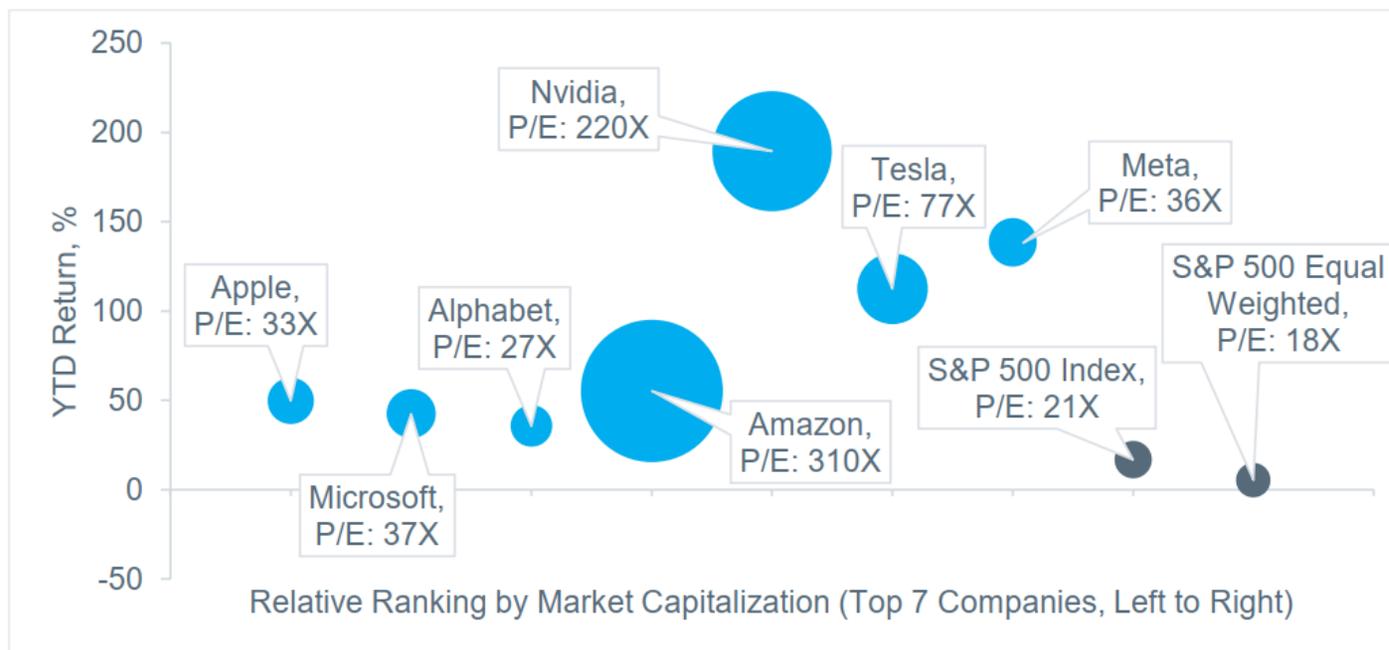


Appendix

US Stock Market Concentration

- **Figure 1** shows the year-to-date (YTD) return and price (P/E) of the top six S&P 500 stocks by size (market capitalization)
- The drivers of public markets change over time; the largest stocks in the S&P 500 are dominating index returns through 6/30/2023

Figure 1: Recent Returns and Valuations (Circles Scaled by P/E Ratio)



- Investors seem to be focused on these firms' size, scale, competitive advantages, cash balances, and roles in artificial intelligence (AI)
- As of June 30, 2023, **these 6 stocks** collectively **comprise over 26% of the S&P 500**, generated a weighted **YTD return of over 17%**, while the return of the entire S&P 500 is 15%
 - This indicates **the other index stocks collectively provided a negative return**
- The S&P 500 history has had a number of narrow market rallies; the most recent period just 18 months ago

Source: Morningstar and Bloomberg. As of June 30, 2023

Appendix

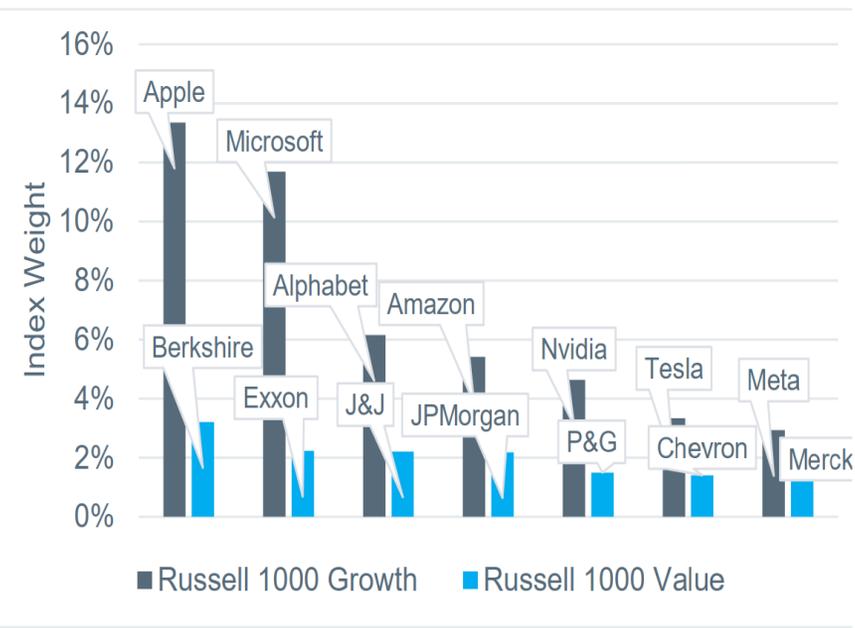
US Stock Market Concentration

- **Figure 2** compares rolling 3-year returns S&P 500 stock market returns on an **equal-weighted** basis relative to the traditional capitalization weighted index S&P 500 where larger stocks have a more significant impact
- Although current S&P 500 returns have been significantly supported by a small number of mega stocks, market returns over time have been impacted a broader collection of stocks

Figure 2: S&P 500 Equal Weighted Index Rolling Excess Returns vs. S&P 500 Index



Figure 3: Style Index Concentration (Top 7 Holdings)



Style Considerations

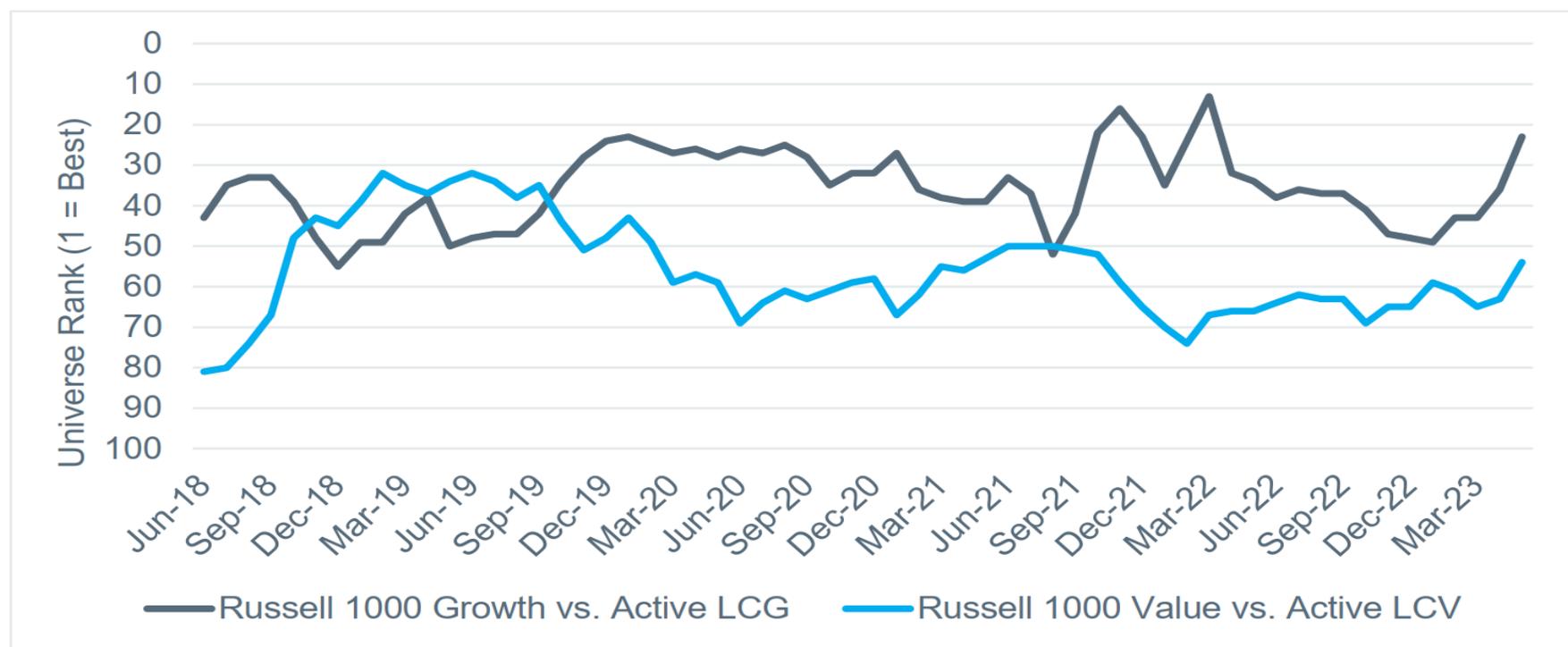
- A small number of stocks significantly impacting market returns has been felt more in growth indices
- **Figure 3** illustrates the top holdings in the Russell 1000 Growth Index are more likely to drive index returns given their combined weight
- **The top 7 stocks in the Russell 1000 Growth index comprise over 45% of the index weight; the top 7 value stocks have a much smaller relative impact on the Russell 1000 Value index**

Appendix

US Stock Market Concentration

- Figure 4 shows the rank of the Russell 1000 Growth and Value indices in a universe of peer style managers for rolling 12-month periods as of May 31, 2023
- Active large cap growth managers have generally had more difficulty beating their index (ranks for the Growth index are high), especially in quickly advancing markets and at least in part due to the mega stock, narrow market rallies where some active managers overweight those stocks
- Active value managers have had more relative success as shown by the lower Russell 1000 Value index rank

Figure 4: Rolling 12-Month Return Ranks vs. Active Management



Appendix

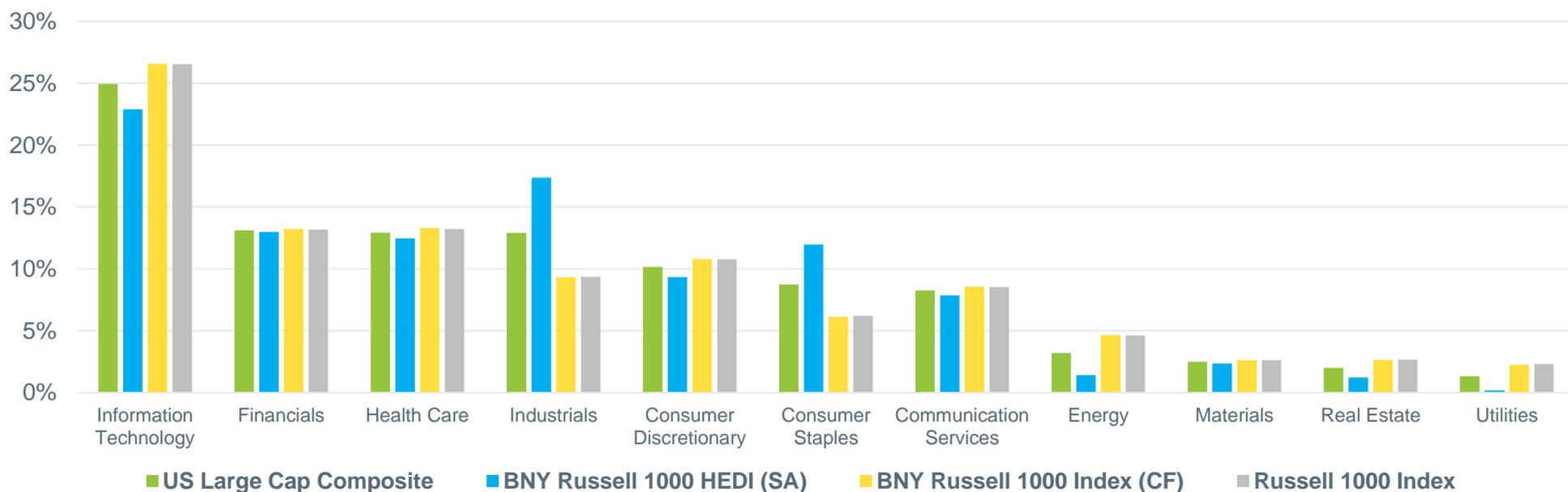
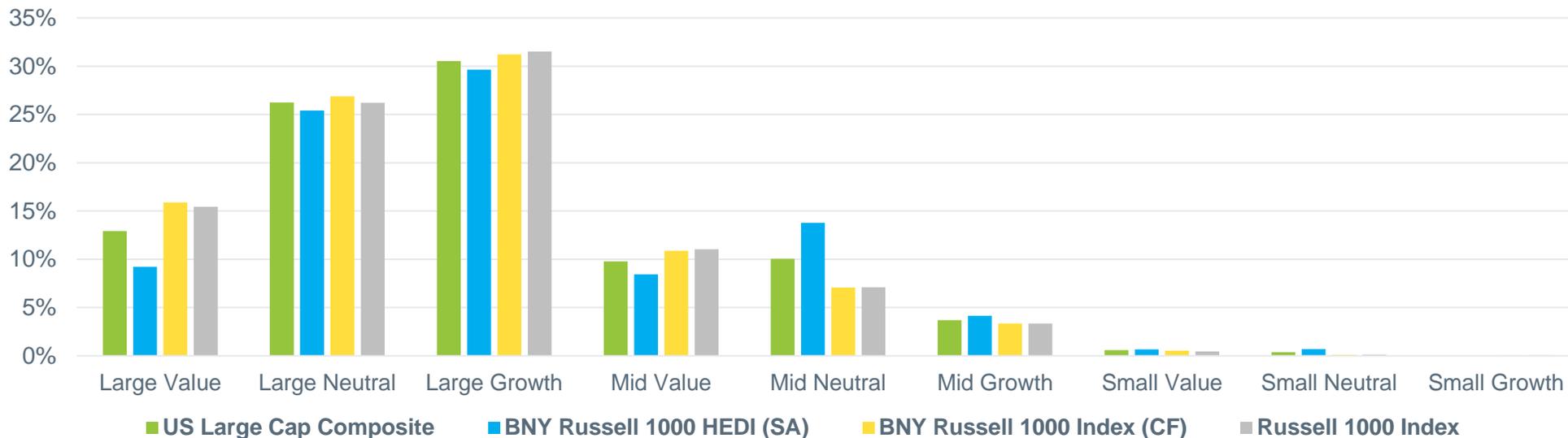
Rolling 3-Year Style Map (Returns Based) – 10 Years



Data shown is as of September 30, 2023, monthly periodicity.

Appendix

Current Large Cap Manager Holdings Analysis – As of September 30, 2023



Appendix

Current Large Cap Manager Performance & Risk Statistics

Historical Performance – as of 9/30/2023

	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2022	2021	2020	2019	2018
Current Structure	20.95	9.48	10.17	12.44	12.24	-17.36	25.96	20.18	31.98	-2.63
Russell 1000 Index	21.19	9.53	9.63	12.00	11.63	-19.13	26.45	20.96	31.43	-4.78
<i>Difference</i>	-0.24	-0.05	0.54	0.44	0.61	1.77	-0.49	-0.78	0.55	2.15
BNY Mellon HEDI	20.61	9.33	10.70	12.83	12.88	-15.11	25.30	18.56	32.58	-0.16
BNY Mellon R1000	21.19	9.56	9.71	12.10	11.70	-19.15	26.46	21.44	31.46	-4.57

Historical Risk Statistics – 10 Years as of 9/30/2023

	Current Structure	Russell 1000 Index	BNY Mellon HEDI	BNY Mellon R1000
Standard Deviation	14.5%	14.6%	13.8%	15.1%
Beta*	0.95	1.00	0.89	1.00
Tracking Error*	1.5%	--	3.4%	0.1%
Up Mkt. Capture*	98.1%	100.0%	95.8%	100.0%
Down Mkt. Capture*	93.6%	100.0%	86.1%	99.7%
Sharpe Ratio**	0.80	0.78	0.87	0.74

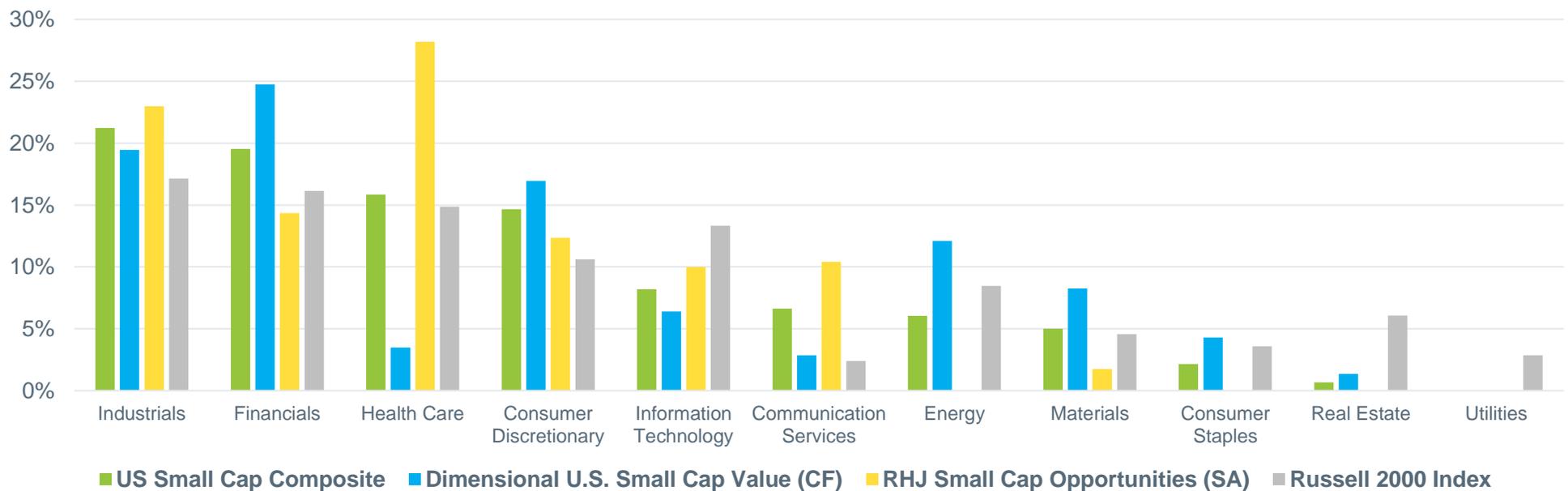
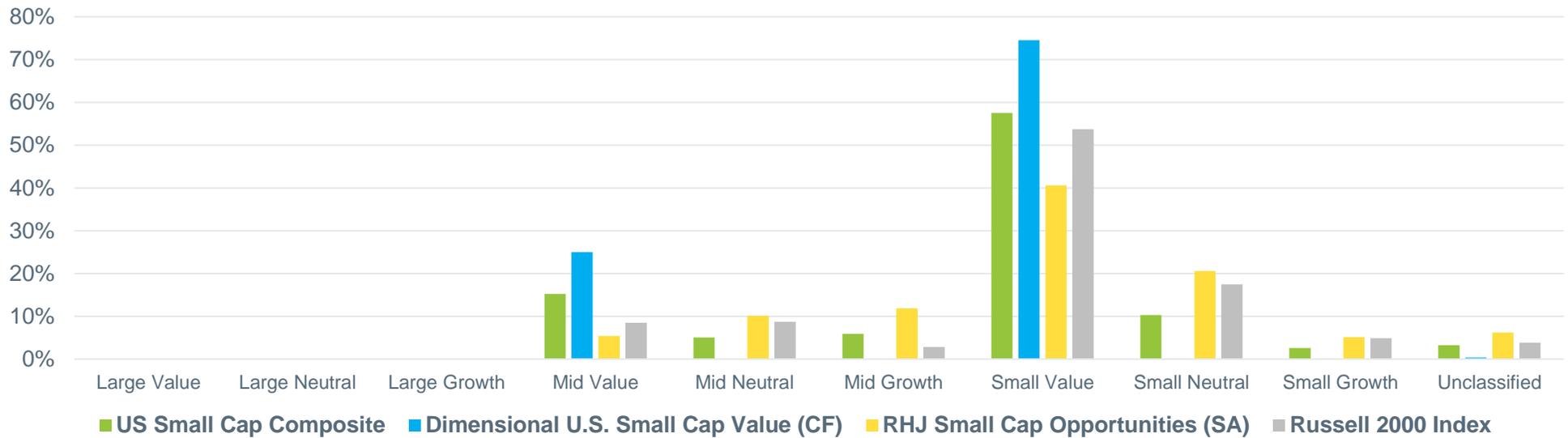
Performance shown is net of fees and annualized for periods greater than one year. Performance prior to client inception is product specific.

*Calculated vs. Russell 1000 Index

**Calculated vs. ICE BofAML 3 Mo US T-Bill Index

Appendix

Current Small Cap Manager Holdings Analysis – As of September 30, 2023



Appendix

Current Small Cap Manager Performance & Risk Statistics

Historical Performance – as of 9/30/2023

	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2022	2021	2020	2019	2018
Current Structure	12.22	12.96	3.66	8.16	7.78	-13.69	27.36	13.17	18.38	-11.16
Russell 2000 Index	8.93	7.16	2.4	6.62	6.65	-20.44	14.82	19.96	25.53	-11.01
<i>Difference</i>	3.29	5.80	1.26	1.54	1.13	6.75	12.54	-6.79	-7.15	-0.15
DFA Small Cap Value	20.32	24.45	7.10	9.15	8.41	-1.93	40.07	3.01	19.65	-15.27
RHJ Small Cap Growth	4.05	2.03	-0.08	6.80	6.85	-24.51	15.35	23.74	17.89	-7.02

Historical Risk Statistics – 10 Years as of 9/30/2023

	Current Structure	Russell 2000 Index	DFA U.S. Small Cap Value	RHJ U.S. Small Cap Opp.
Standard Deviation	19.8%	19.6%	21.6%	19.4%
Beta*	0.99	1.00	1.05	0.93
Tracking Error*	4.4%	--	7.0%	6.9%
Up Mkt. Capture*	101.4%	100.0%	108.6%	94.2%
Down Mkt. Capture*	96.8%	100.0%	102.3%	91.3%
Sharpe Ratio**	0.42	0.37	0.43	0.38

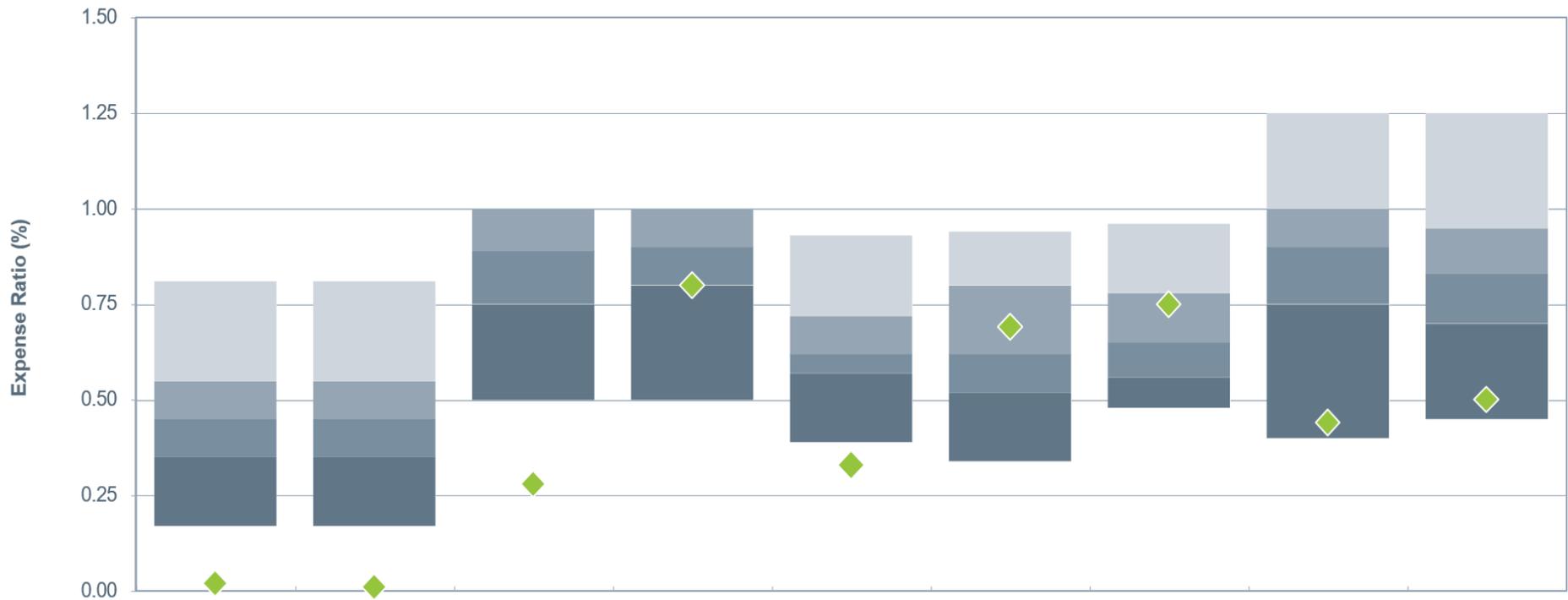
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*Calculated vs. Russell 2000 Index

**Calculated vs. ICE BofAML 3 Mo US T-Bill Index

Appendix

Current Manager Fee Analysis



Fund	BNY Mellon HEDI (SA)	BNY Mellon R1000 Index - NL (SA)	Dimensional U.S. Small Cap Value (CF)	RHJ Sm Cap Opportunities (SA)	PanAgora Dynamic International Equity (SA)	Artisan Non-U.S. Growth (SA)	Acadian Non-US Small Cap Equity (CF)	DFA Emg Mkts Value;I (DFEVX)	RBC Emerging Markets Equity (CF)
Peer Group	U.S. Large Cap Core Equity (SA+CF)	U.S. Large Cap Core Equity (SA+CF)	U.S. Small Cap Value Equity (SA+CF)	U.S. Small Cap Growth Equity (SA+CF)	EAFE Value (SA)	EAFE Core (SA)	EAFE Growth (SA)	International Small Cap Equity (SA+CF)	Emerging Market Equity (SA+CF)
Fund Expense Ratio	0.02	0.01	0.28	0.80	0.33	0.69	0.75	0.44	0.50
Median Expense Ratio	0.45	0.45	0.89	0.90	0.62	0.62	0.65	0.90	0.83
Percentile Rank	1	1	2	27	82	5	67	27	7
Population	590	590	481	502	84	219	48	221	397

Appendix

Active/Passive Summary: Long-Term 3-Year Rolling Average (Net of Fees)

January 2001 – December 2023

US Equity Excess Returns, %			
	25 th Percentile	Median	75 th Percentile
US All Cap Core Equity	2.01	0.02	-2.01
US All Cap Growth Equity	2.75	-0.11	-2.82
US All Cap Value Equity	3.23	0.56	-1.86
US Large Cap Core Equity	1.26	-0.31	-1.89
US Large Cap Growth Equity	1.36	-0.54	-2.42
US Large Cap Value Equity	2.18	0.35	-1.28
US Large Cap Enhanced Equity	0.89	0.09	-0.78
US Mid Cap Core Equity	1.49	-0.46	-2.35
US Mid Cap Growth Equity	1.92	-0.29	-2.34
US Mid Cap Value Equity	1.51	-0.35	-2.15
US Small-Mid Cap Core Equity	2.52	0.24	-1.90
US Small-Mid Cap Growth Equity	2.72	-0.07	-2.72
US Small-Mid Cap Value Equity	2.40	0.20	-1.77
US Small Cap Core Equity	2.87	0.65	-1.49
US Small Cap Growth Equity	3.82	0.94	-1.85
US Small Cap Value Equity	3.16	0.89	-1.27

Excess return is calculated versus universe-specific benchmark. January 2001 represents the start of the first 3-year period. Performance shown represents rolling 3-year performance at each quartile and does not correspond to the long-term experience of any specific manager. Peer group constituents and managers' rankings change over time.

Appendix

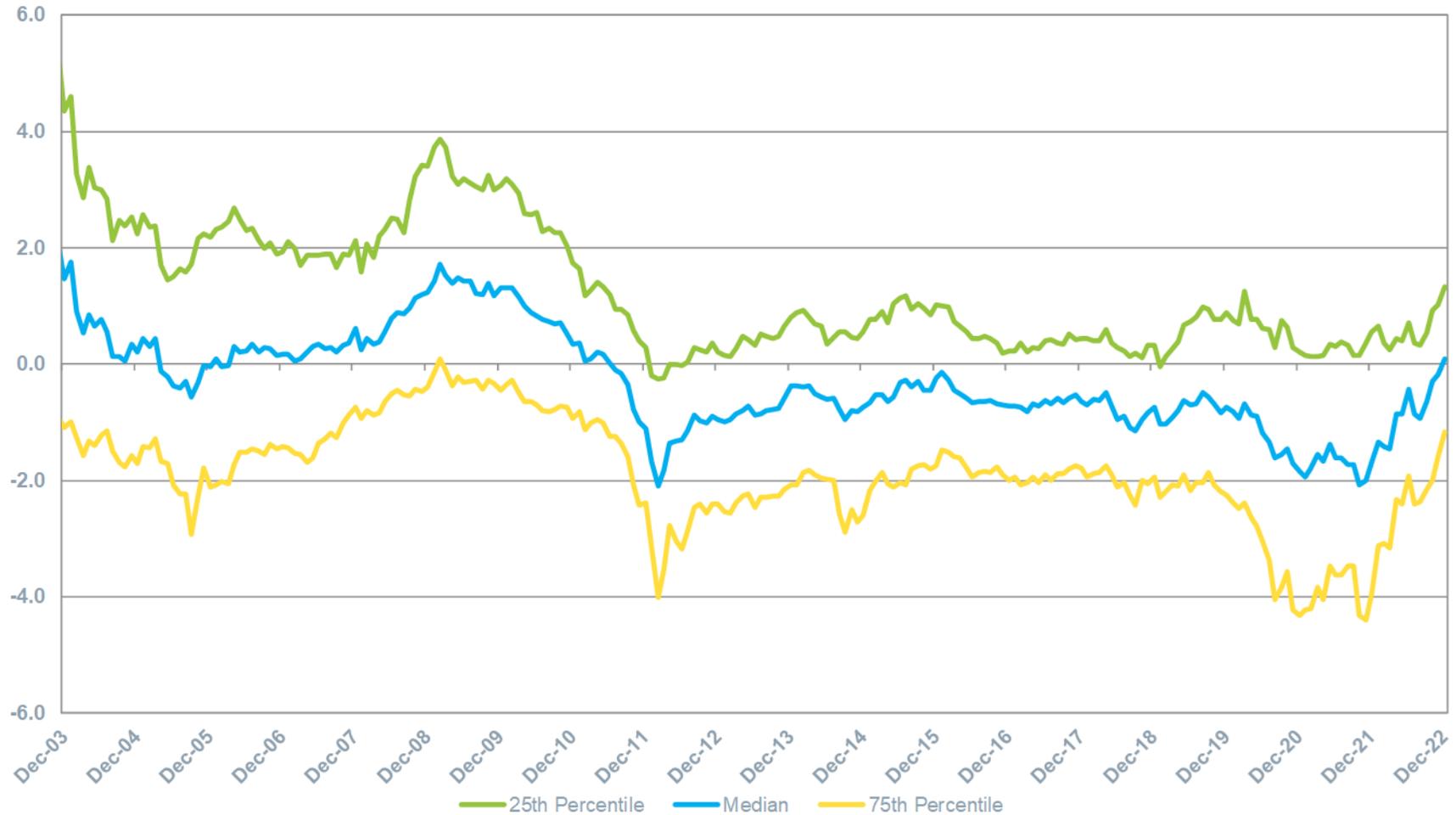
Active/Passive Summary: US Large Cap Core Equity

Manager Excess Returns – Rolling 3-Year Periods (beginning January 2001)

Excess Returns (%) are calculated relative to the Russell 1000 Index

Assumed Active Management Fee: 41 (Basis Points)

Peak Population: 477



eVestment Manager Database Comparison

Performance shown represents rolling 3-year performance at each quartile and does not correspond to the long-term experience of any specific manager. Peer group constituents and managers' rankings change over time.

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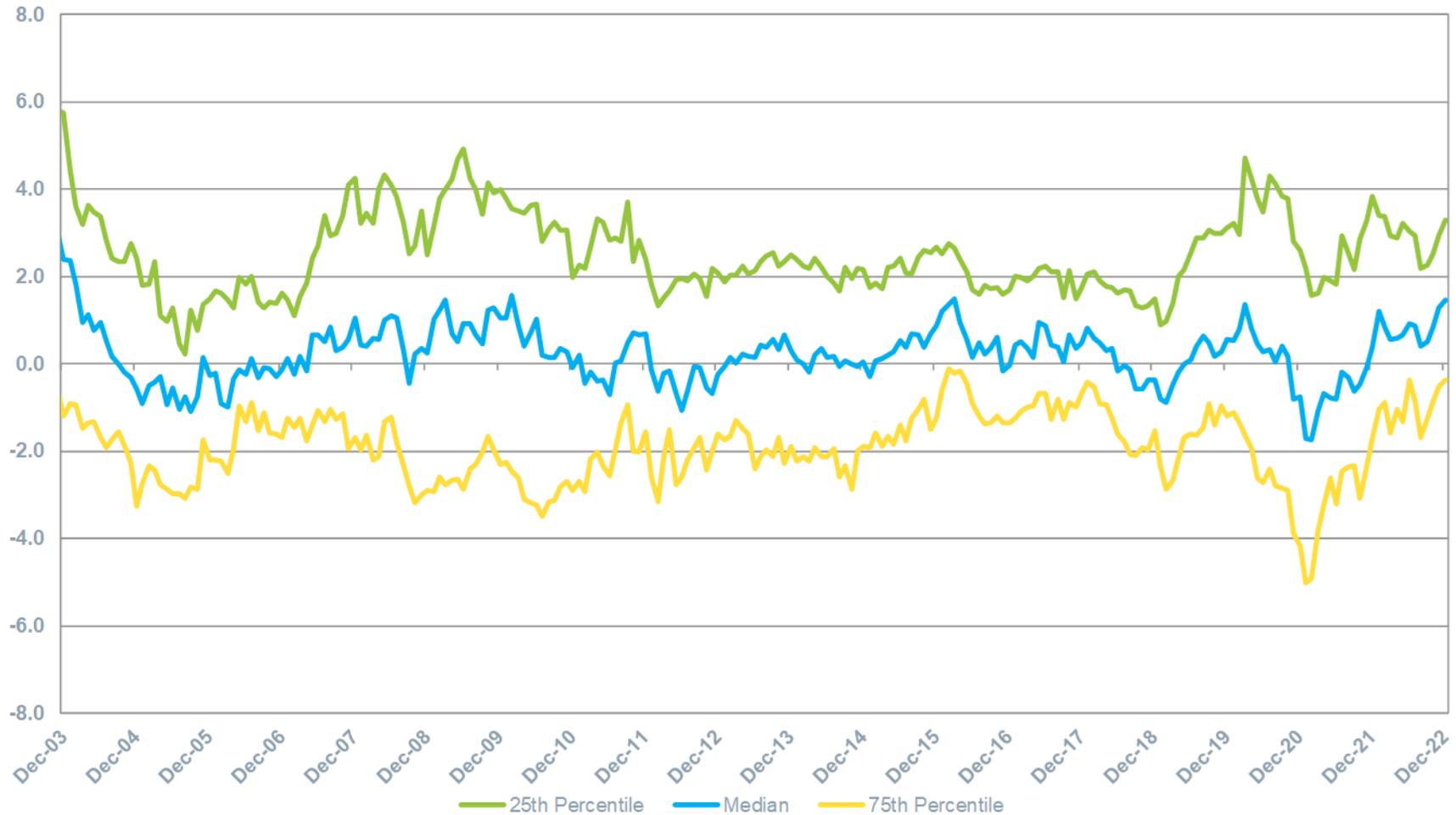
Active/Passive Summary: US Small-Mid Cap Core Equity

Manager Excess Returns – Rolling 3-Year Periods (beginning January 2001)

Excess Returns (%) are calculated relative to the Russell 2500 Index

Assumed Active Management Fee: 71.5 (Basis Points)

Peak Population: 99



eVestment Manager Database Comparison

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PORTLAND

BOISE

CHICAGO

NEW YORK

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