NORTH CAROLINA
DEPARTMENT OF STATE TREASURER

STATE TREASURER OF NORTH CAROLINA
DALE R. FOLWELL, CPA

INVESTMENT MANAGEMENT DIVISION

Public Equity – IAC Presentation

Presented by:
Rhonda Smith, Director
Casey High, Portfolio Manager
Greg Taylor, Portfolio Manager
Tina Kapoor, Investment Analyst

August 25, 2021

Public Equity Team

Rhonda M Smith
Director
19 years with IMD
28+ Years Industry Experience

Casey High
Portfolio Manager
Trader
9+ years with IMD
11+ Years Industry Experience

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Portfolio Manager
Trader
6+ years with IMD
9+ Years Industry Experience

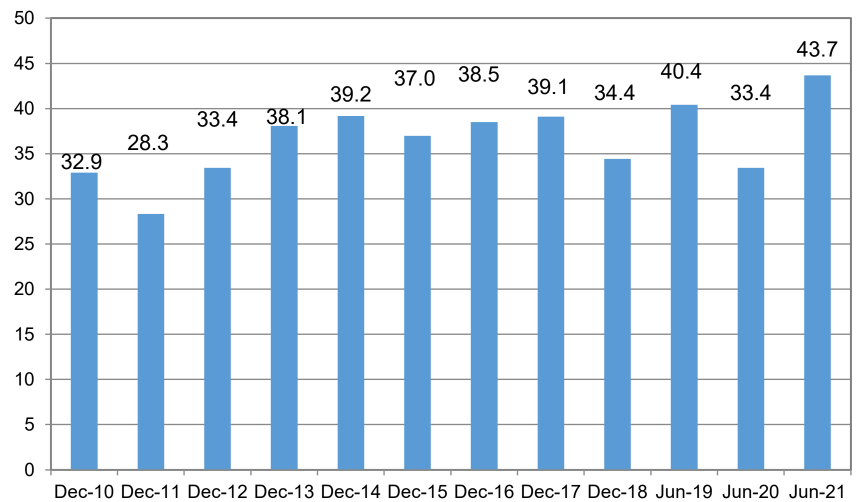
Tina Kapoor
Investment Analyst
(New Hire)
0.0 years with IMD
10+ Years Industry Experience

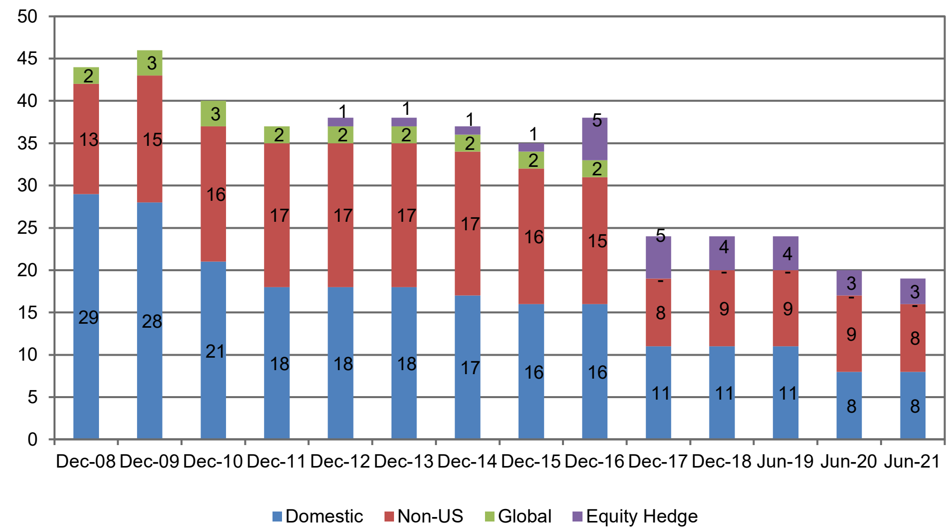
PUBLIC EQUITY PORTFOLIO

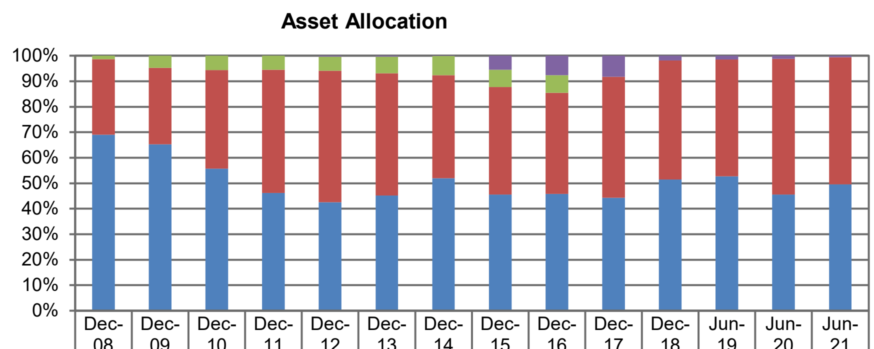
NCRS Public Equity Net Performance – June 30, 2021

	Market Value ($MM)	3 Month	1 Year	3 Years	5 Years	10 Years	15 Years
Public Equity	**$43,688**	**7.16**	**41.87**	**16.10**	**15.95**	**10.97**	**8.24**
Benchmark		7.15	40.65	14.12	14.17	9.71	7.36
Domestic Portfolio	**$21,669**	**7.93**	**43.10**	**19.42**	**18.53**	**14.82**	**10.91**
Russell 3000		8.24	44.16	18.73	17.89	14.70	10.78
Non-US Portfolio	**$21,768**	**6.30**	**40.40**	**12.67**	**14.06**	**7.37**	**5.96**
Custom Benchmark		5.60	37.18	9.42	11.2	5.65	4.38
Equity Hedge	**$250**	**14.75**	**38.26**	**9.37**	**8.13**		
MSCI ACWI (beta adjusted)		2.84	15.09	5.92	5.88		

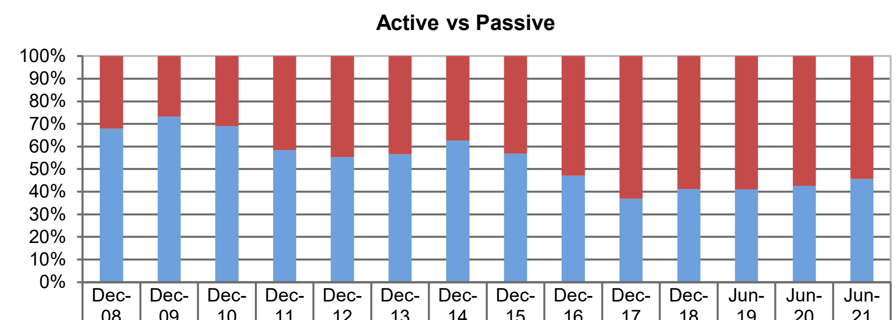
Snapshot of Total Public Equity







	Dec-08	Dec-09	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Jun-19	Jun-20	Jun-21
Equity Hedge	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.1%	5.5%	7.6%	8.2%	1.9%	1.5%	1.2%	0.6%
Global	1.3%	4.8%	5.6%	5.5%	5.4%	6.5%	7.5%	6.8%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-US	29.7%	29.9%	38.8%	48.3%	51.6%	47.9%	40.4%	42.2%	39.7%	47.5%	46.6%	45.7%	53.2%	49.8%
Domestic	69.0%	65.3%	55.7%	46.2%	42.6%	45.2%	52.0%	45.5%	45.8%	44.3%	51.5%	52.8%	45.6%	49.6%



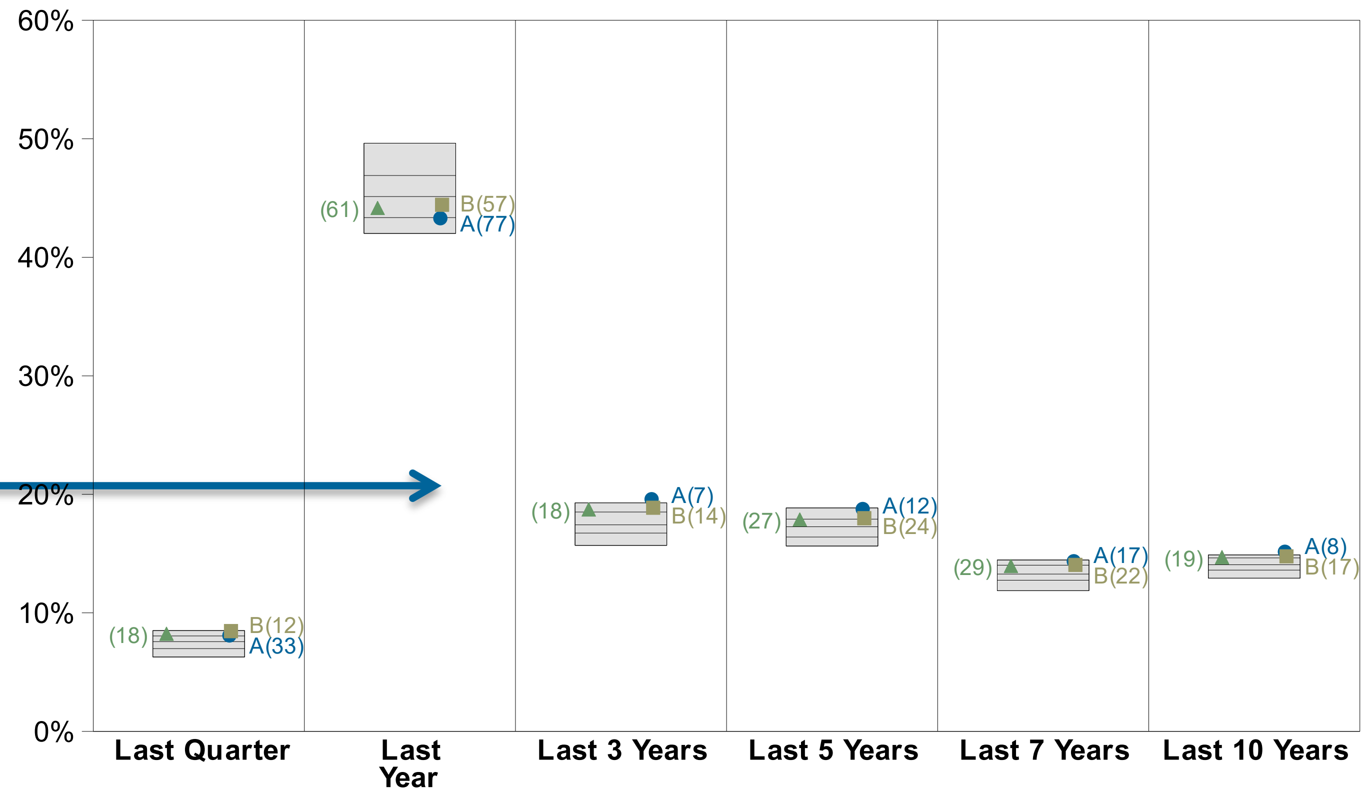
	Dec-08	Dec-09	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Jun-19	Jun-20	Jun-21
Passive	32.1%	26.8%	30.9%	41.6%	44.7%	43.4%	37.3%	43.2%	52.9%	63.1%	58.9%	59.0%	57.4%	54.3%
Active	67.9%	73.2%	69.1%	58.4%	55.3%	56.6%	62.7%	56.8%	47.1%	36.9%	41.1%	41.0%	42.6%	45.7%

Excludes cash and transition
Excluded Hedged Equity until 2016

Domestic Equity Peer Universe Ranking

Performance vs Public Fund - Domestic Equity (Gross)

Long term performance rankings remain in the top quartile of peers



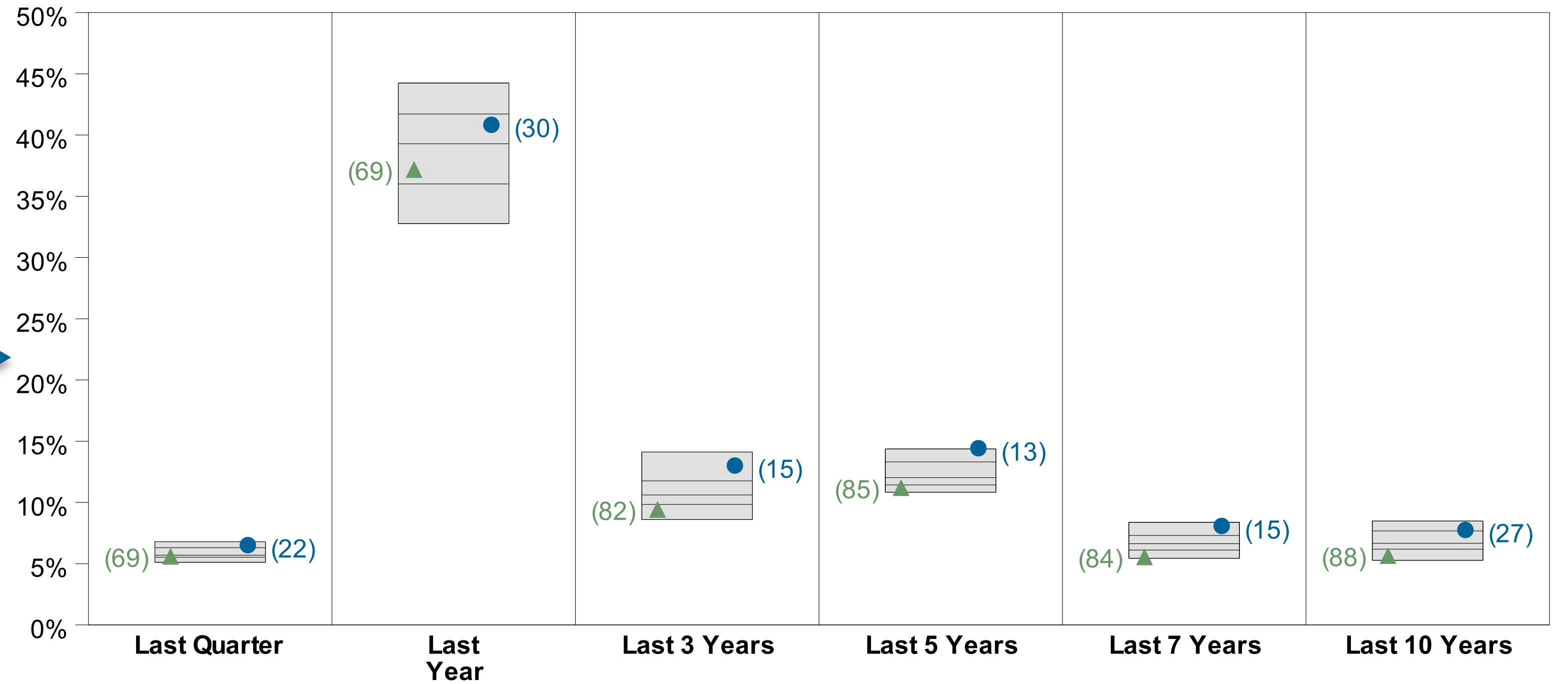
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	8.51	49.63	19.29	18.85	14.46	14.89
25th Percentile	8.05	46.90	18.50	17.91	14.02	14.64
Median	7.57	45.12	17.43	17.27	13.27	14.06
75th Percentile	6.98	43.35	16.74	16.40	12.76	13.61
90th Percentile	6.28	42.02	15.69	15.64	11.87	12.93
Domestic Equity ● A	7.96	43.18	19.48	18.63	14.22	15.02
MSCI US IMI ■ B	8.46	44.43	18.87	17.98	14.05	14.77
Russell 3000 Index ▲	8.24	44.16	18.73	17.89	13.95	14.70

Source: Callan Associates

International Equity Peer Universe Ranking

Performance vs Public Fund - International Equity (Gross)

Top 1/3rd performance rankings across all time frames

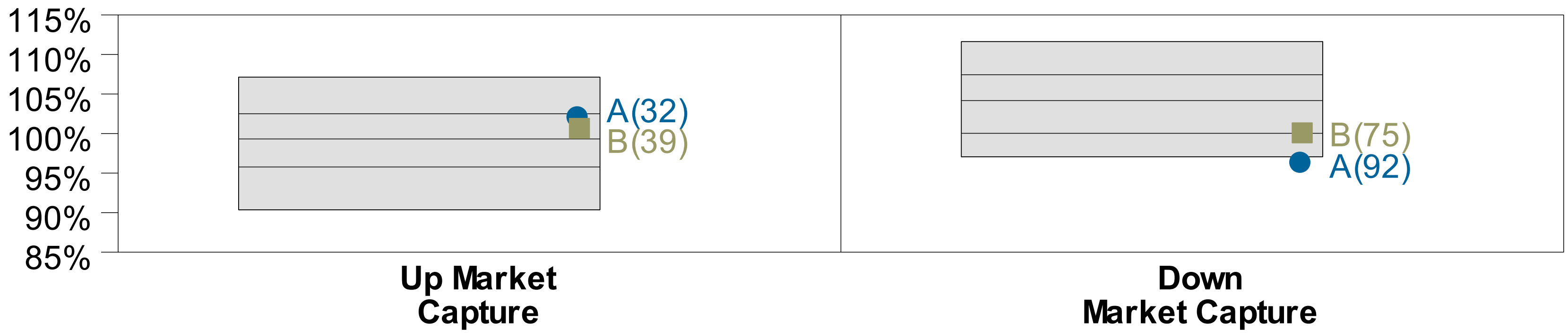


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	6.80	44.24	14.12	14.37	8.39	8.49
25th Percentile	6.31	41.71	11.76	13.31	7.31	7.68
Median	5.70	39.29	10.62	12.03	6.64	6.67
75th Percentile	5.53	36.01	9.84	11.44	6.12	6.19
90th Percentile	5.12	32.77	8.61	10.85	5.44	5.29
Non-US Equity ●	6.35	40.69	12.87	14.27	7.91	7.61
Non-US Benchmark ▲	5.60	37.18	9.43	11.20	5.56	5.65

Source: Callan Associates

Domestic Equity Up/Down Market Capture

Market Capture vs Russell 3000 Index
Rankings Against Public Fund - Domestic Equity (Gross)
Five Years Ended June 30, 2021

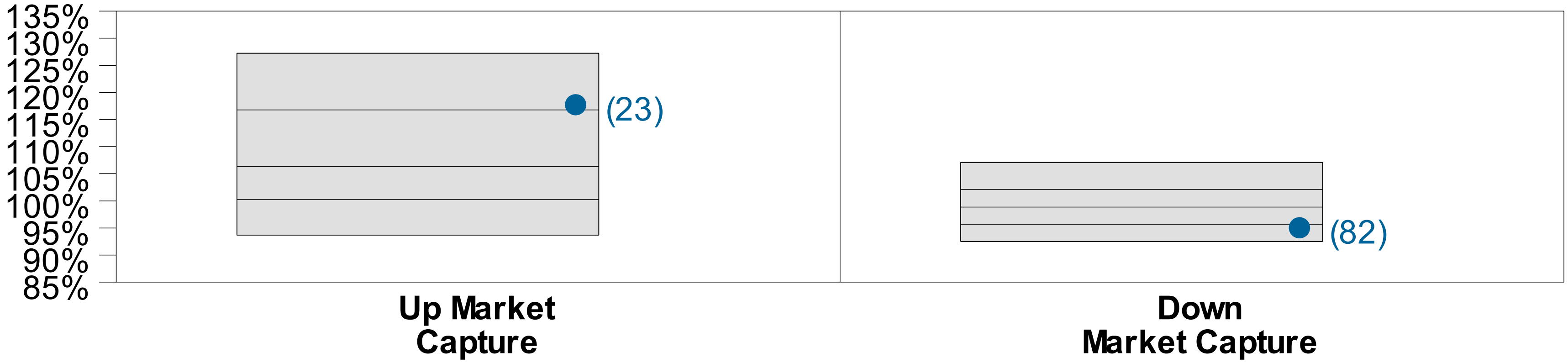


	Up Market Capture	Down Market Capture
10th Percentile	107.16	111.65
25th Percentile	102.51	107.43
Median	99.31	104.17
75th Percentile	95.77	100.04
90th Percentile	90.36	97.05
Domestic Equity ● A	101.83	96.10
MSCI US IMI ■ B	100.65	100.09

Source: Callan Associates

International Equity Up/Down Market Capture

Market Capture vs Non-US Benchmark
Rankings Against Public Fund - International Equity (Gross)
Five Years Ended June 30, 2021

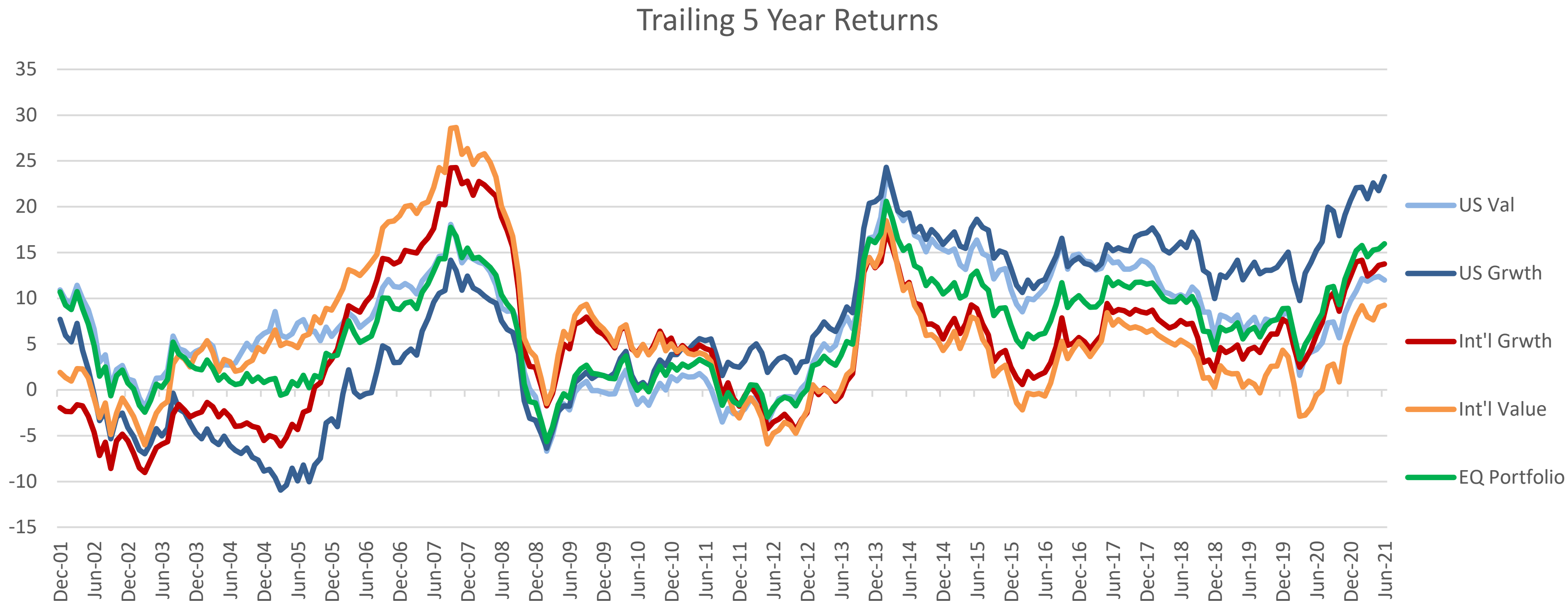


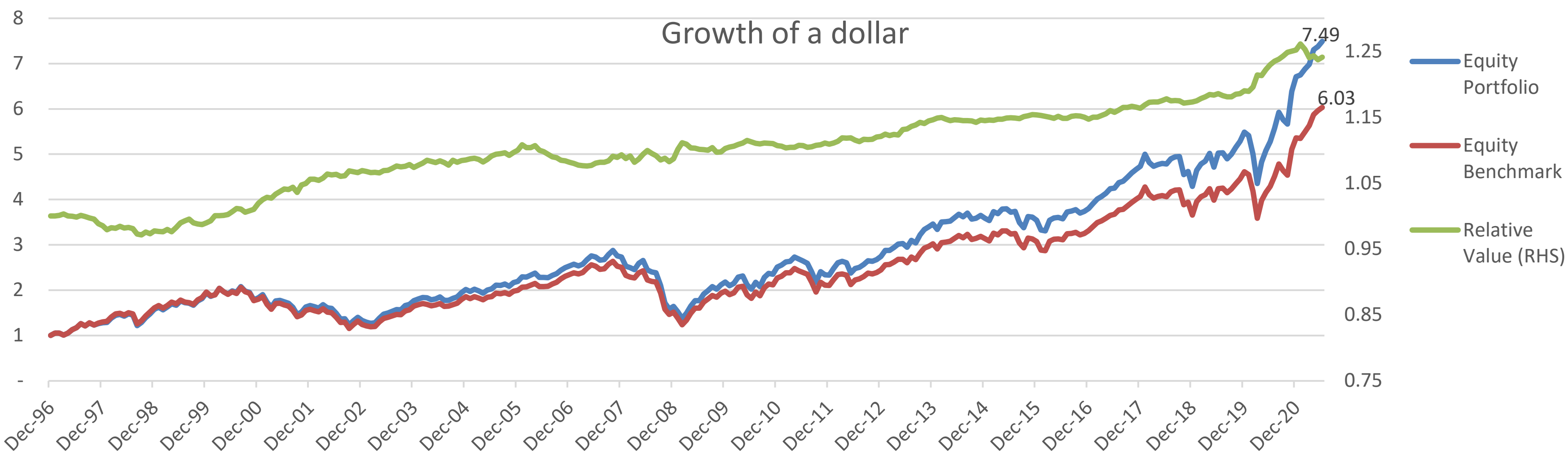
	Up Market Capture	Down Market Capture
10th Percentile	127.25	107.10
25th Percentile	116.78	102.11
Median	106.37	98.85
75th Percentile	100.26	95.67
90th Percentile	93.69	92.54
Non-US Equity ●	117.31	94.63

Source: Callan Associates

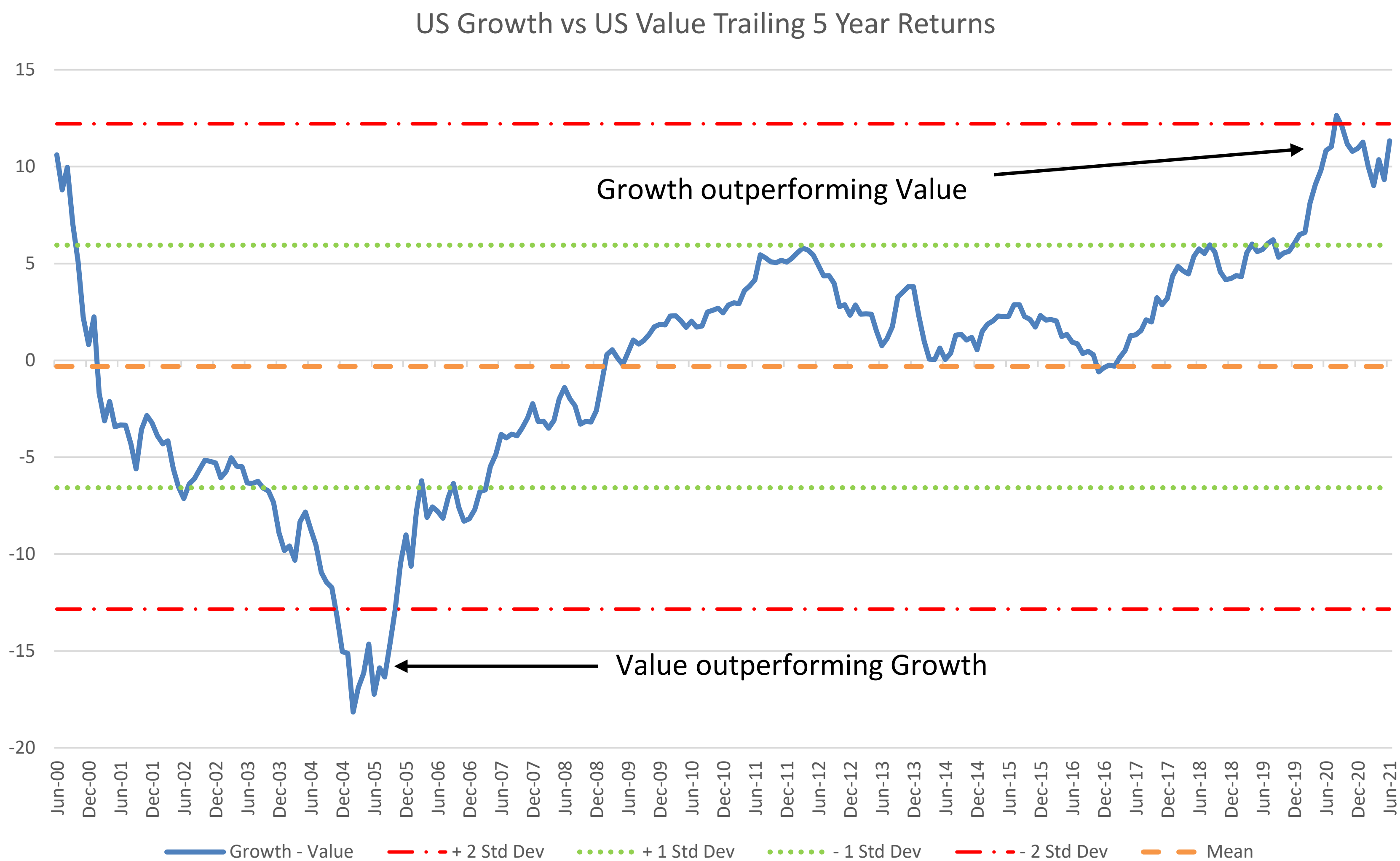
ANALYZING PUBLIC EQUITY RETURN PROFILE

Investment Management Division

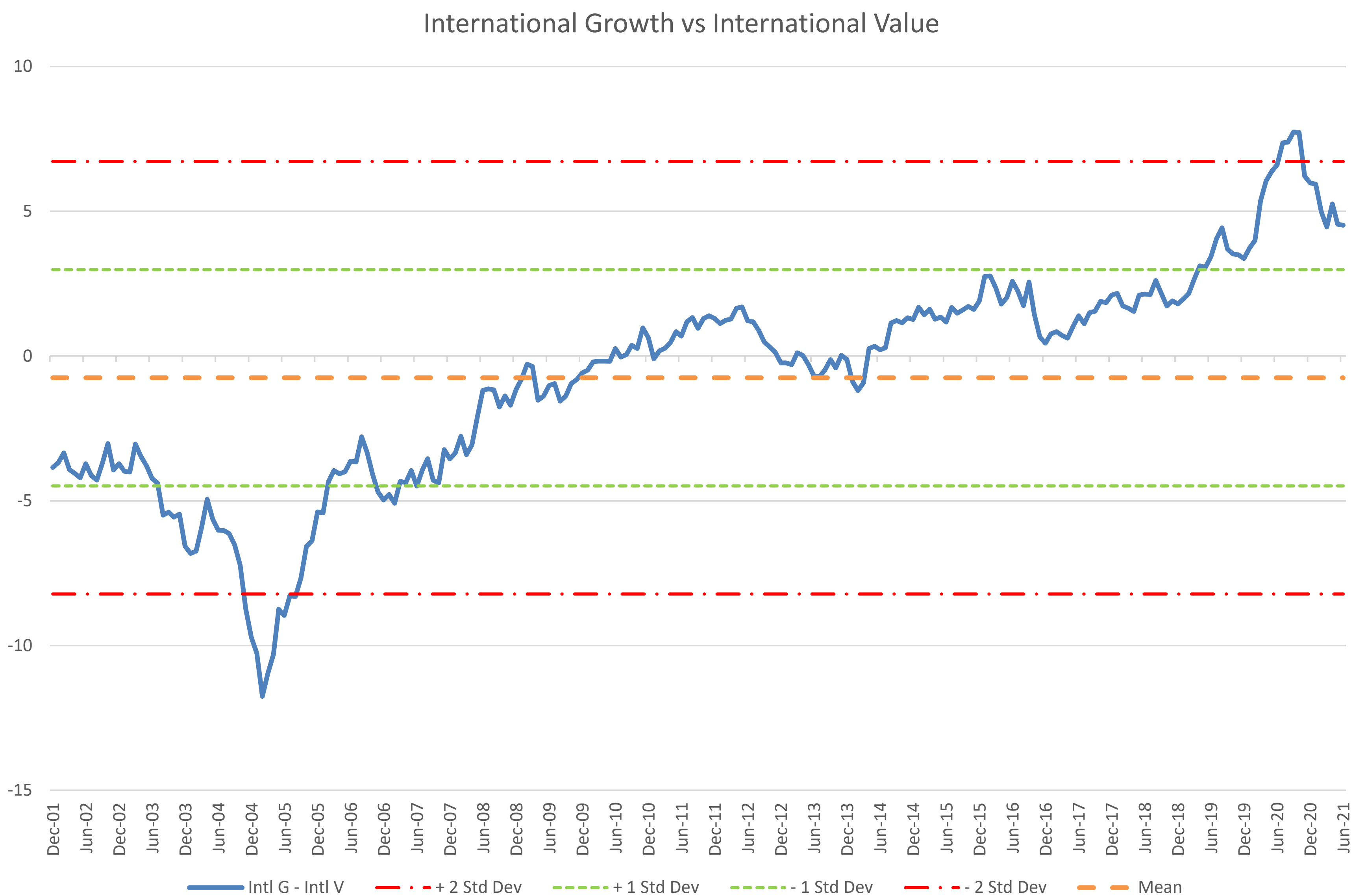




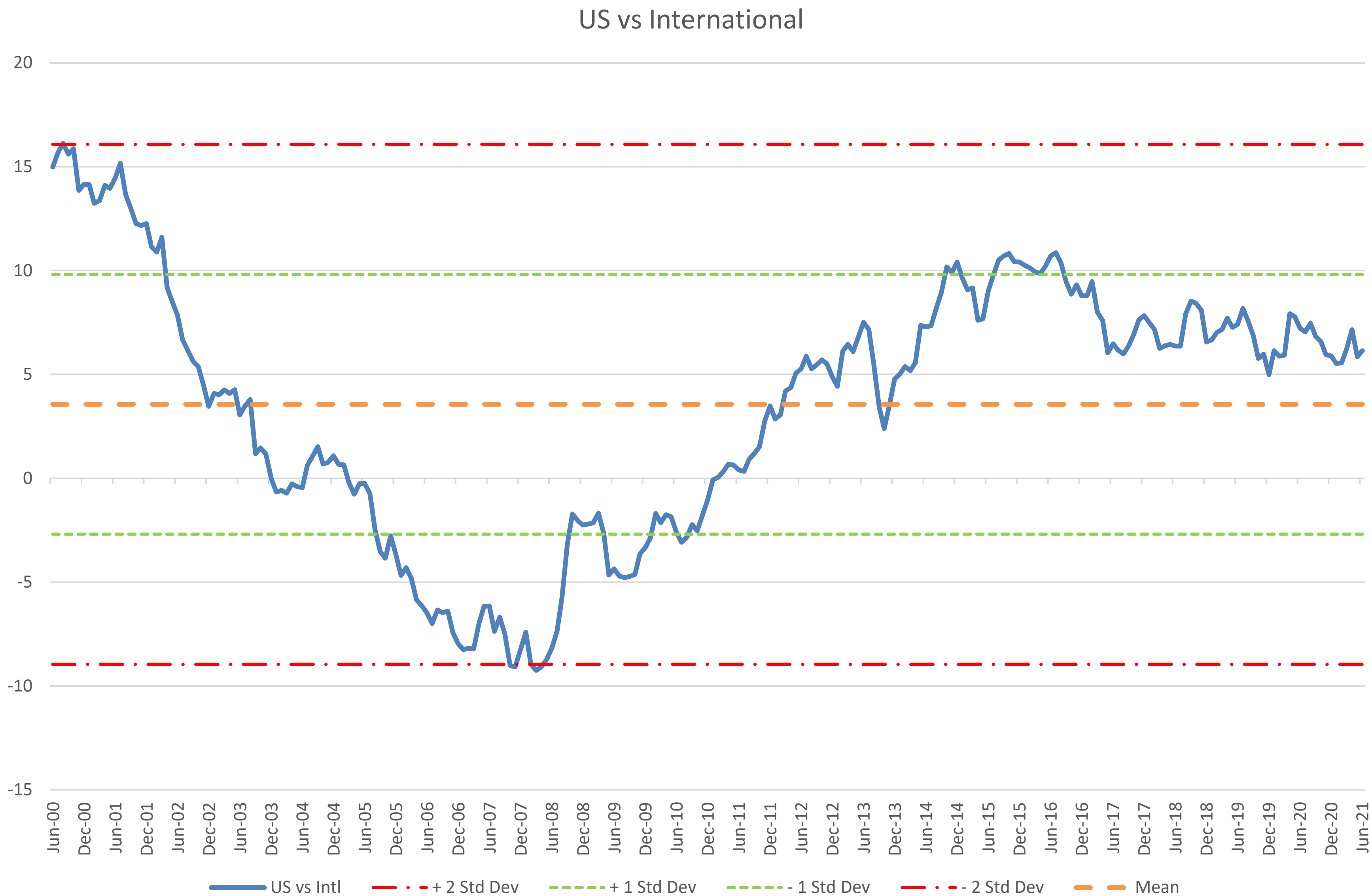
Equity Return Dispersion



Equity Return Dispersion

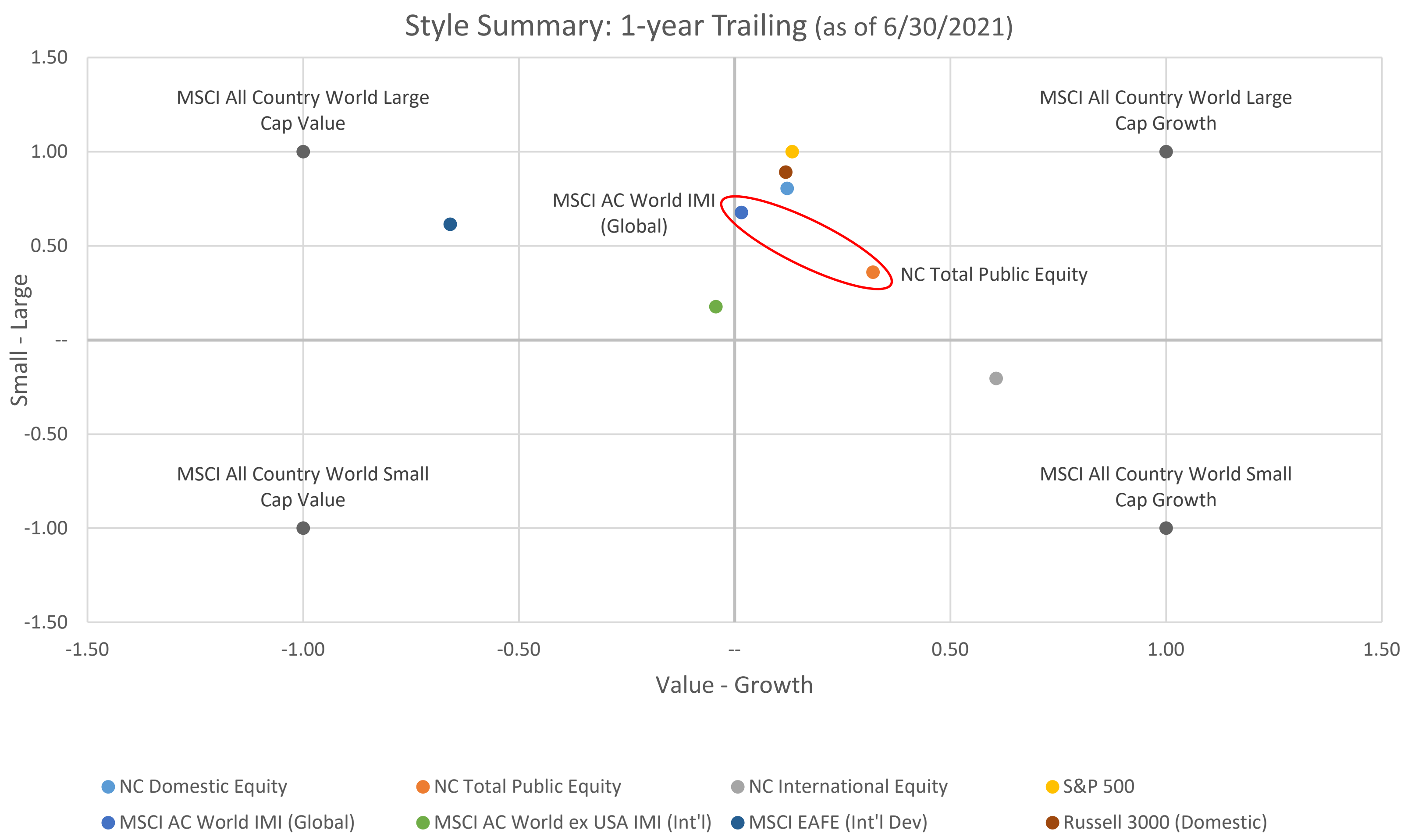


Equity Return Dispersion

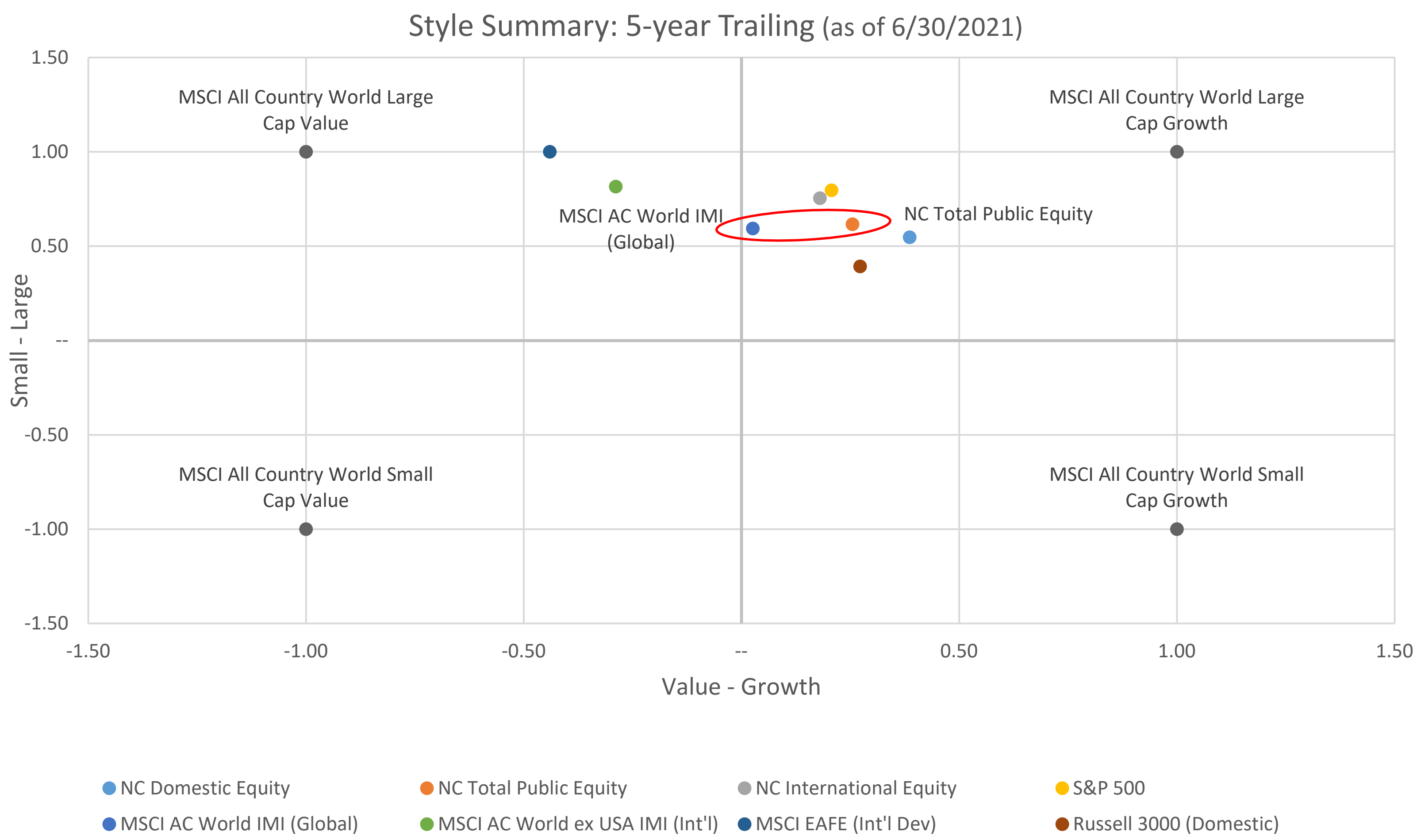


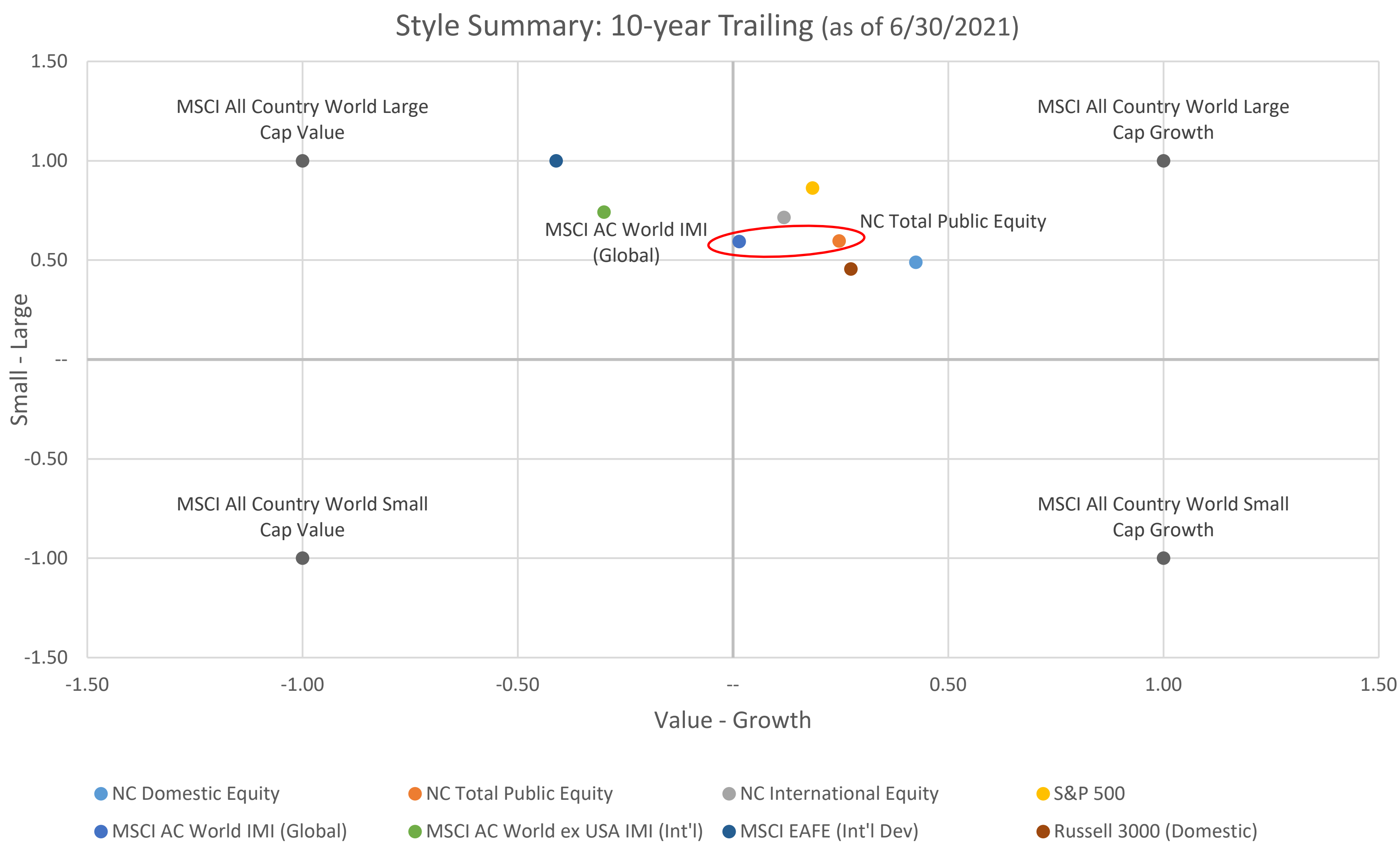
ANALYZING PUBLIC EQUITY STYLE PROFILE

Investment Management Division

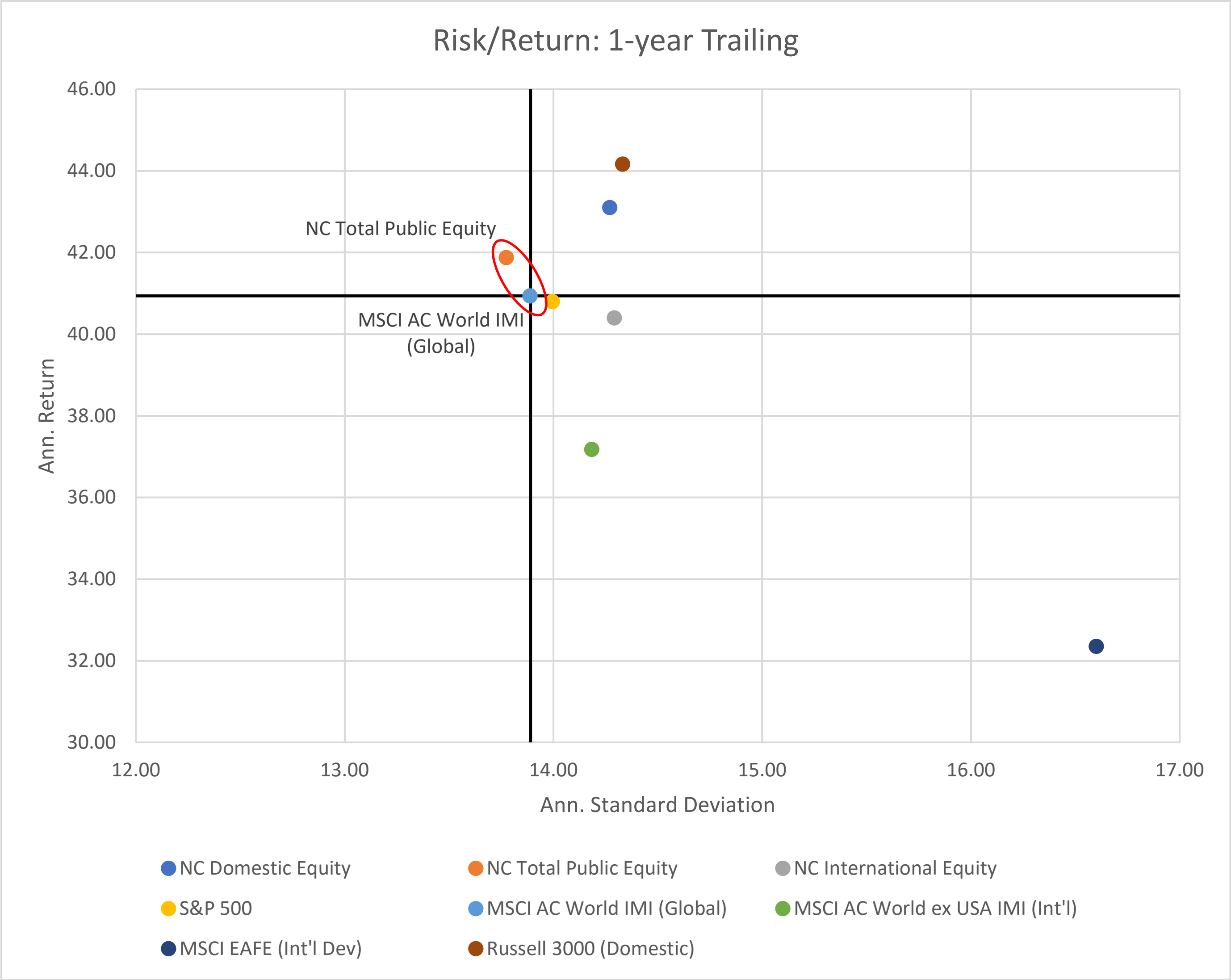


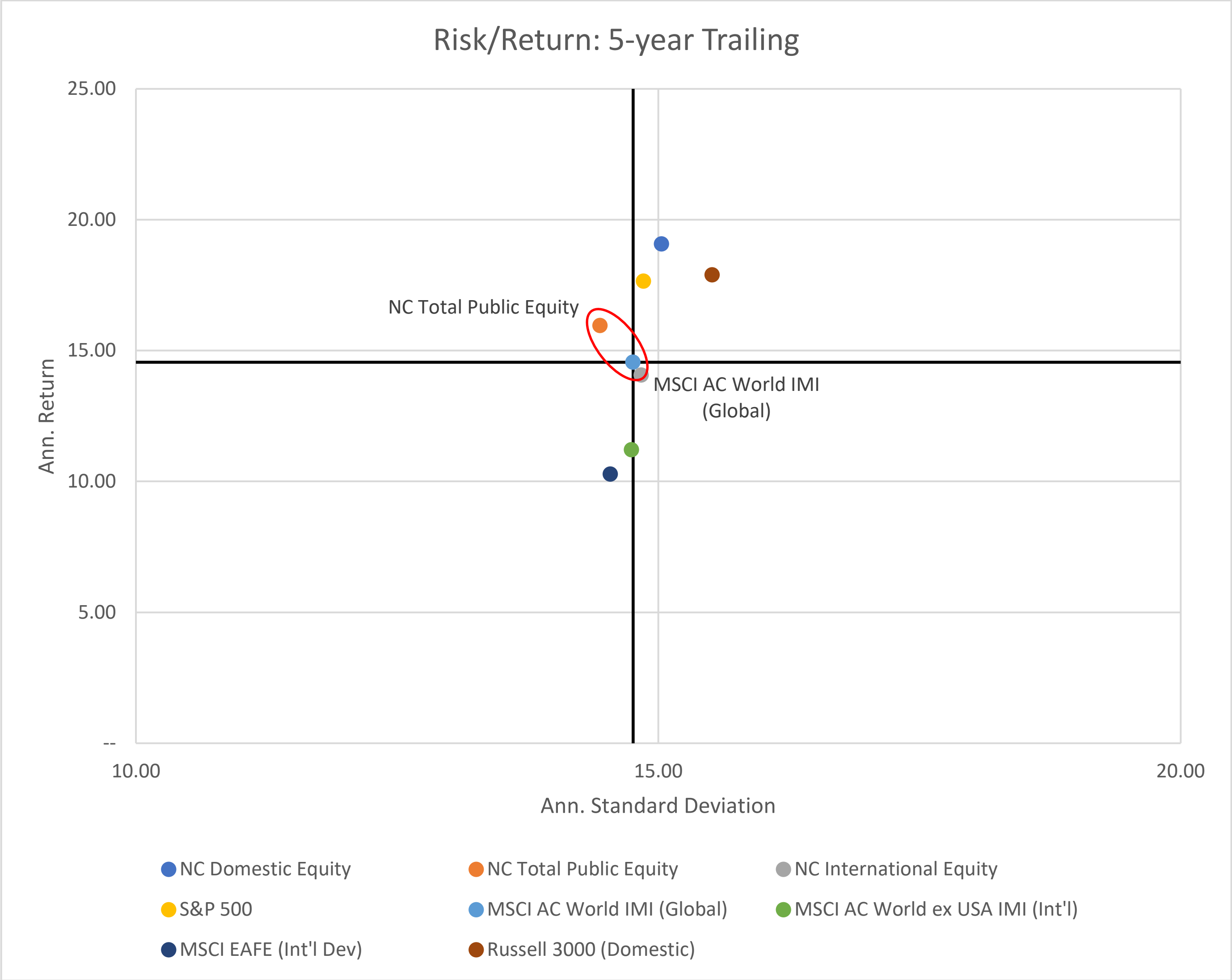
Investment Management Division




Style Summary: 10-year Trailing (as of 6/30/2021)
MSCI All Country World Large Cap Value
MSCI All Country World Large Cap Growth
MSCI AC World IMI (Global)
NC Total Public Equity
MSCI All Country World Small Cap Value
MSCI All Country World Small Cap Growth
Small - Large
Value - Growth
1.50
1.00
0.50
--
-0.50
-1.00
-1.50
NC Domestic Equity
NC Total Public Equity
NC International Equity
S&P 500
MSCI AC World IMI (Global)
MSCI AC World ex USA IMI (Int'l)
MSCI EAFE (Int'l Dev)
Russell 3000 (Domestic)

ANALYZING PUBLIC EQUITY RISK PROFILE


Risk/Return: 1-year Trailing
46.00
44.00
42.00
40.00
38.00
36.00
34.00
32.00
30.00
Ann. Return
12.00
13.00
14.00
15.00
16.00
17.00
Ann. Standard Deviation
NC Total Public Equity
MSCI AC World IMI (Global)
NC Domestic Equity
NC Total Public Equity
NC International Equity
S&P 500
MSCI AC World IMI (Global)
MSCI AC World ex USA IMI (Int'l)
MSCI EAFE (Int'l Dev)
Russell 3000 (Domestic)


Risk/Return: 5-year Trailing
25.00
20.00
15.00
10.00
5.00
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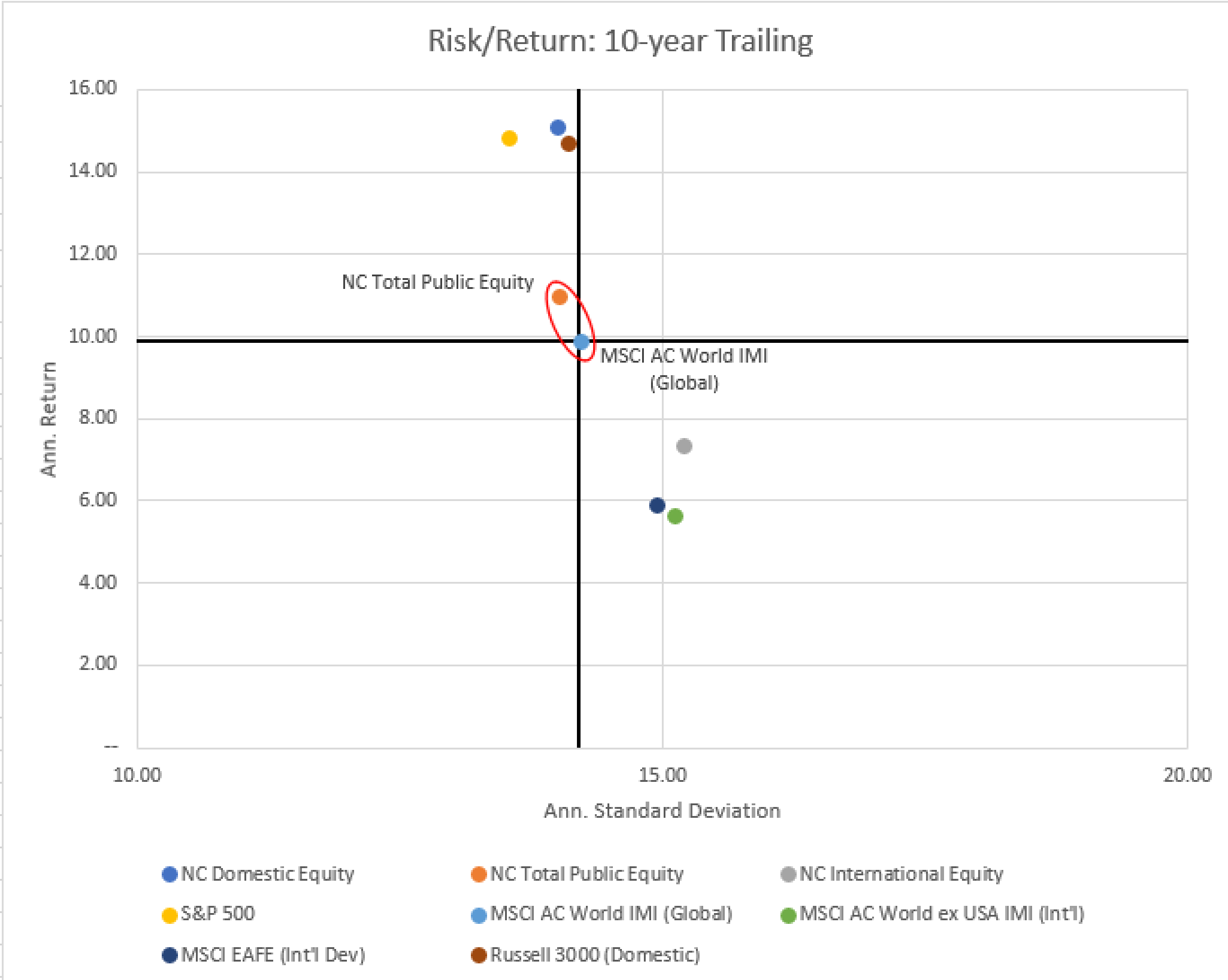
Ann. Return
10.00
15.00
20.00
Ann. Standard Deviation
NC Total Public Equity
MSCI AC World IMI
(Global)
NC Domestic Equity
NC Total Public Equity
NC International Equity
S&P 500
MSCI AC World IMI (Global)
MSCI AC World ex USA IMI (Int'l)
MSCI EAFE (Int'l Dev)
Russell 3000 (Domestic)

Investment Management Division



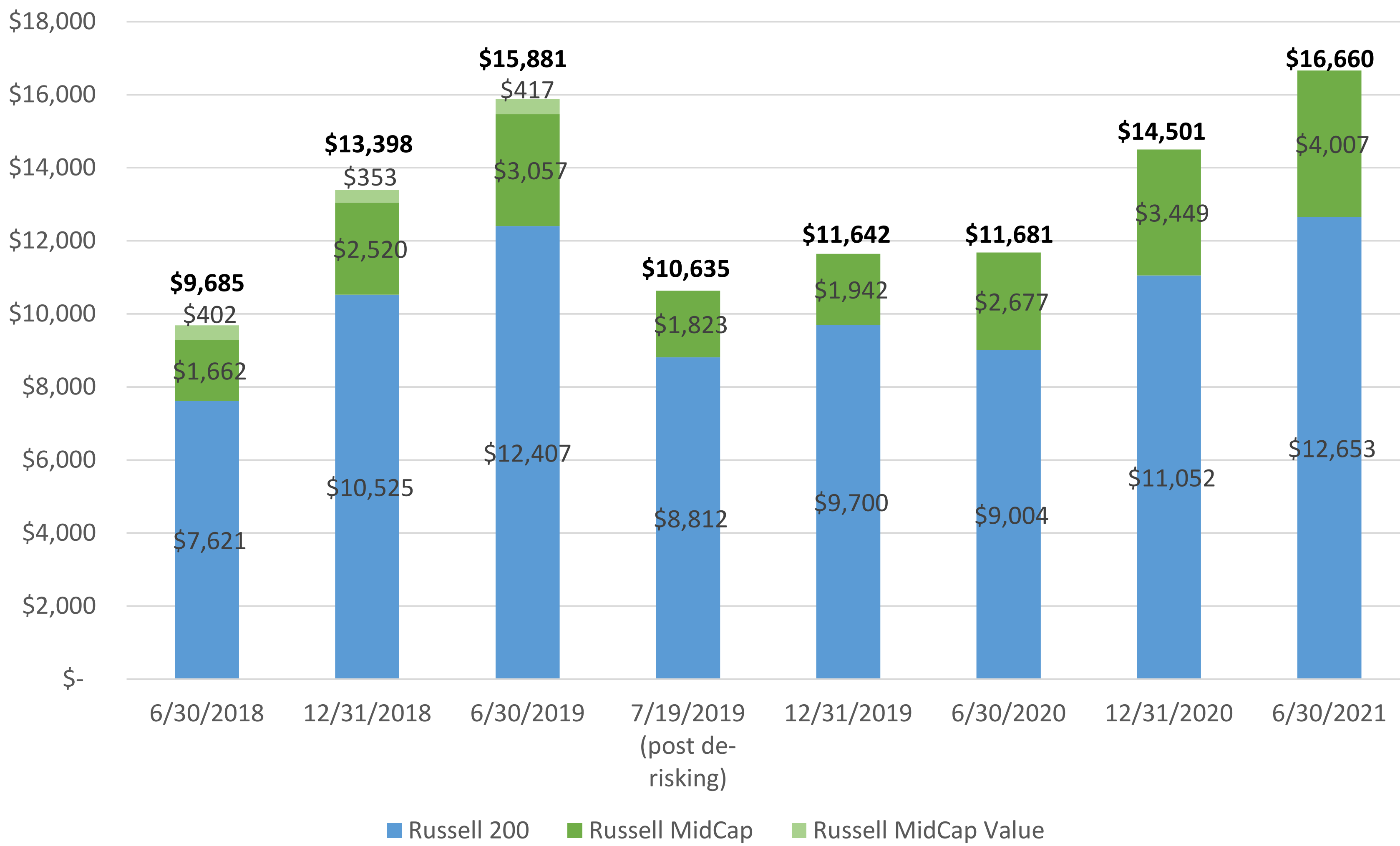
Public Equity - Internal Index Management

Russell Indices Annual Reconstitution (June 2021)

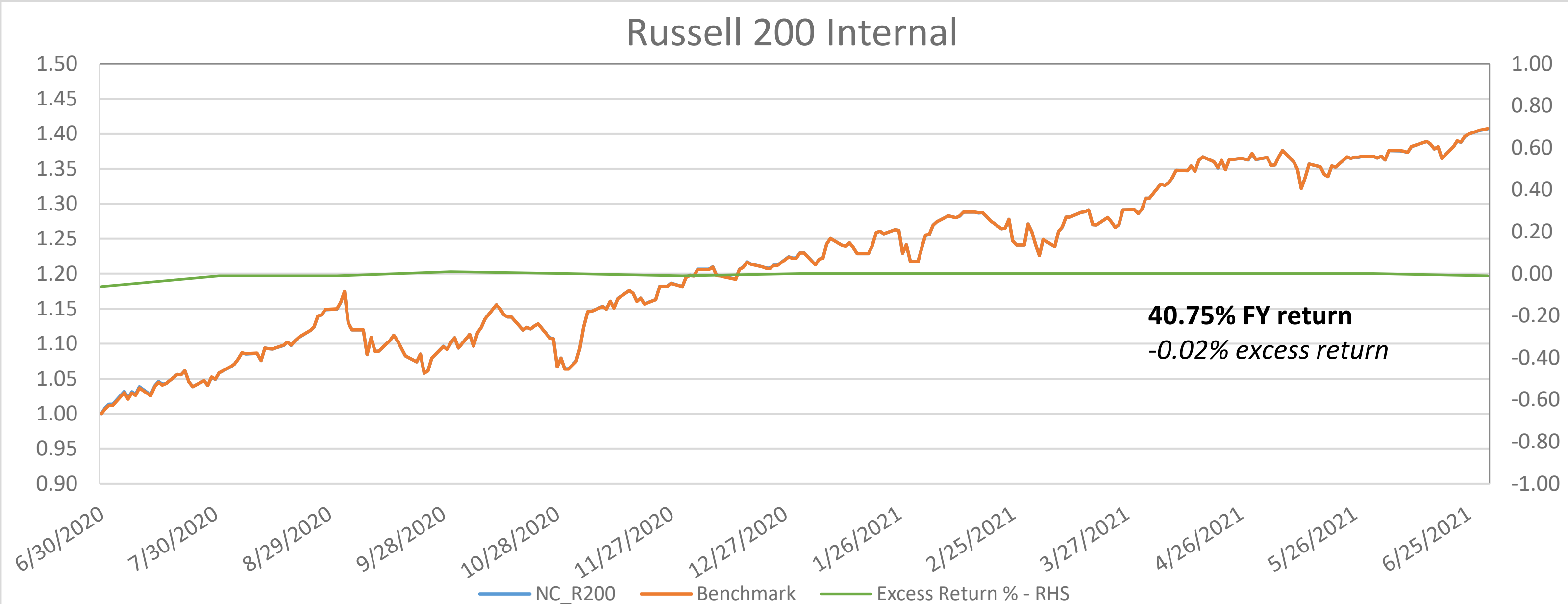
NCRS Account	No of shares Held	No of shares Traded	No of shares Transferred	Turnover (%)
Russell 200	91,484,902	2,656,879	3,323,555	2.29%
Russell Mid Cap	54,452,930	7,891,039	3,323,555	9.48%
Total	**145,937,832**	**10,547,918**	**6,647,110**	**4.03%**

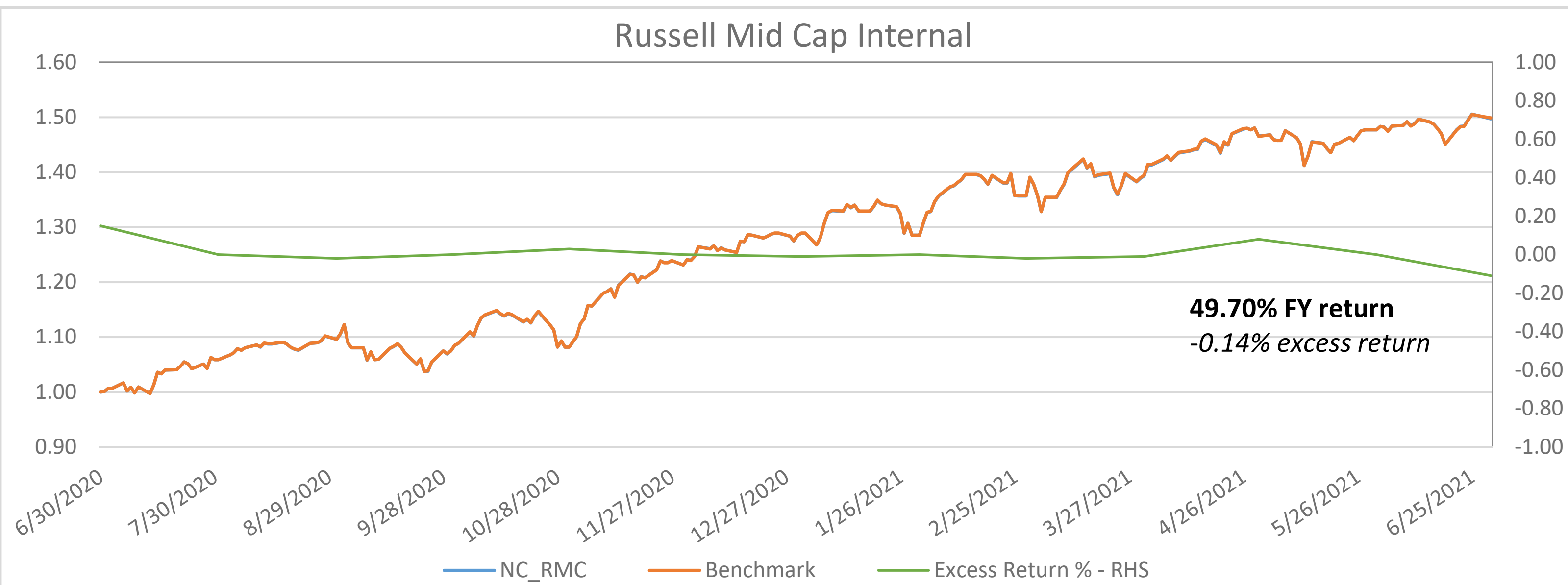
- **1,074** names and **10.5MM** shares traded; gross market value of **$892MM**.
- Negotiated very competitive broker commission rates < **0.25c** per share; **$20,771** total explicit cost.
- Transferred **6.6MM** shares (market value of **$219MM**) between custodial accounts for securities migrating between indices; avoided trade-related costs for transferred shares.

Internal Passive Equity AUM (MM's)



Performance (Fiscal Year 2020 - 2021)





WRAP-UP

2021-2022 STRATEGIC GOALS

- Rebalance total Public Equity portfolio
- Grow Public Equity's internal management capabilities

APPENDIX

Trend Watch: US Value vs. Growth

Value vs. growth since 2010

- 2010 to 2017: relative P/E multiples were stable (even as growth outperformed value).
- Growth stock rally was driven by much faster earnings growth (i.e., growth outperformed value as investors paid up for faster earnings growth).
- Since 2017, huge divergence in multiples between value and growth.

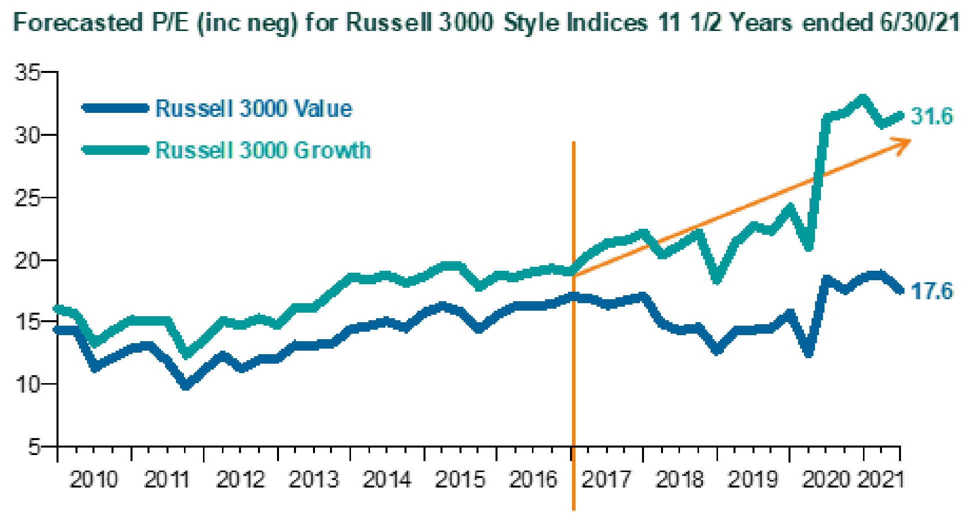
Recent trend

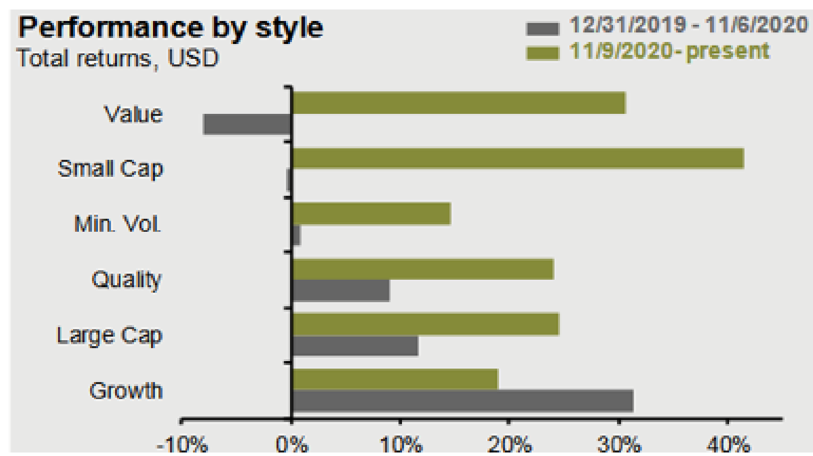
- Vaccine news/roll-out provided a catalyst for market rotation into value/cyclicals in 4Q20 and 1Q21.
- In June 2021, the Fed moved up its timeline for rate hikes, prompting a shift back to growth stocks.

Bottom line

- The market leadership of value stocks lasted roughly two quarters, not long enough to recapture the underperformance relative to growth stocks over the last decade. Inflation and interest rates could dictate whether growth or value will outperform in the coming quarters.
- Rising rates may not necessarily hurt equity markets; since February 2009, stock returns and 10-year Treasury yields exhibited positive 2-year correlation until yields rose to 3.6%.

Source: JPMorgan



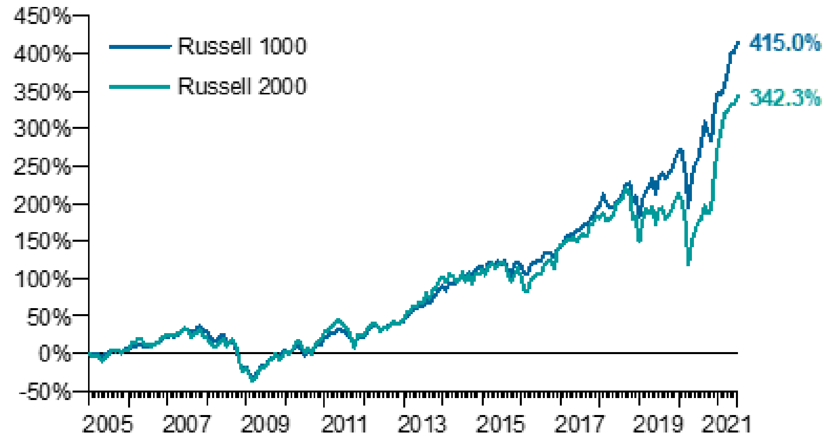


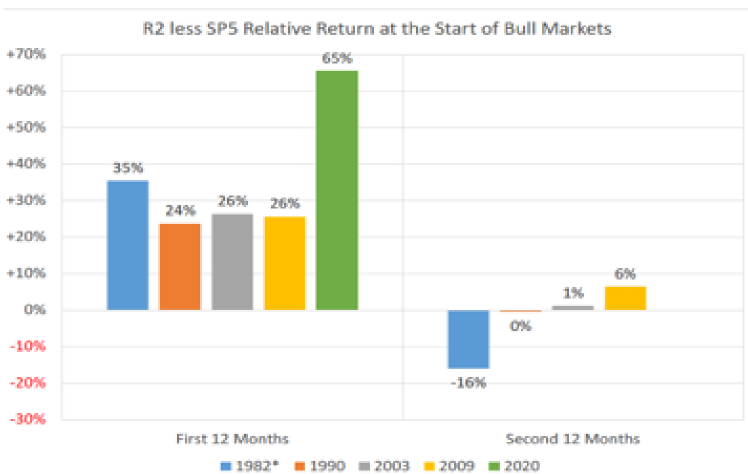
Source: Callan Associates

Trend Reversal: US Large Cap Recaptures Market Leadership

– Since 2005, cumulative returns for broad large cap and small cap indices were in lock-step until 4Q18.
– In 2Q21, Russell 1000 increased by 8.5%, ending a two-quarter streak in which small cap stocks outperformed large.
– After cyclical stocks led the market for the prior two quarters, mega-cap Technology stocks (e.g., MSFT, GOOG, FB, etc.) outperformed in 2Q. This helped the Russell 1000 beat the Russell 2000 Index. For the year, the two best-performing sectors are Energy and Financials.
– Historically, small cap stocks have outperformed in the first 12 months of market recoveries. They tend to underperform in the ensuing 12 months.

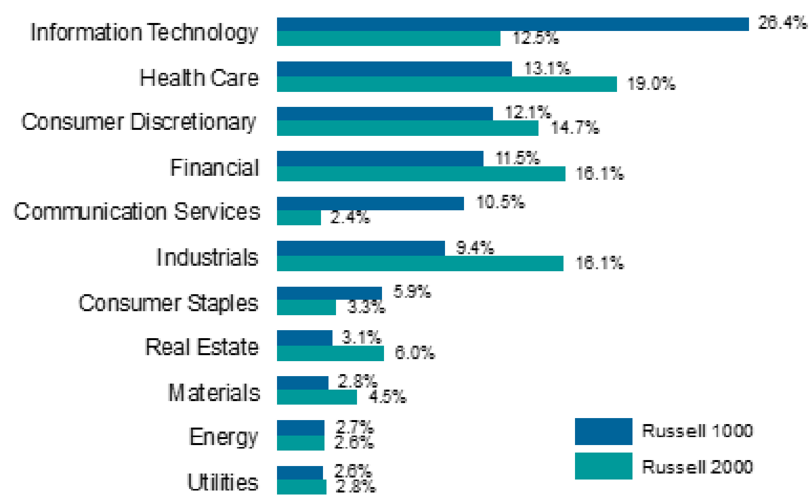
Cumulative Returns for Russell Indices as of June 30, 2021





Sources: FTSE Russell, Furey Research Partners, S&P Dow Jones Indices

Sector Weights as of June 30, 2021



Source: Callan Associates