

Undergraduate Student Investment Management Fund

Spring 2018 Presentation

Fund Manager



Ernest Dela Cruz

Fund Analysts



Kevin Bergauer



Jeremy Liu



Joshua Harter



Thomas Henning



Brian Stewart



Kyle McCall



Gage Schrantz

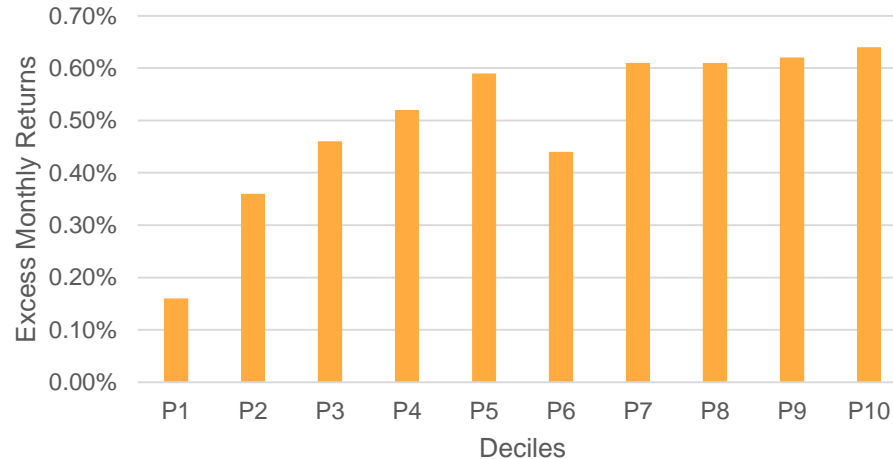


Andrew Kudlinski

Strategy Overview

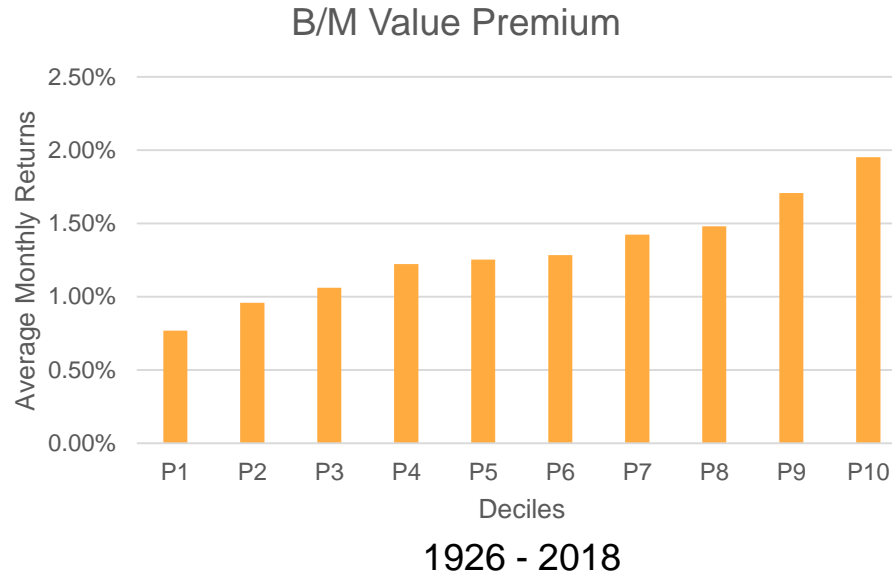
Profitability

Cash-based Operating Profitability Premium

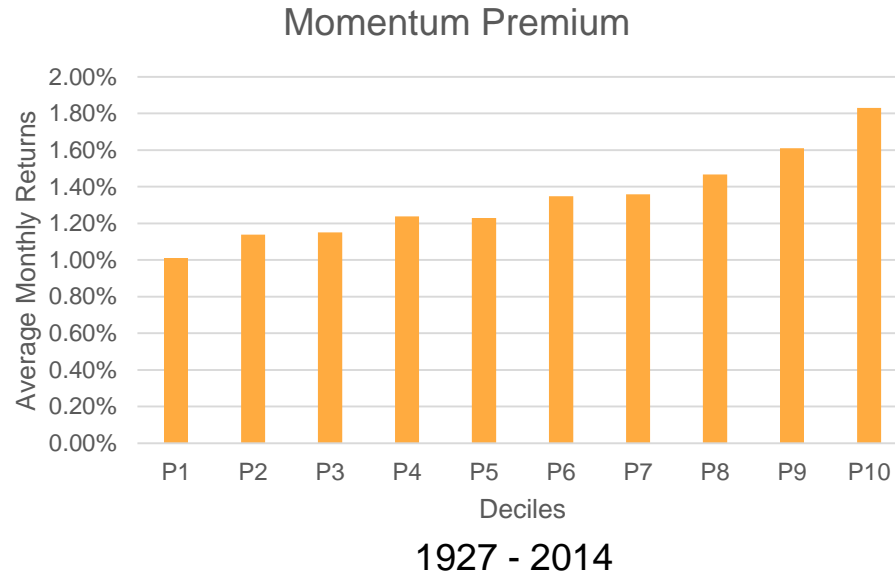


1963 - 2014

Value



Momentum



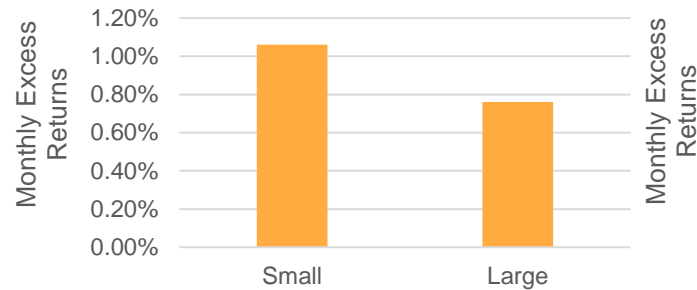
Premia By Size

Momentum: High Returns – Low Returns

Profitability: Profitable - Unprofitable

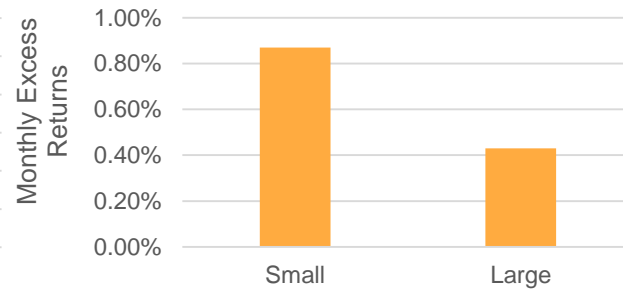
Value: Value - Growth

Momentum Excess Returns



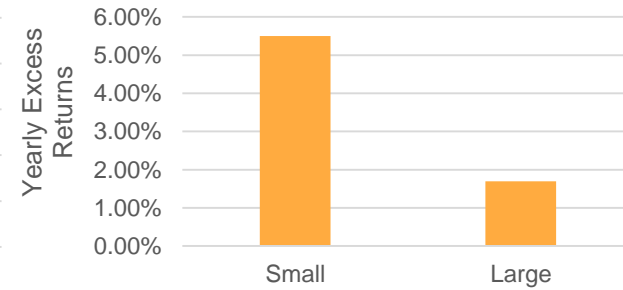
1965 - 1989

Profitability Excess Returns



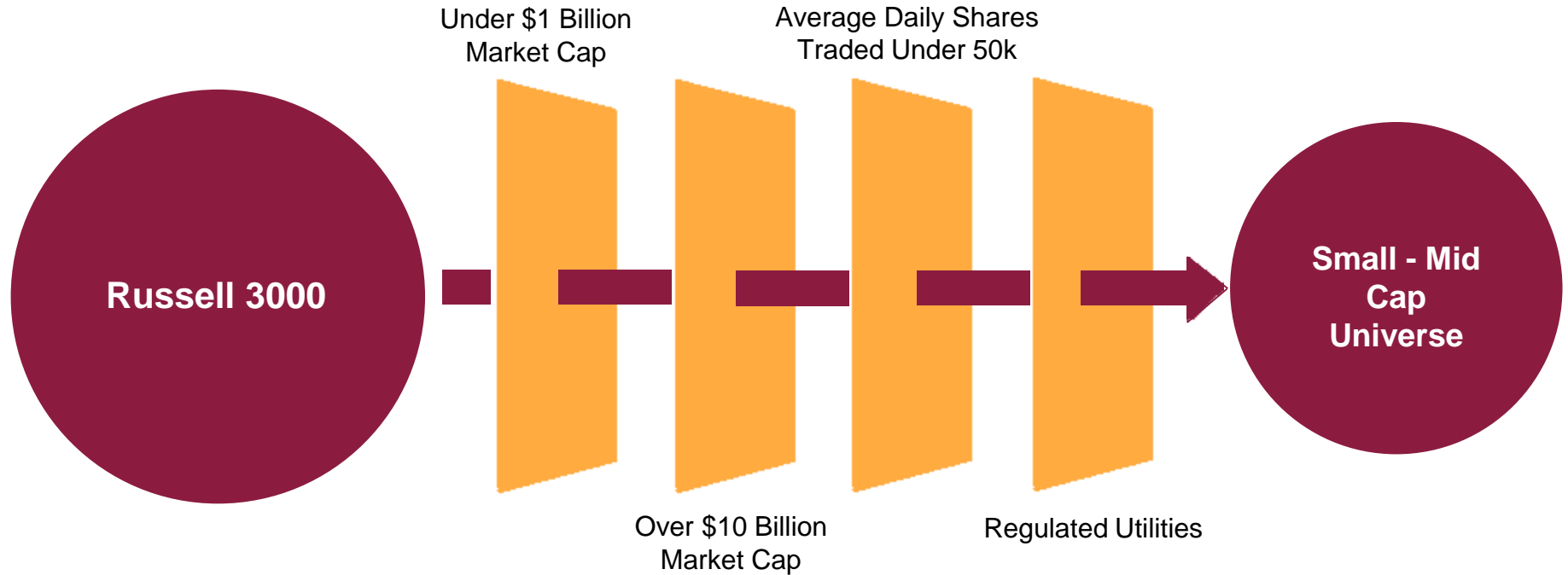
1963 - 2014

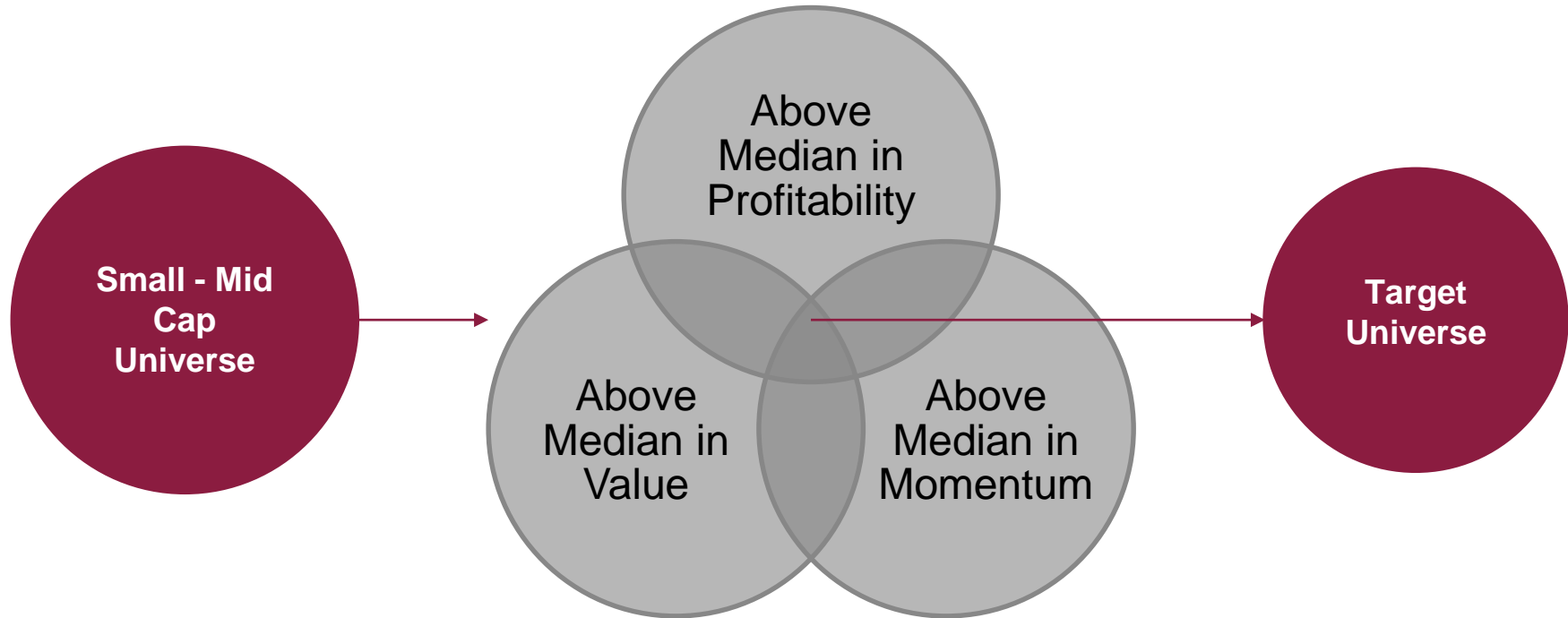
Value Excess Returns

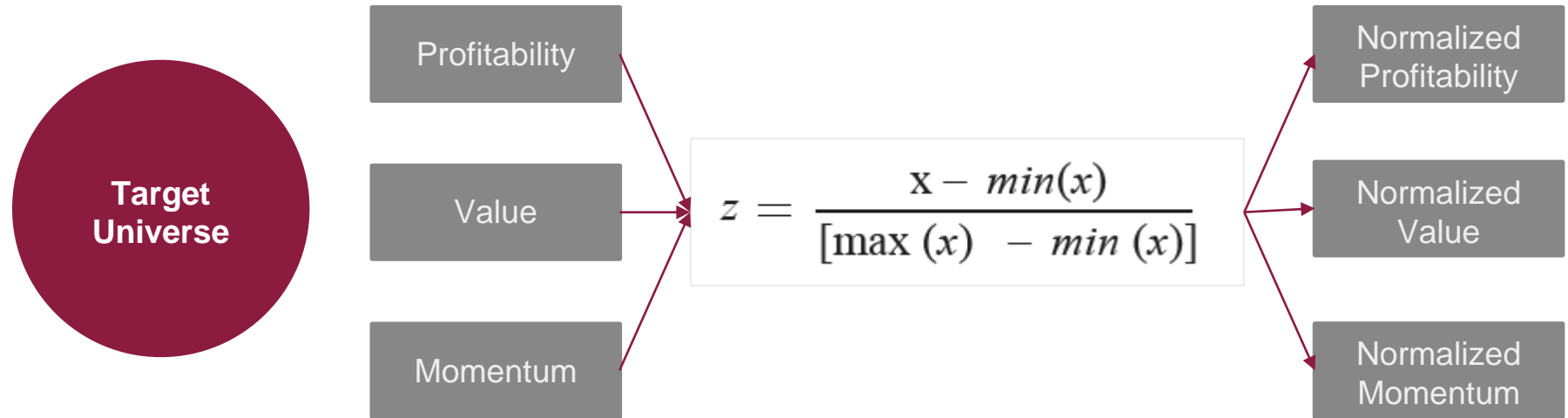


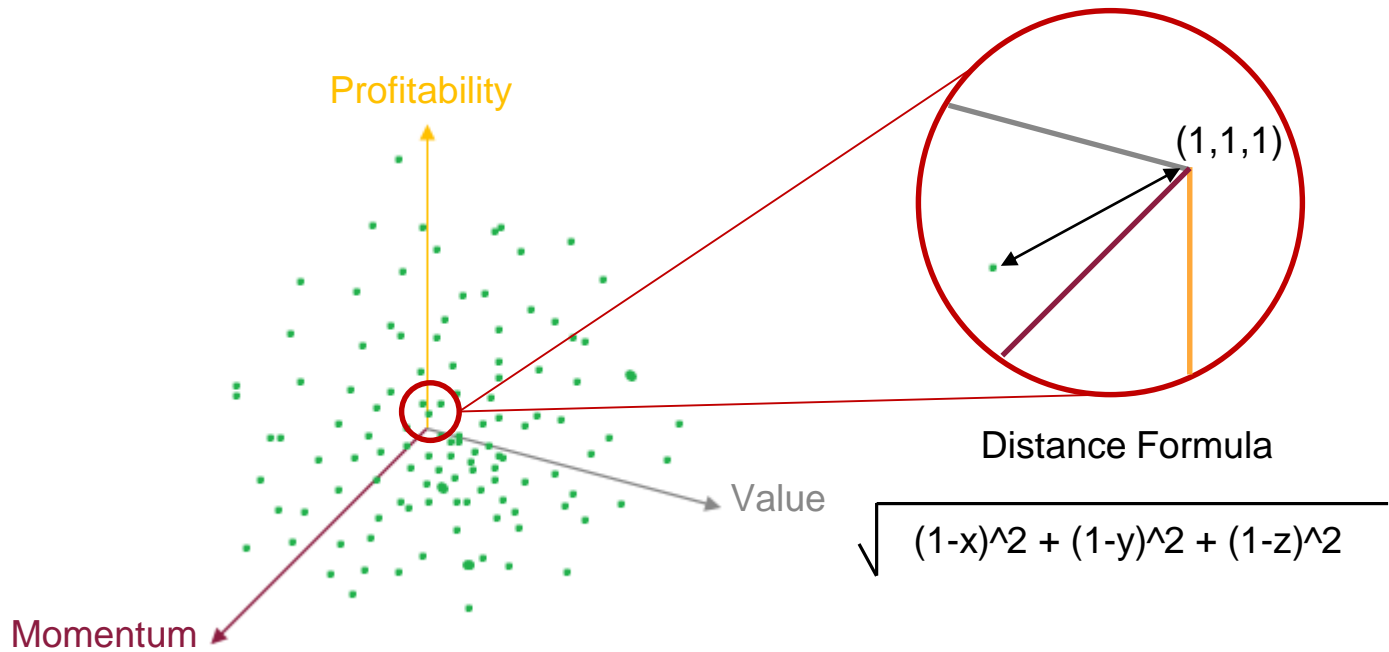
1926 - 2014

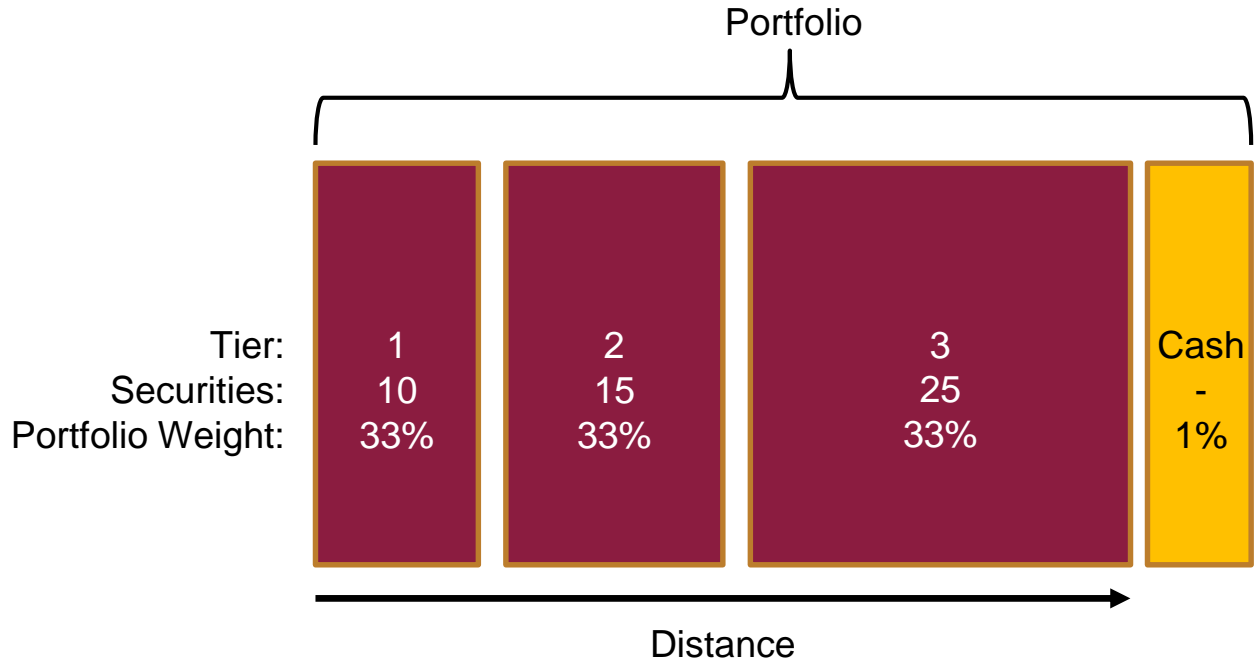
Seed Process



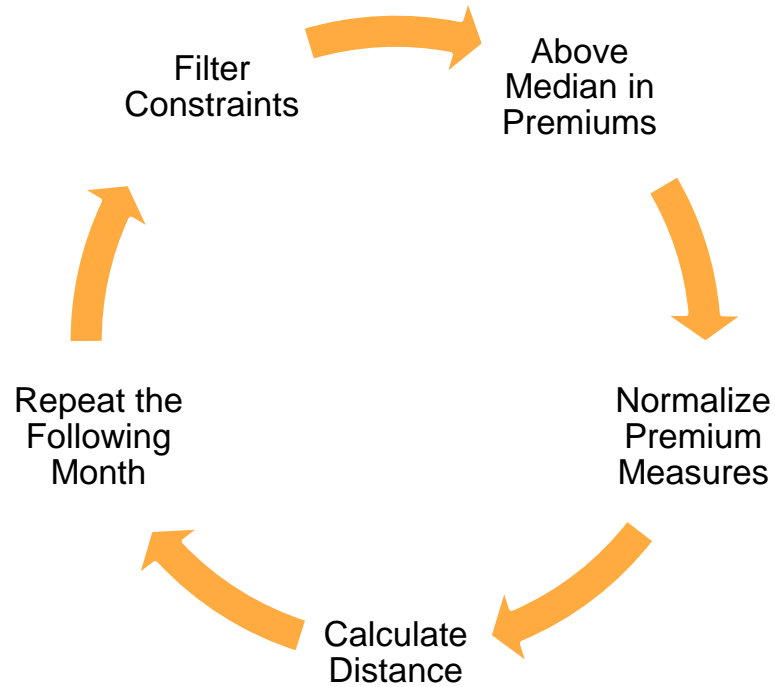




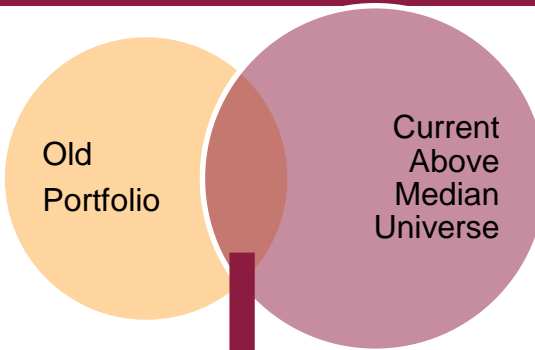




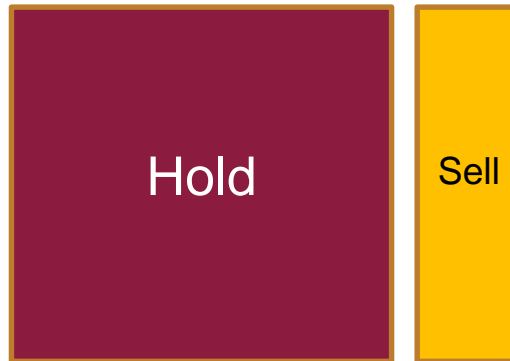
Rebalance Process

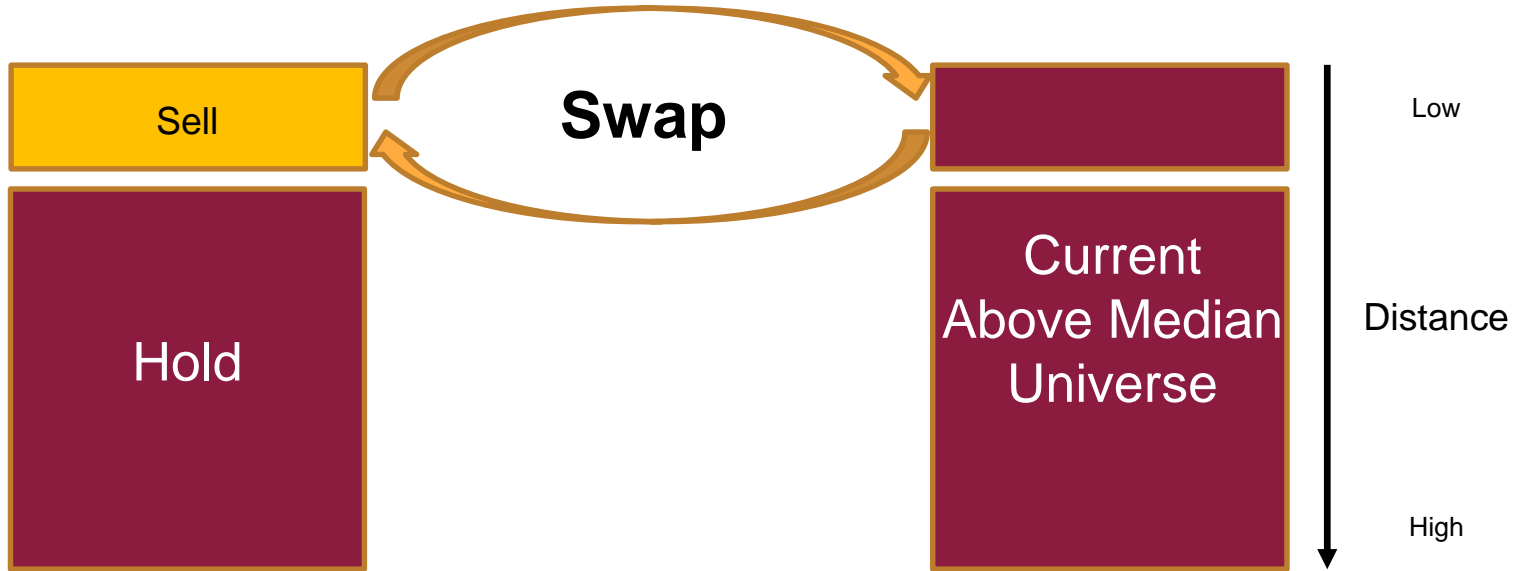


Created in the
Previous Month



Created in the
Current Month

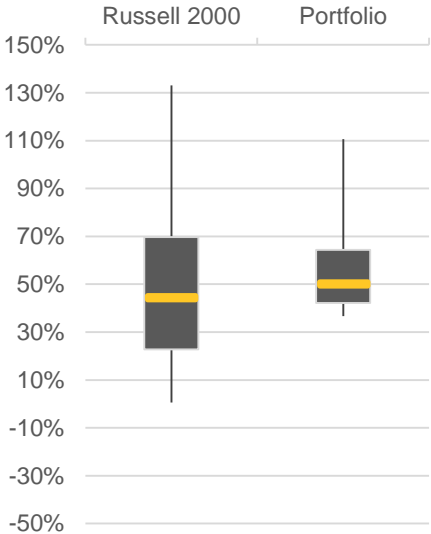




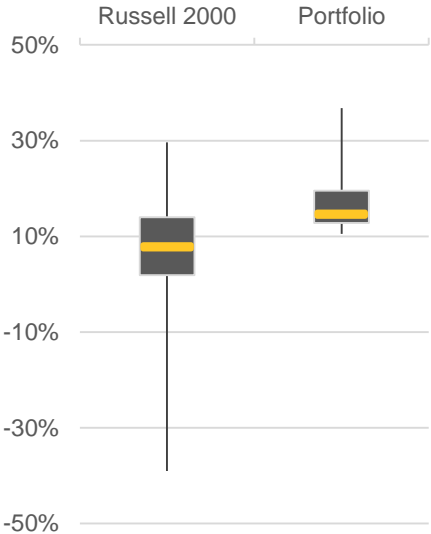
Outcome

Factor Tilts

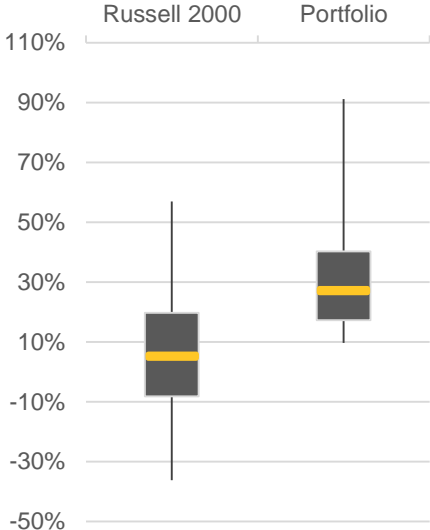
Value



Profitability

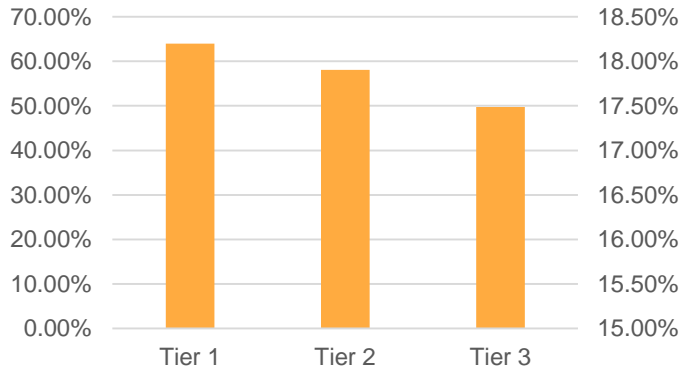


Momentum

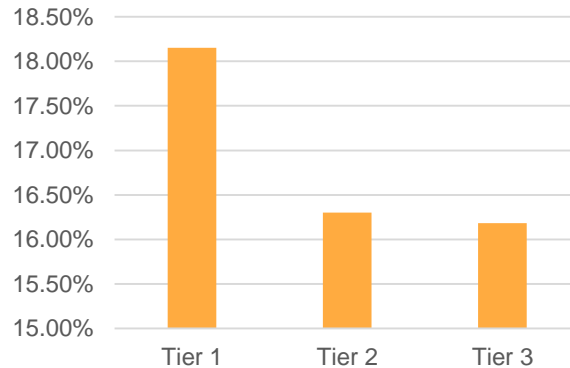


Average Exposure By Tier

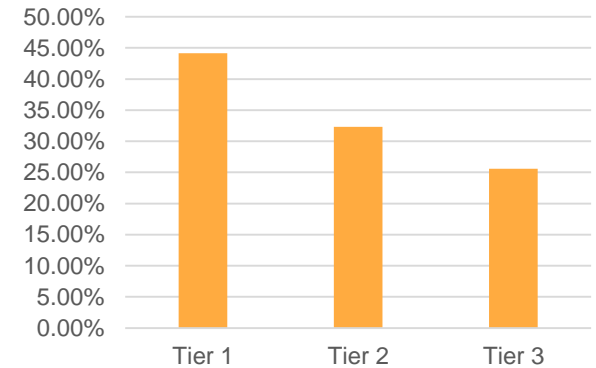
Average Value



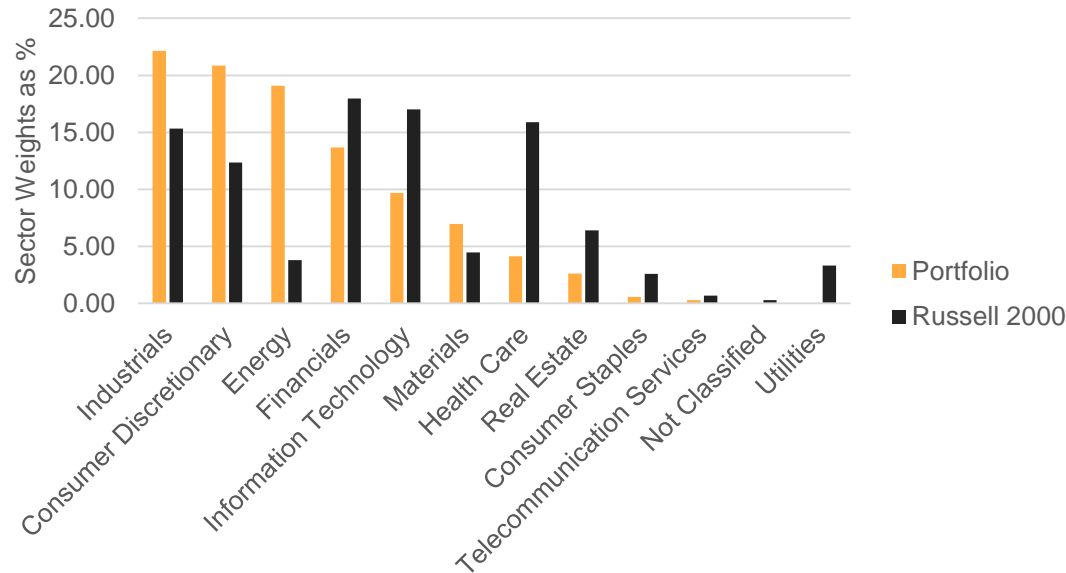
Average Profitability



Average Momentum

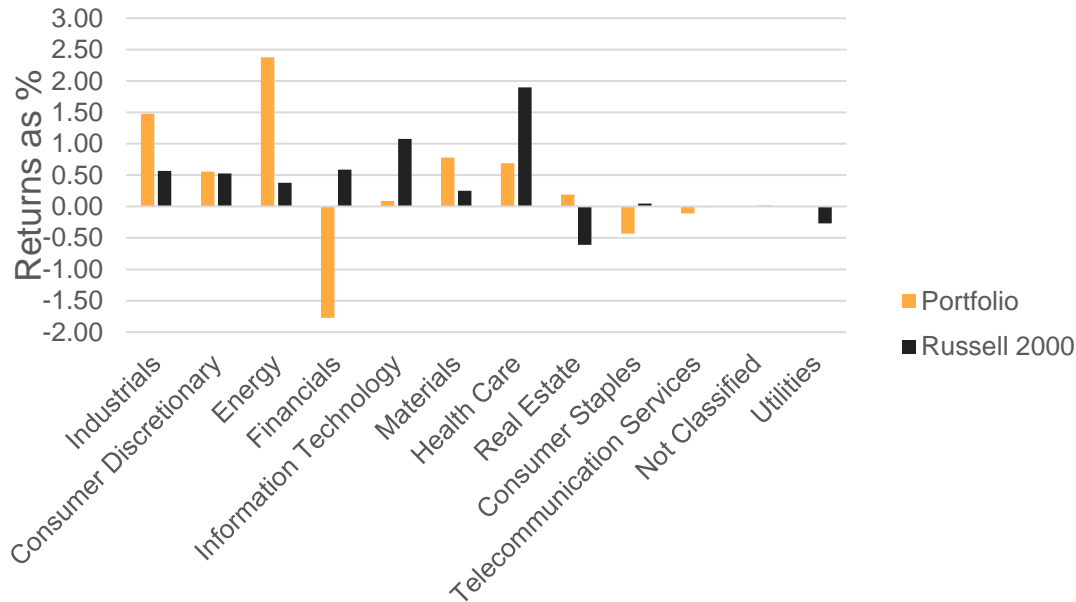


Sector Distribution



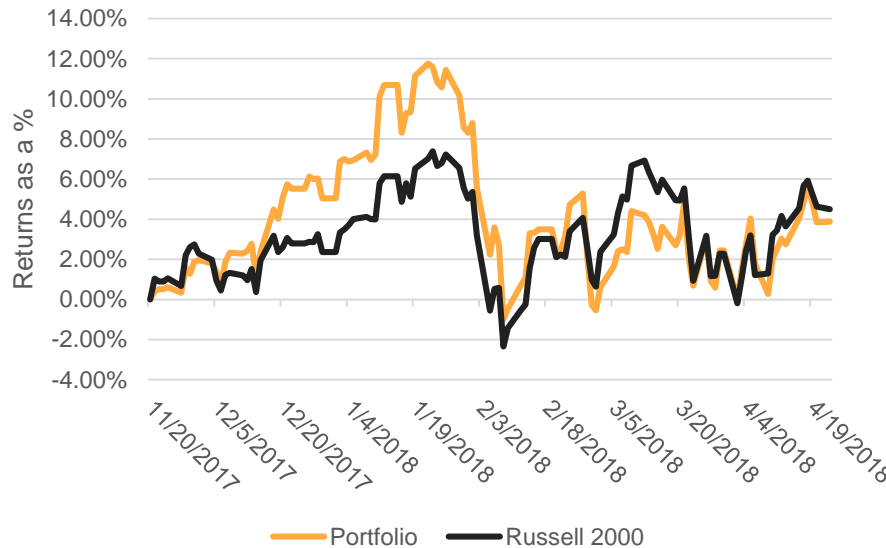
Sectors	Portfolio	Russell 2000
Industrials	22.16	15.34
Consumer Discretionary	20.86	12.34
Energy	19.10	3.80
Financials	13.66	17.96
Information Technology	9.68	17.00
Materials	6.96	4.47
Health Care	4.12	15.90
Real Estate	2.60	6.39
Consumer Staples	0.57	2.58
Telecommunication Services	0.29	0.68
Not Classified	0.00	0.28
Utilities	0.00	3.32

Return Contributions By Sector



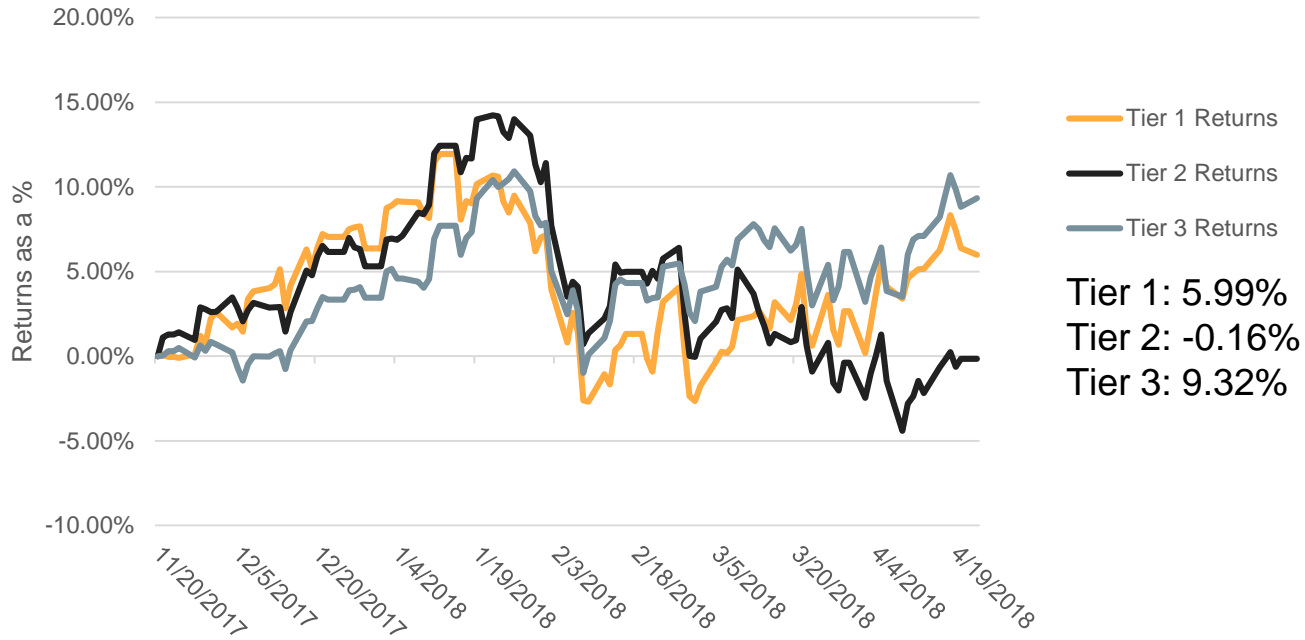
Sectors	Portfolio	Russell 2000
Industrials	1.48	0.57
Consumer Discretionary	0.56	0.53
Energy	2.38	0.38
Financials	-1.77	0.59
Information Technology	0.09	1.08
Materials	0.78	0.25
Health Care	0.69	1.90
Real Estate	0.19	-0.61
Consumer Staples	-0.43	0.05
Telecommunication Services	-0.11	-0.01
Not Classified	0.00	0.01
Utilities	0.00	-0.27

Portfolio Returns

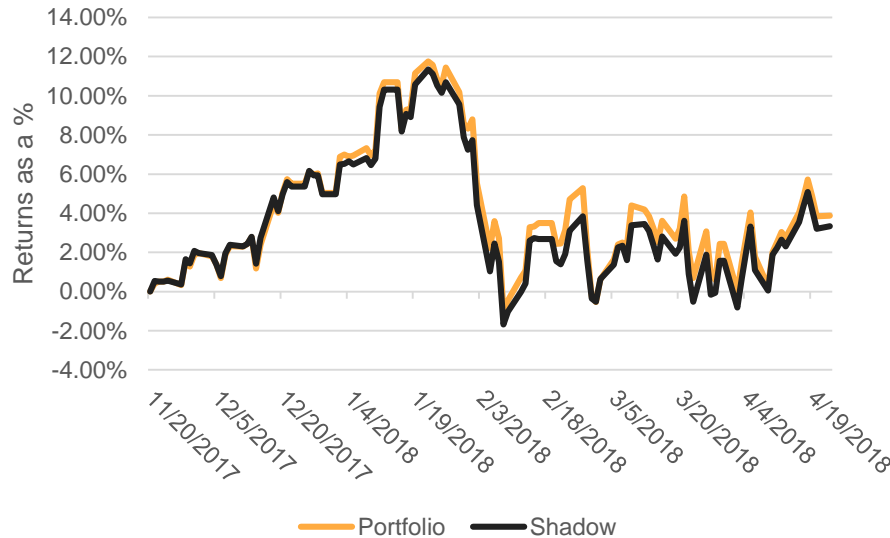


Portfolio: 3.87%
Russell 2000: 4.49%

Tier Returns



Shadow Portfolio Returns

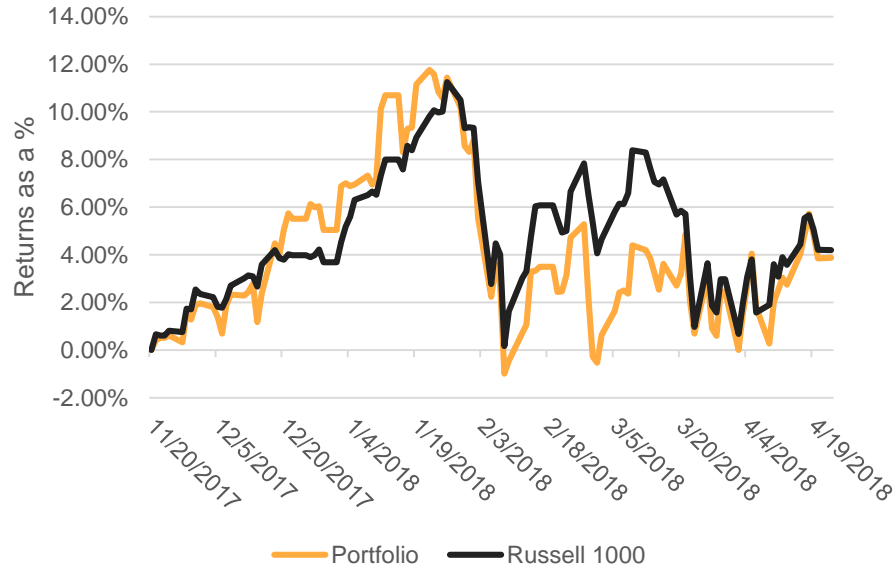


Portfolio: 3.87%
Shadow: 3.33%

Thank you. We will now welcome questions.

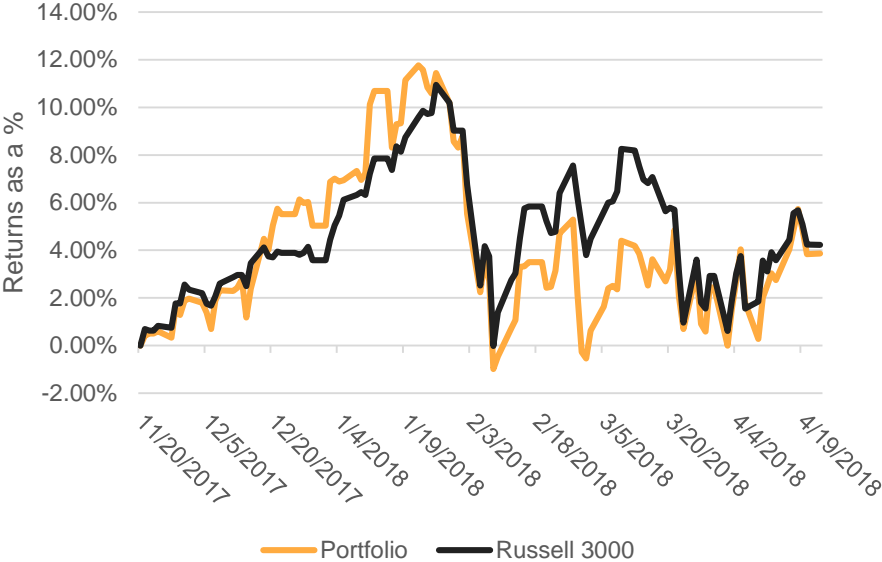
Appendix

Benchmark Returns (Russell 1000)



Portfolio: 3.87%
Russell 1000: 4.20%

Benchmark Returns (Russell 3000)



Portfolio: 3.87%
 Russell 3000: 4.22%

Trading Costs & Turnover

- \$1,733 In Total Trading Costs
- Total Turnover Since Portfolio Inception: 93.8%
- Annualized Turnover: 281.41%

Worst Performers

Security	Average Weight (%)	Total Return (%)	Contribution to Return (5)
VISHAY INTERTECHNOLOGY INC	1.26	-17.72	-0.40
NMI HOLDINGS INC-CLASS A	0.64	-34.33	-0.79
MGIC INVESTMENT CORP	2.07	-29.46	-0.66
ESSENT GROUP LTD	2.11	-23.50	-0.52
SANDERSON FARMS INC	0.57	-12.74	-0.43
SANTANDER CONSUMER USA HOLDI	2.09	-10.57	-0.34
MEDNAX INC	0.29	-8.52	-0.07
MODINE MANUFACTURING CO	3.19	-13.73	-0.51
ENSIGN GROUP INC/THE	0.50	0.33	0.00
MEDPACE HOLDINGS INC	2.17	2.94	0.07

Profitability

Calculation used for premium measure:
$$\frac{\text{Cash Flow From Operations} - \text{Net Income} + \text{Operating Income}}{\text{Total Assets}}$$

Paper used: *Accruals, Cash Flows, and Operating Profitability in the Cross Section of Stock Returns*
Ball, Gerakos, Linnainmaa and Nikolaev (2015)

Value

Calculation used for premium measure:
$$\frac{\textit{Book Equity}}{\textit{Market Capitalization}}$$

Paper used: *Fact, Fiction, and Value Investing*
Asness, Frazzini, Israel and Moskowitz (2015)

Momentum

Calculation used for premium measure: $\frac{\text{Current Value}}{\text{Prior 6 Months Value}} - 1$

Paper used: *Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency*
Jegadeesh and Titman (1993)

Undergraduate Student
Investment Management
Fund 2018

Meet the Team

Fund
Manager



Paige
Weisman

Fund
Analysts



Michael
Barger



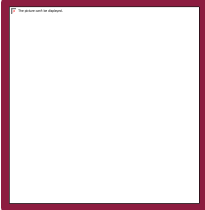
Peter
Hurtado



Chris
Nuccio



Elena
Pham



Drezden
Plotkin



Caleb
Skogen



Steven
Urry



Jerry
Zhang

1

Strategy + Implementation

2

Characteristics

3

Returns + Attribution

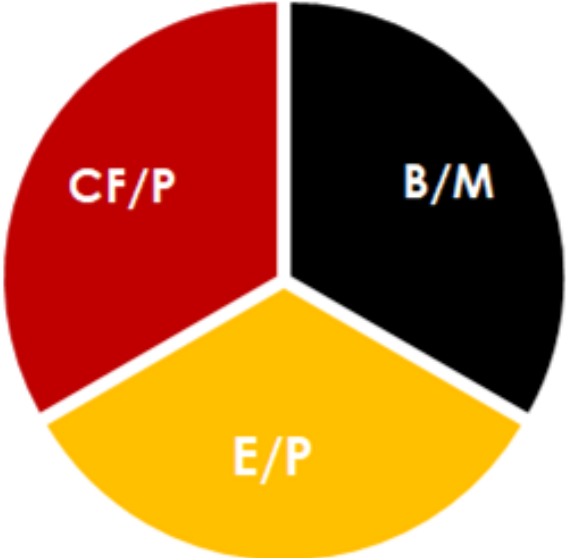
4

Shadow Portfolios

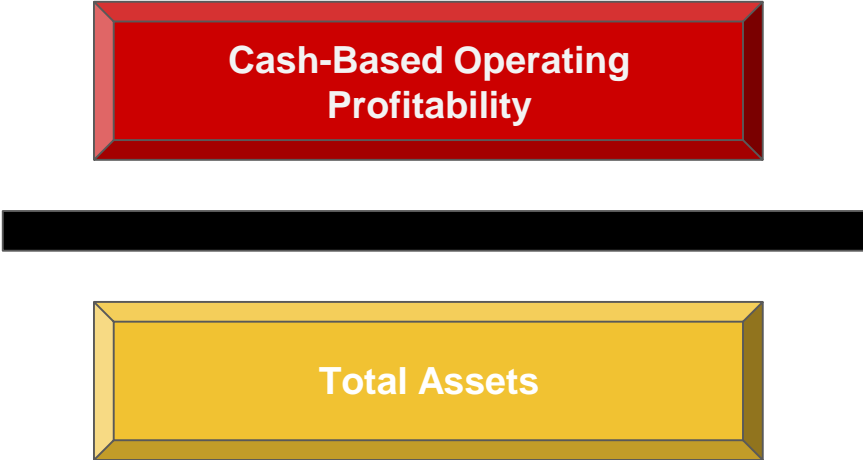
Agenda

Strategy and Implementation

Measures

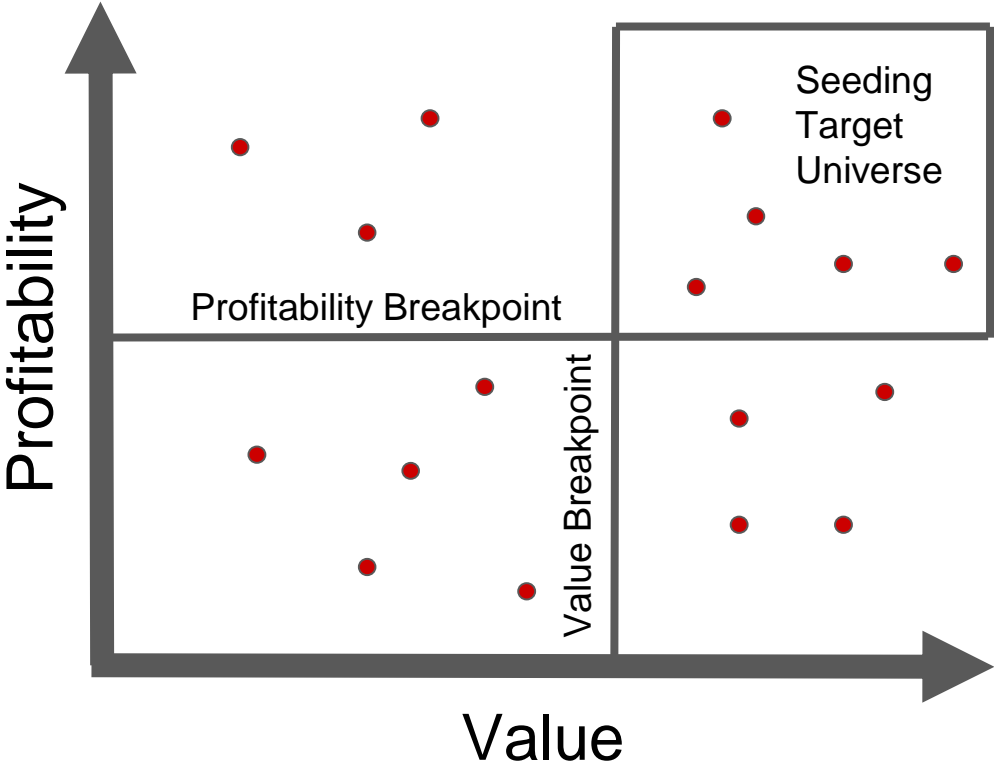


Value Measure



Profitability Measure

Sector Breakpoints



Security Selection Example: Financials

Security	Market Cap (B)	Profitability Measure	Value Measure	Value Rank
A	24.60	0.132	0.469	2
B	17.27	0.138	0.450	3
C	30.23	0.144	0.808	1
D	11.27	0.141	0.442	4

Security Selection Example: Financials



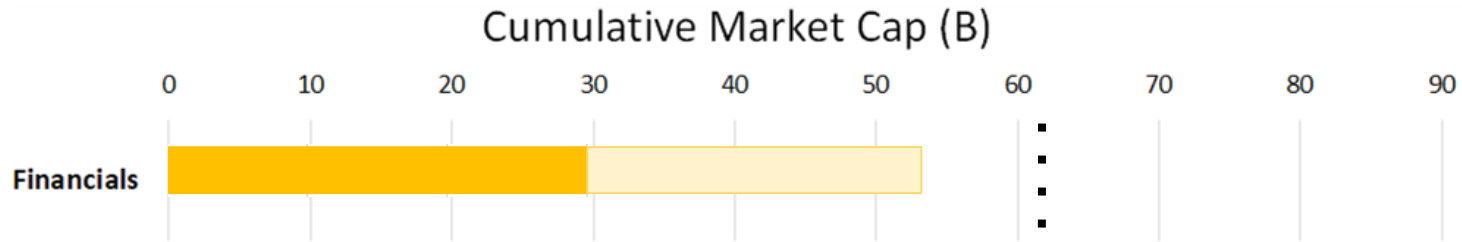
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Security Selection Example: Financials



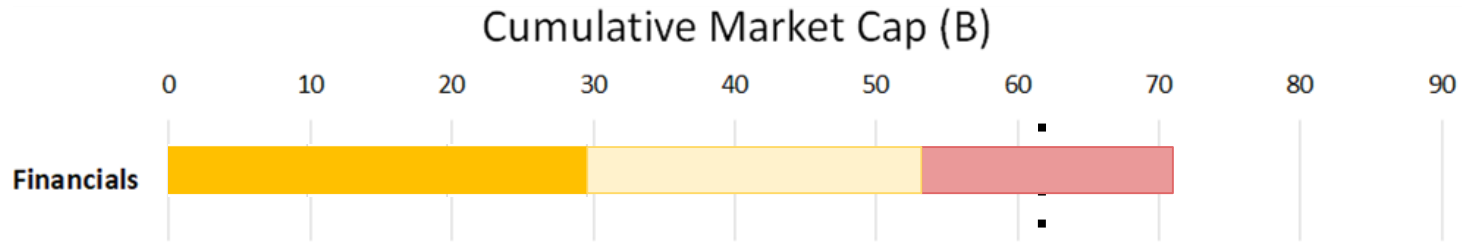
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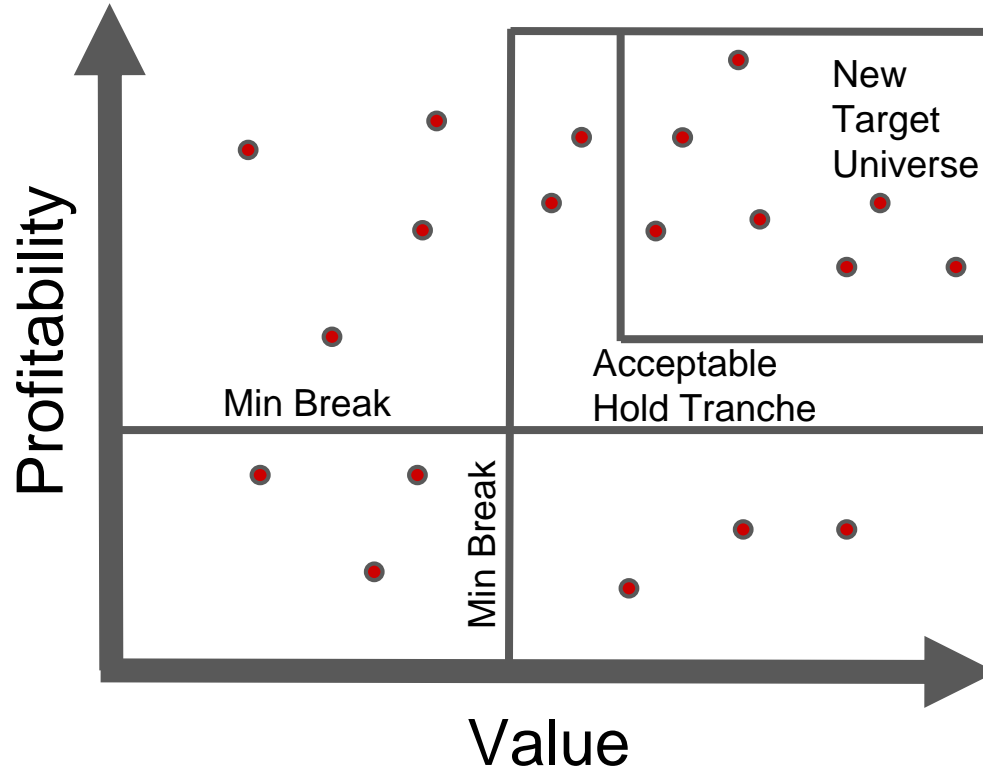
Security Selection Example: Financials



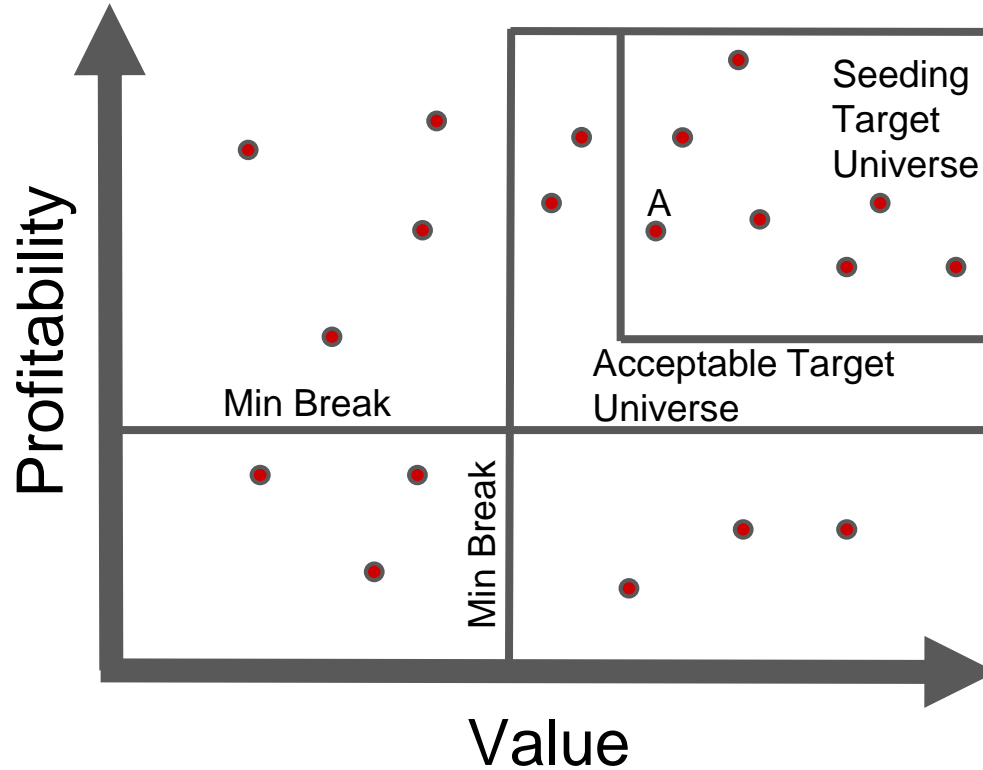
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Rebalancing

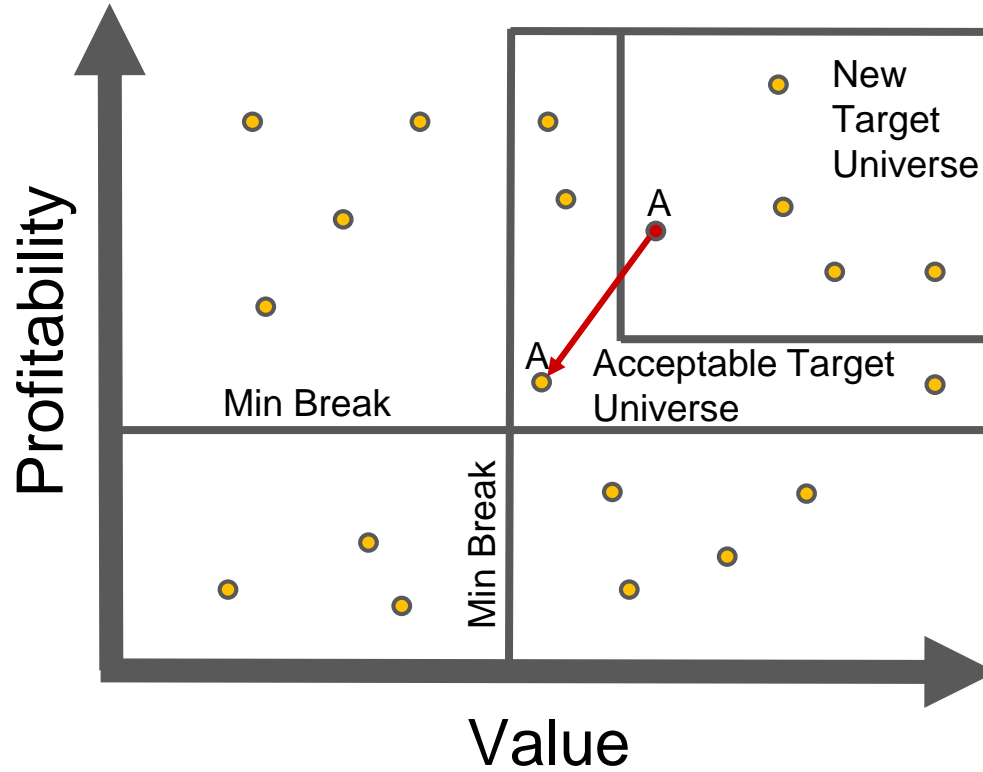
Breakpoints



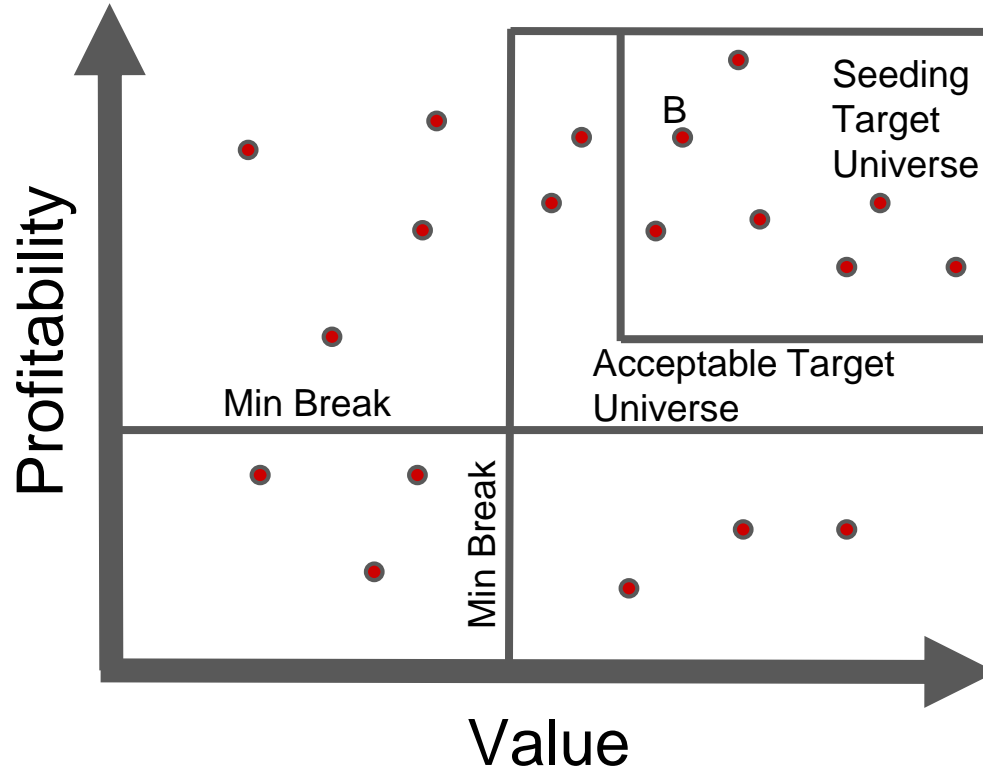
Hold Example



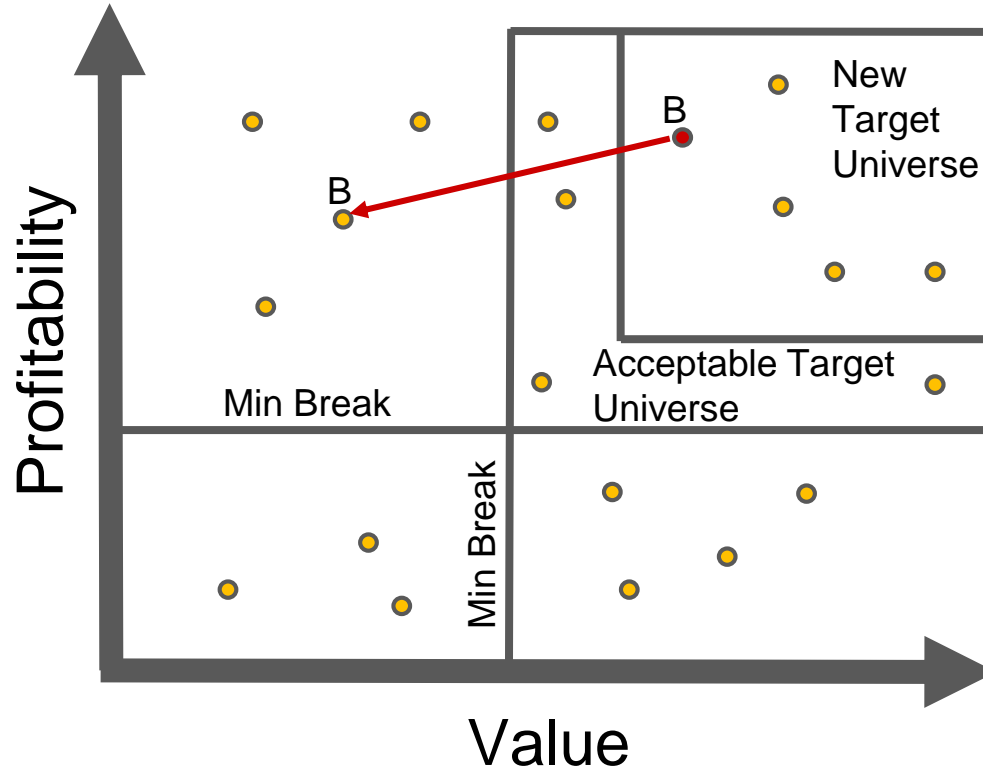
Hold Example



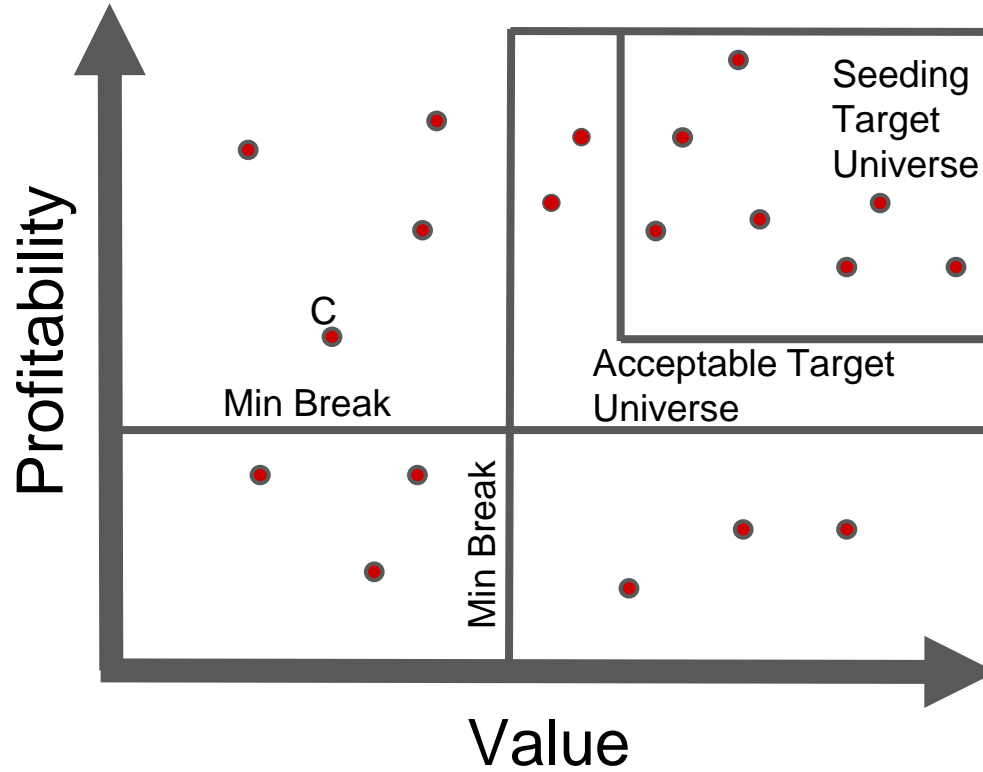
Sell Example



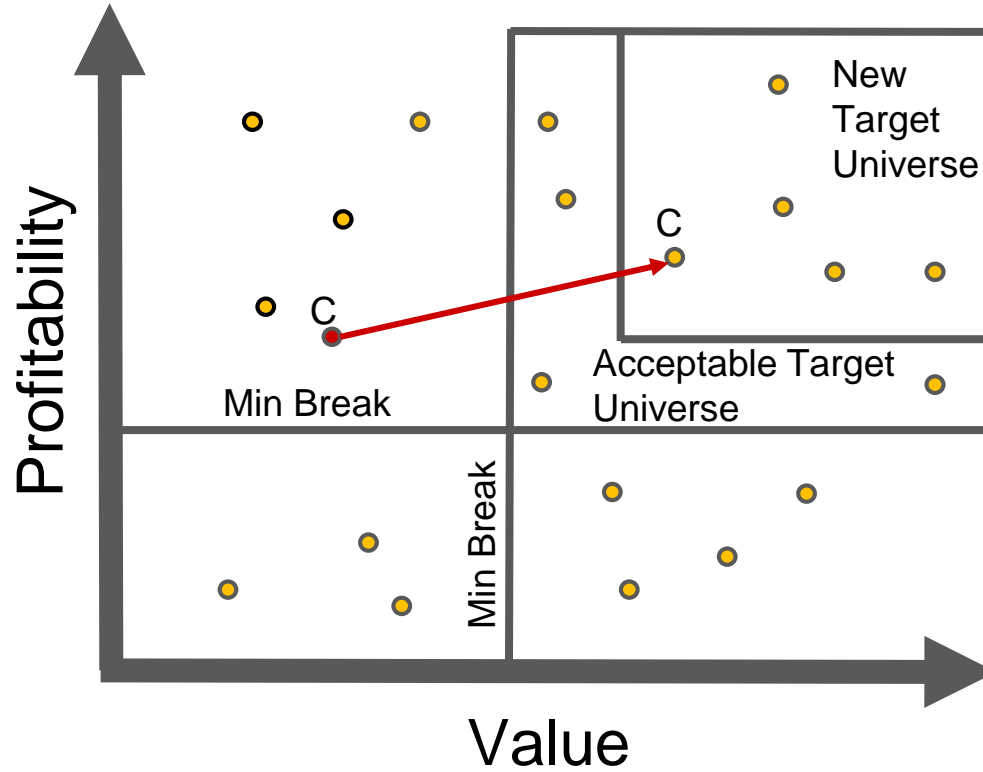
Sell Example



Buy Example

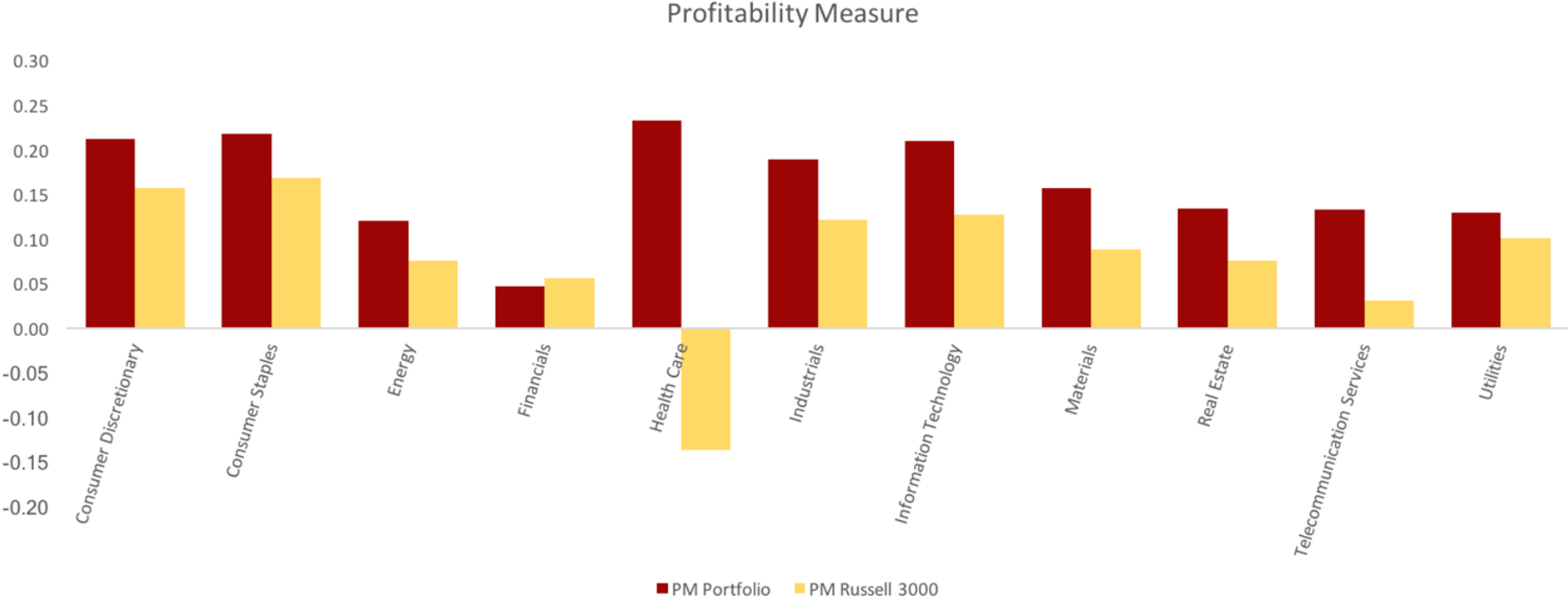


Buy Example

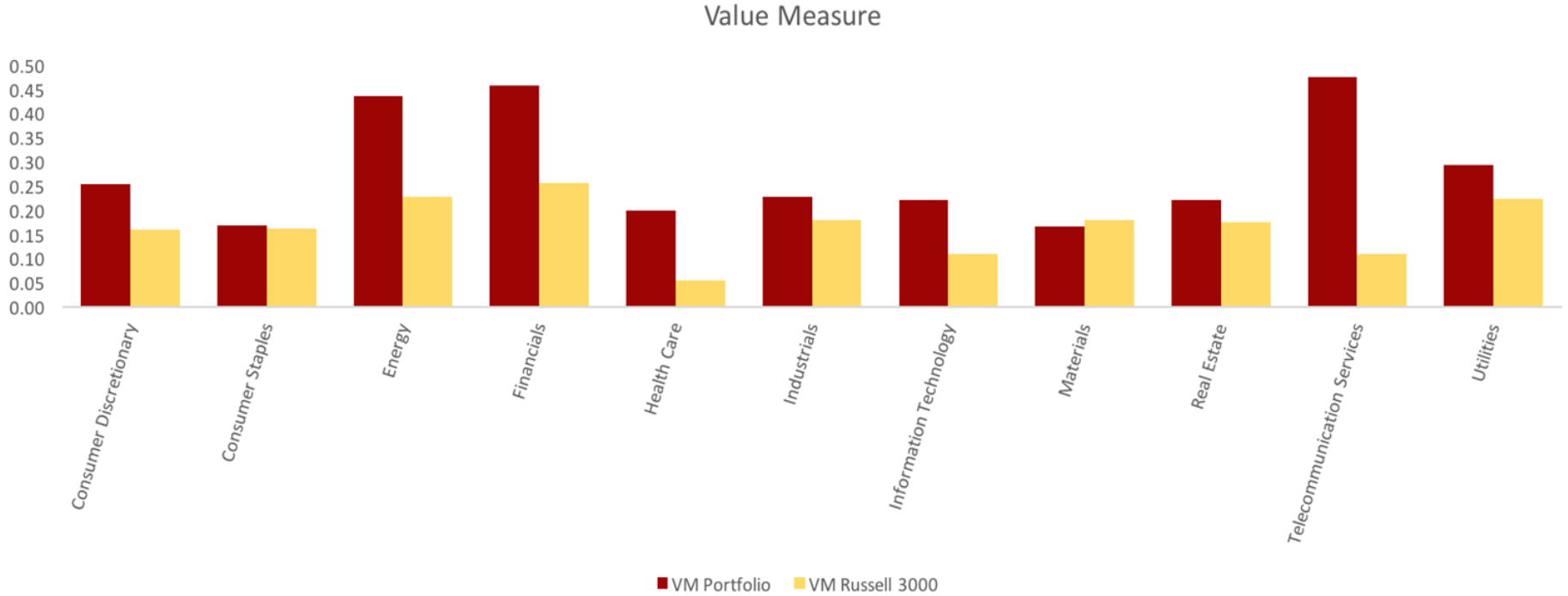


Portfolio Characteristics

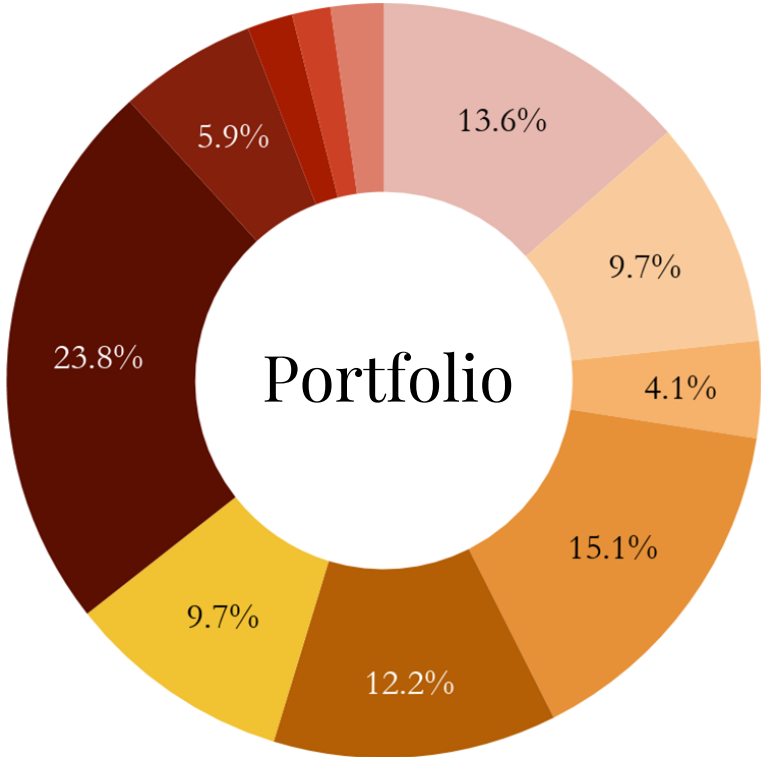
Profitability Tilts



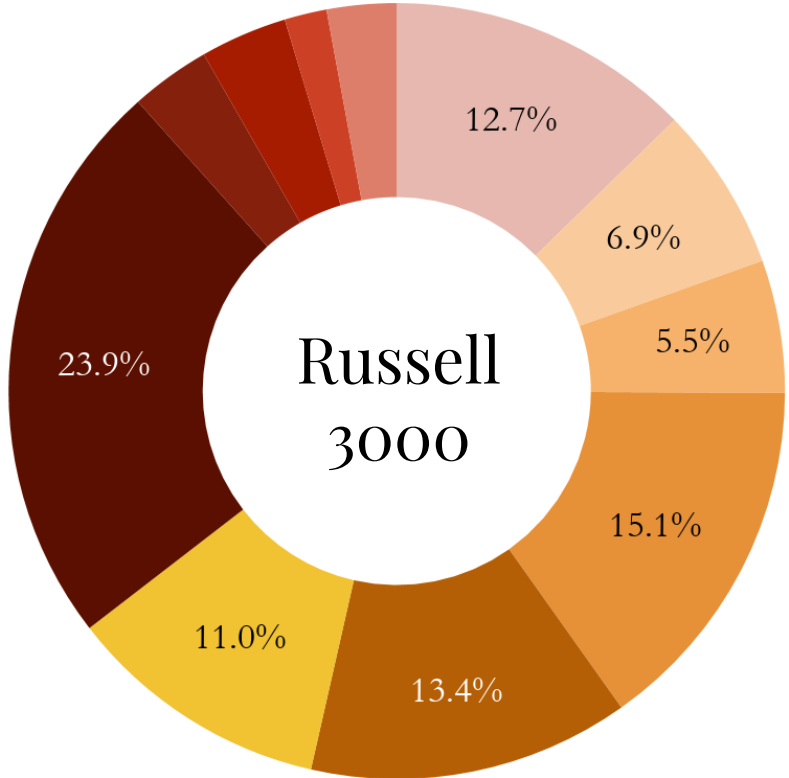
Value Tilts



Sector Weights

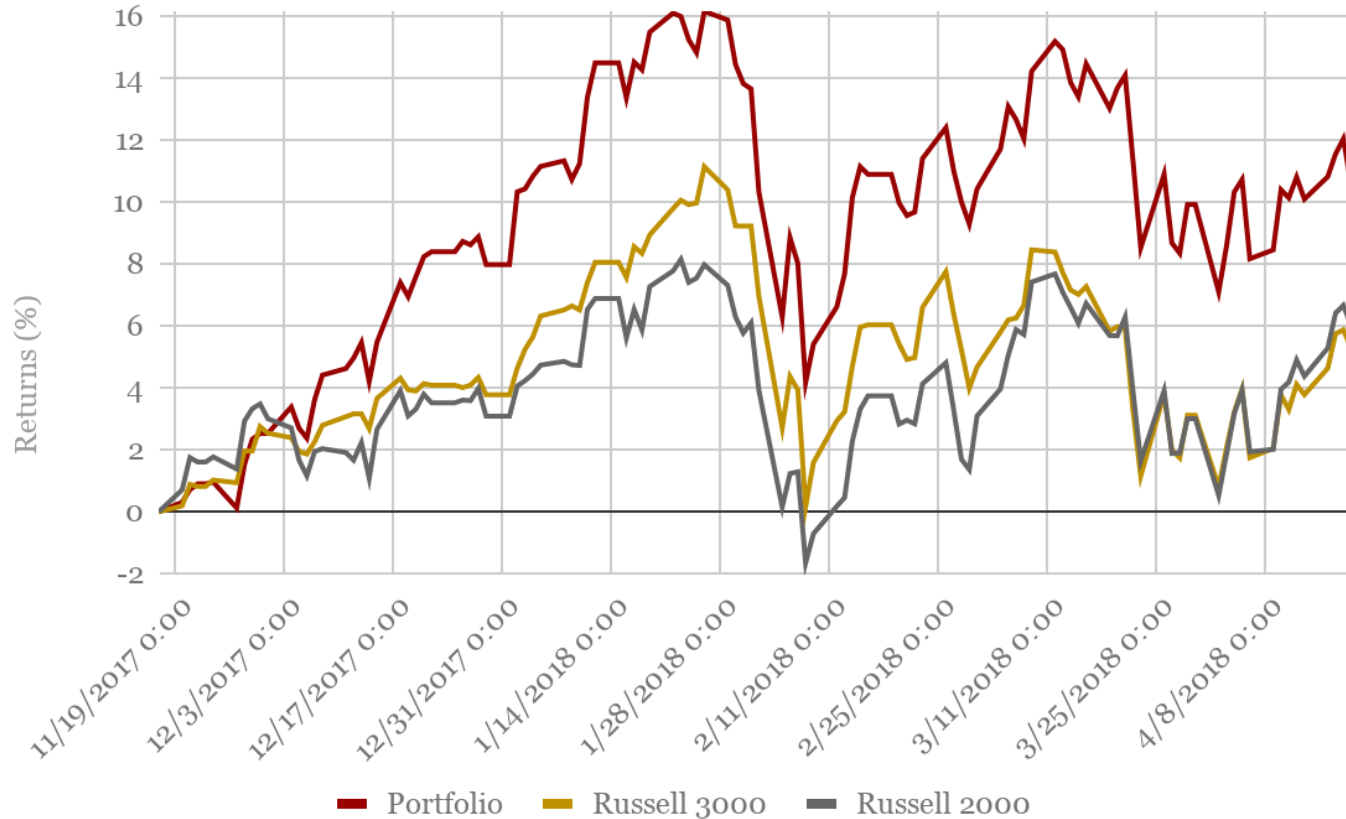


- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Health Care
- Industrials
- Information Technology
- Materials
- Real Estate
- Telecommunication Services
- Utilities

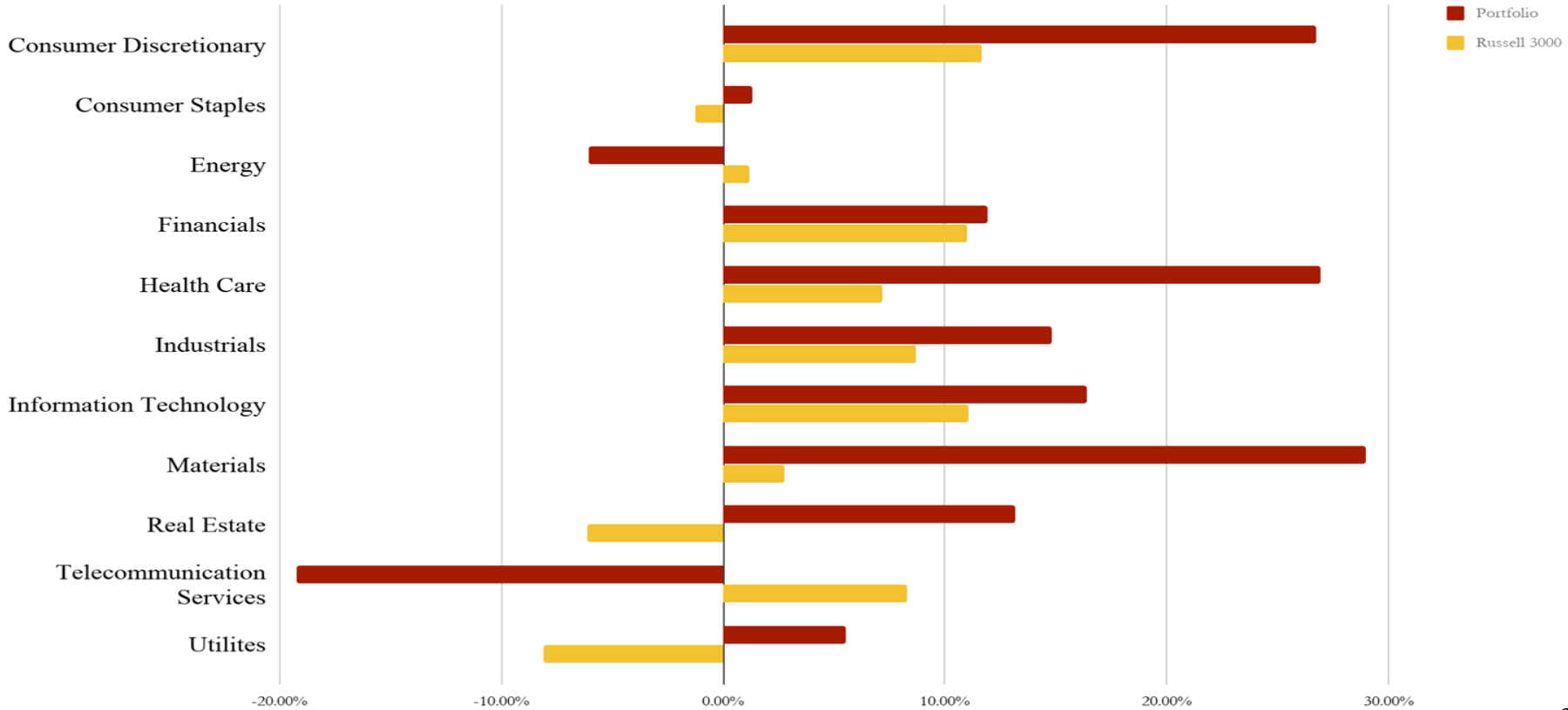


Returns and Attributions

Returns vs Benchmarks

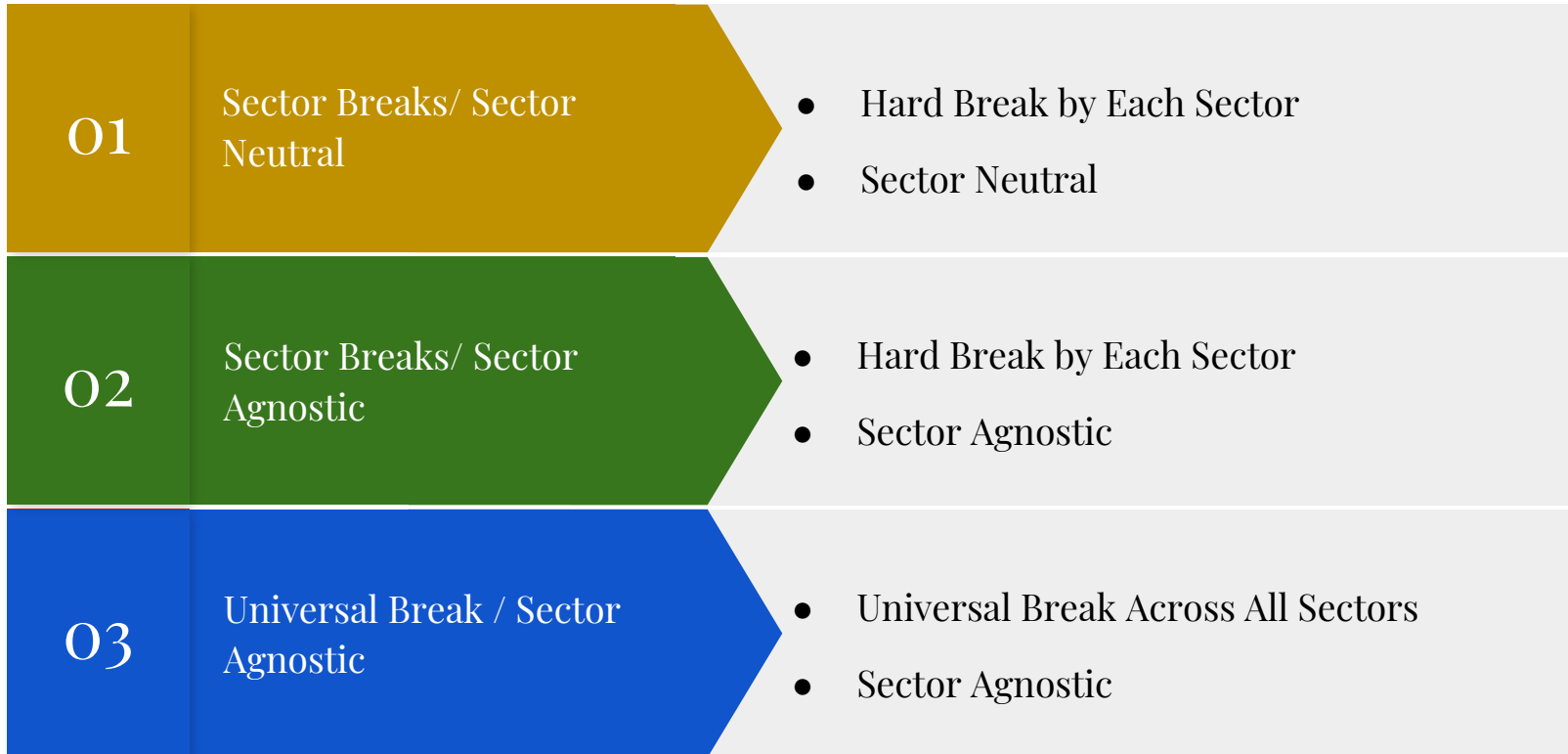


Return By Sector

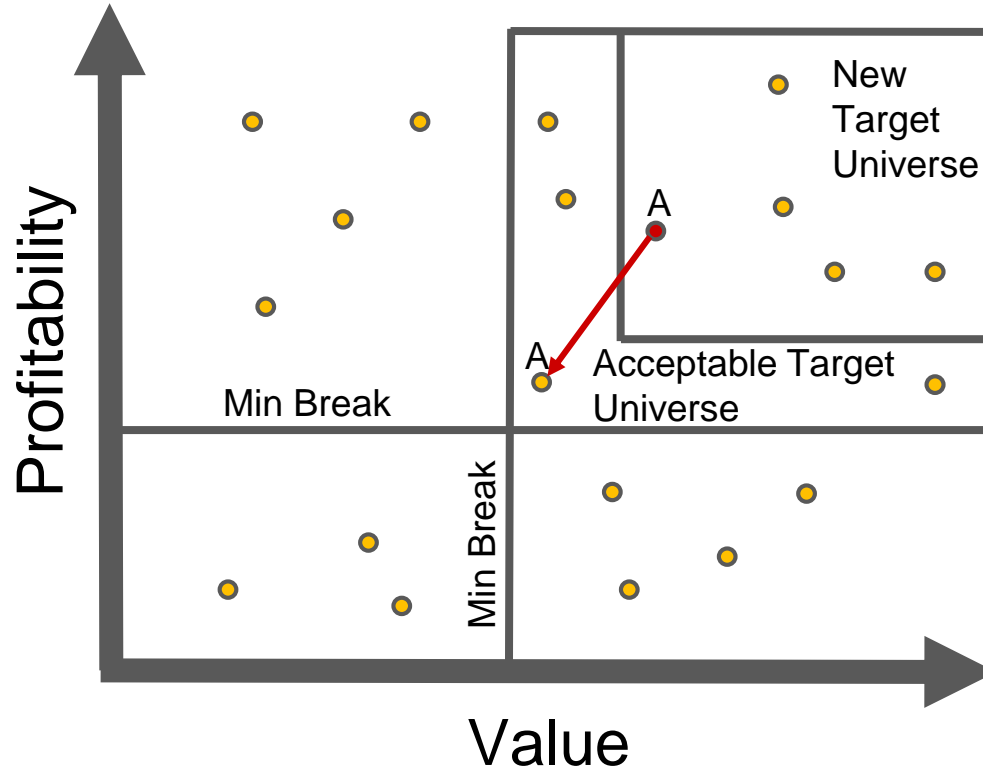


Shadow Portfolios

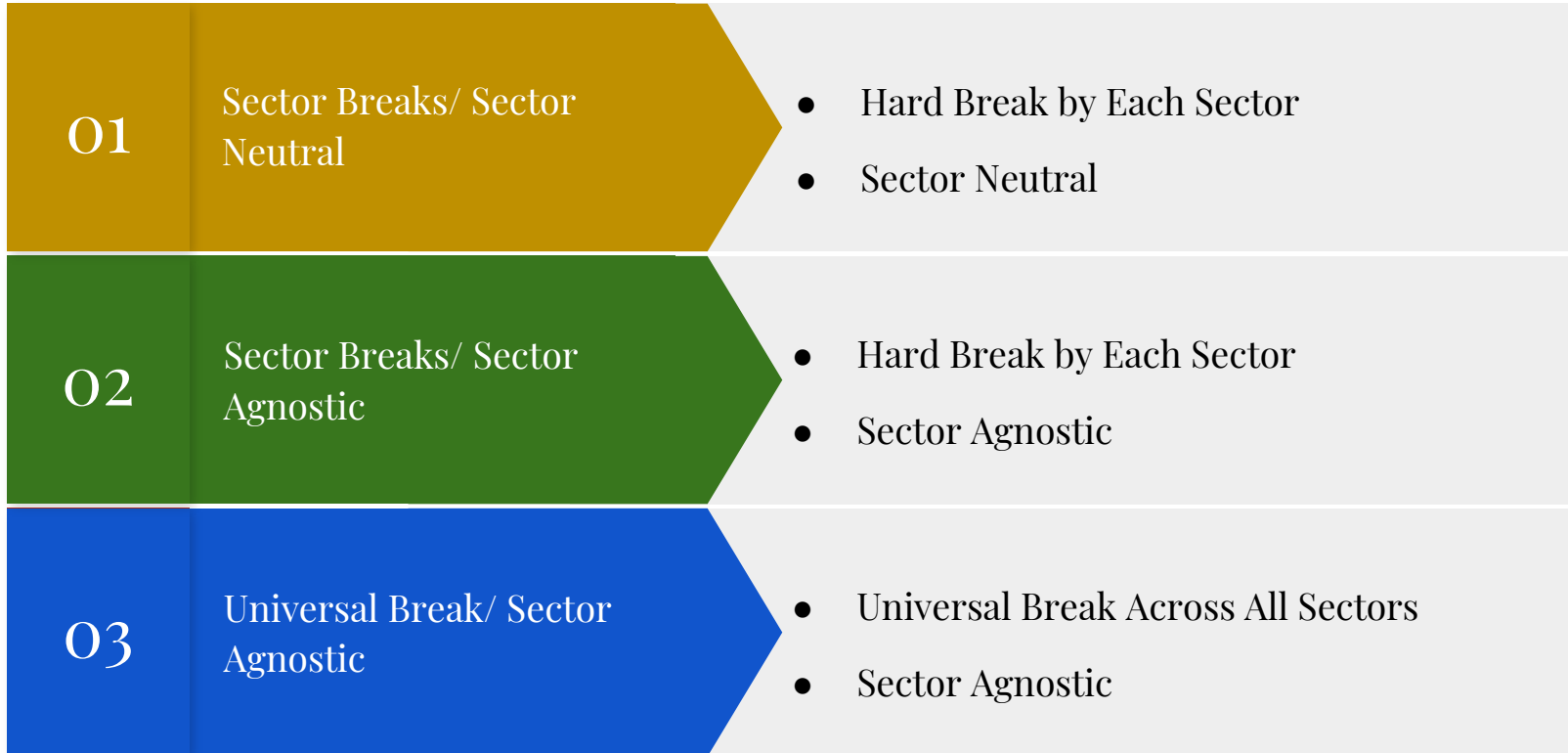
Shadow Portfolios



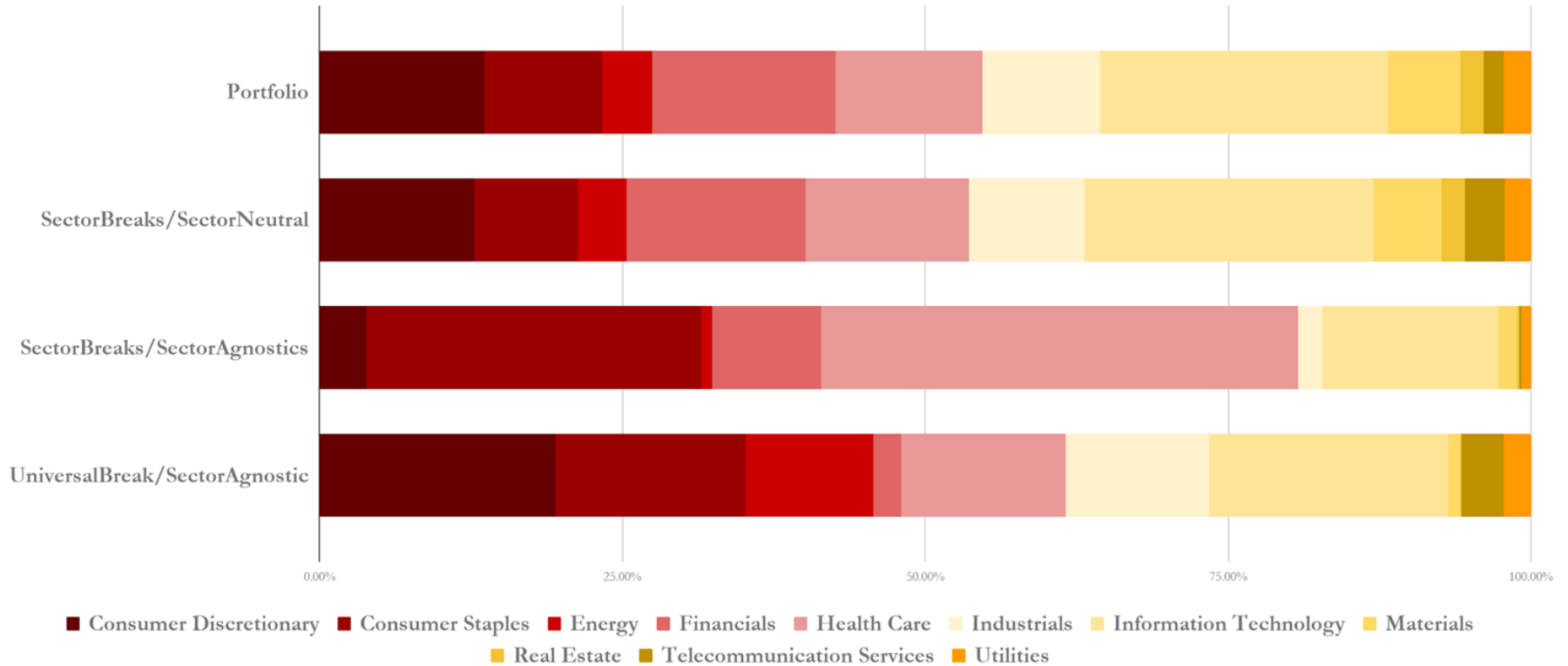
Hold Example



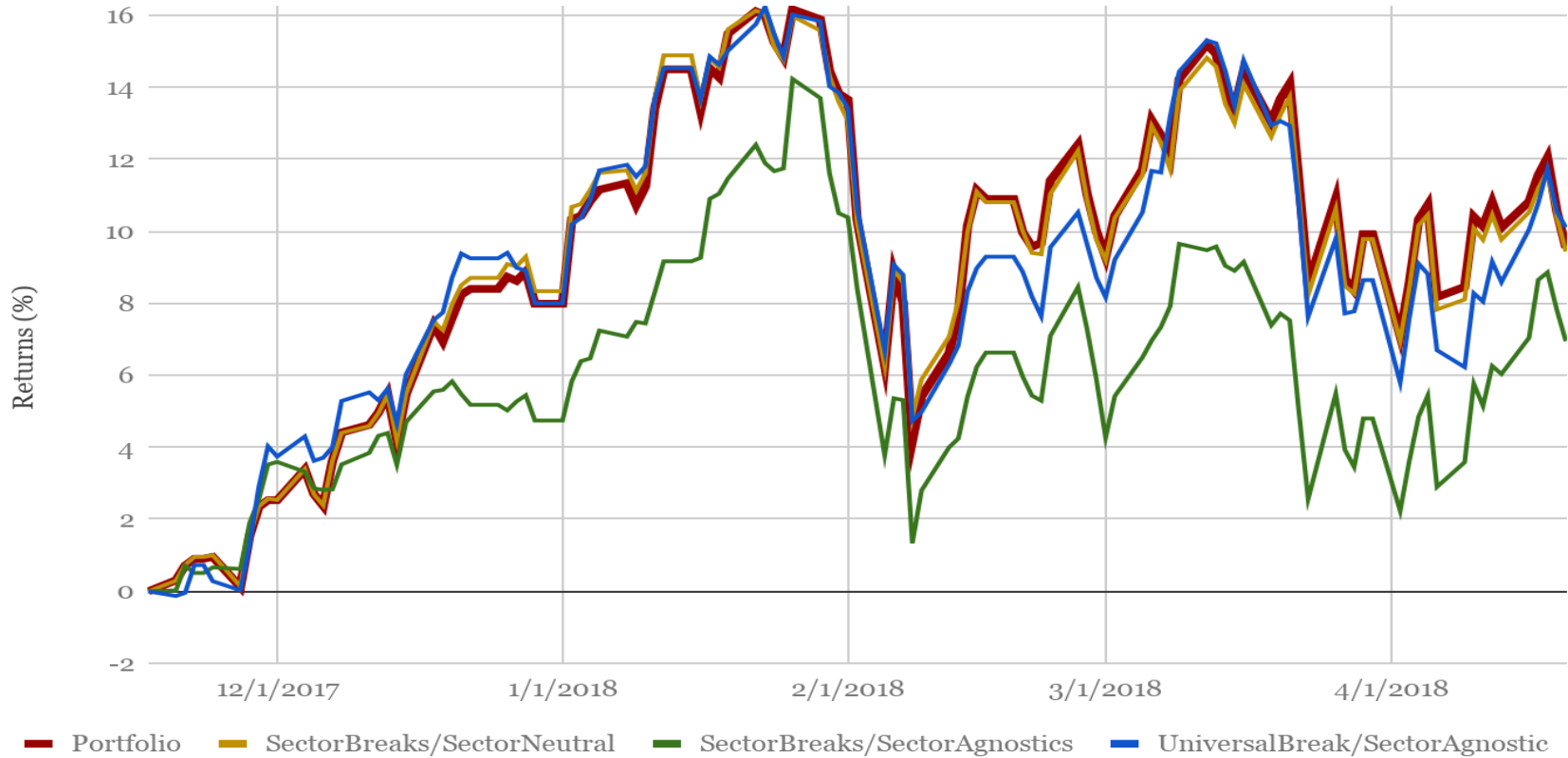
Shadow Portfolios



Portfolio Sector Weights vs Shadow's



Returns vs Shadow Portfolios

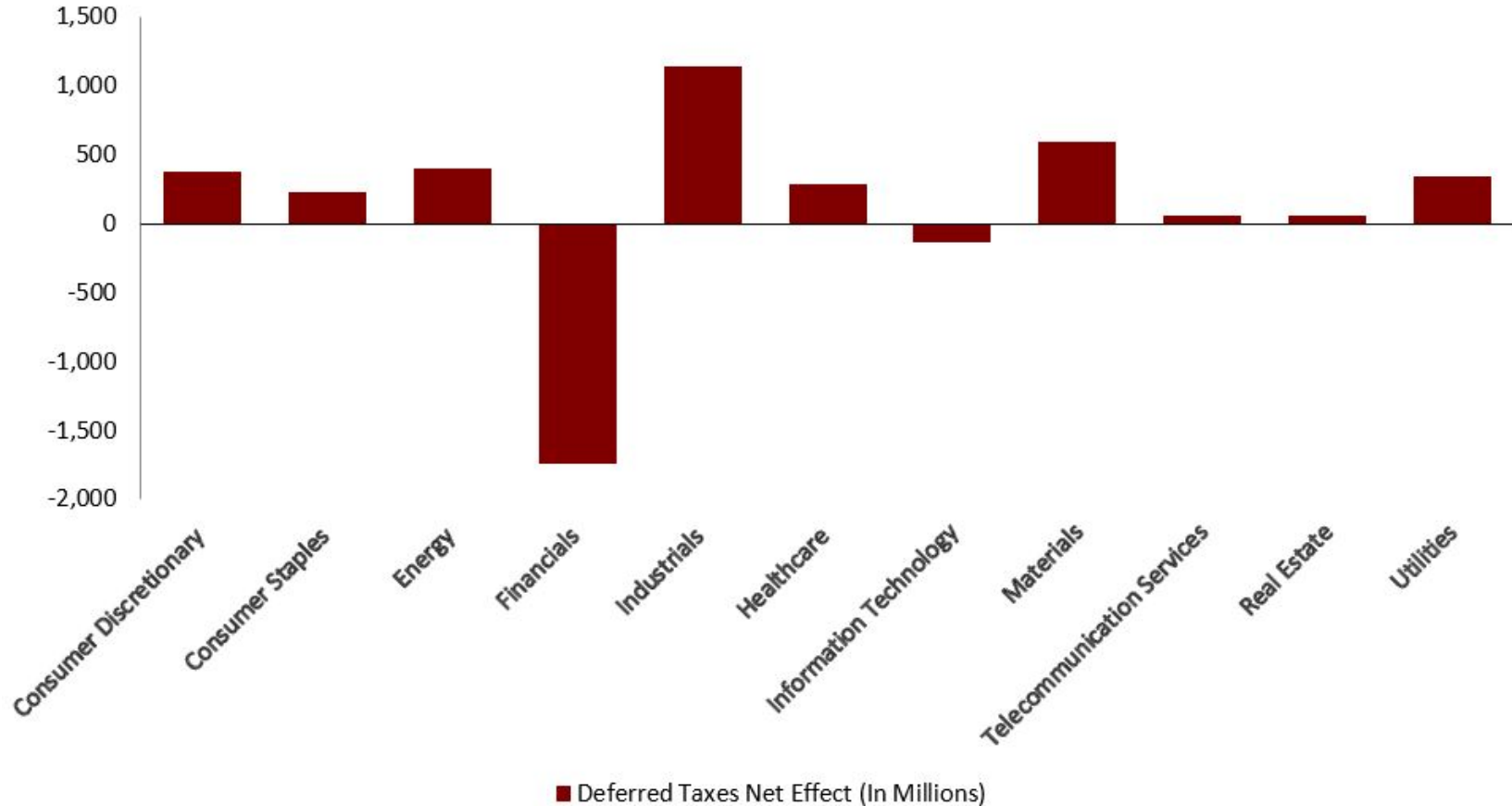


Portfolio Statistics

<i>Bloomberg reported as of 4/23</i>	Portfolio	Shadow Portfolios			Russell 3000
		SectorBreaks/ SectorNeutral leastrestbb	SectorBreaks/ SectorAgnostic maxbreaksbb	UniversalBreak/ SectorAgnostic universalbb	
158 Day Return	10.83%	9.21%	6.88%	10.24%	4.29%
Volatility	18.89%	18.46%	17.95%	18.00%	16.36%
Beta	1.03	1.04	1.06	1.00	---
Tracking Error	6.66%	7.19%	4.74%	7.54%	---

Tax Cuts and Jobs Act - Deferred Tax Issue

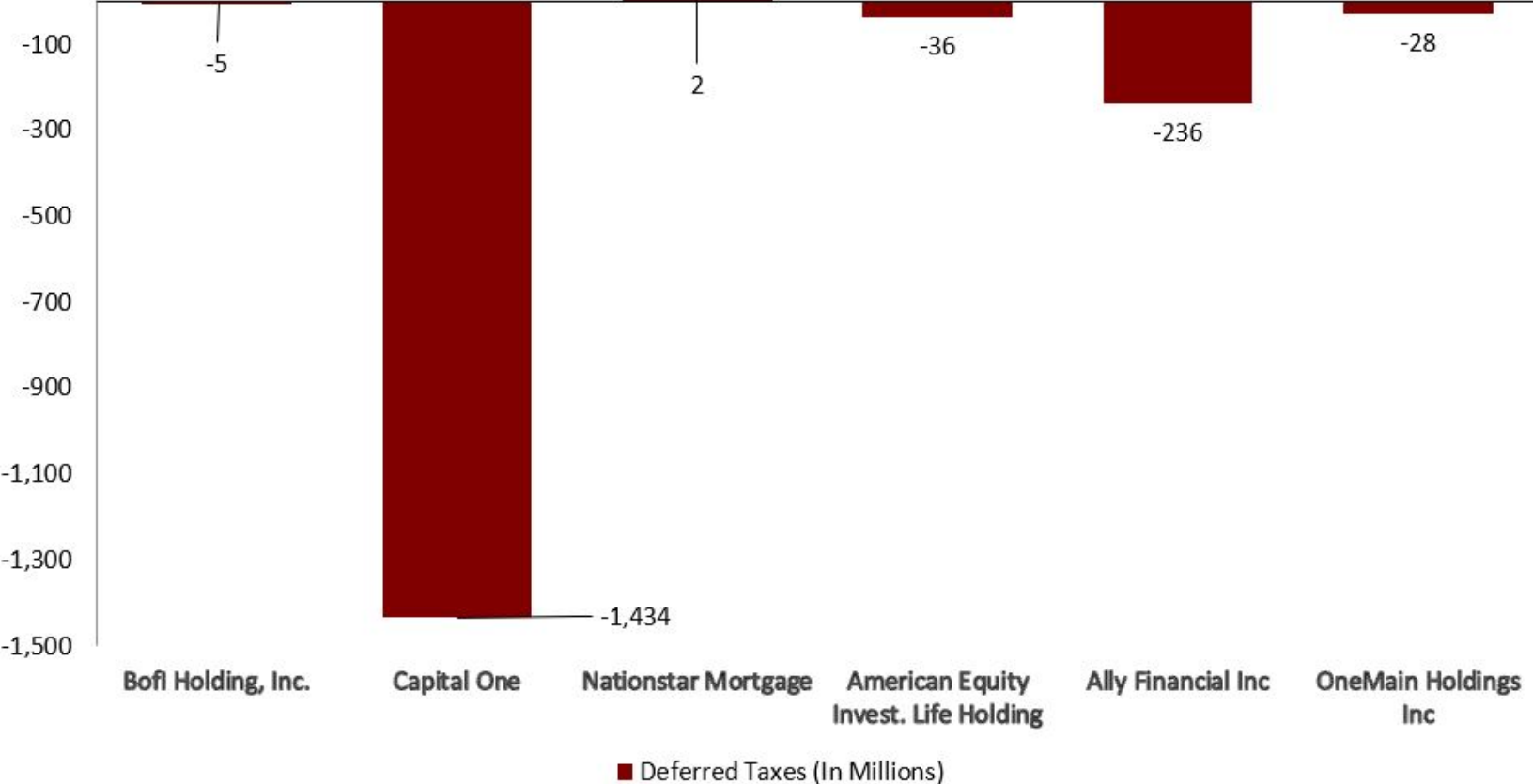
Deferred Taxes by Sector



Thank you, we welcome questions

Appendix

Deferred Taxes - Financials



Portfolio Stats

Bloomberg volatility:

- Standard deviation of the total returns over the holding period, annualized

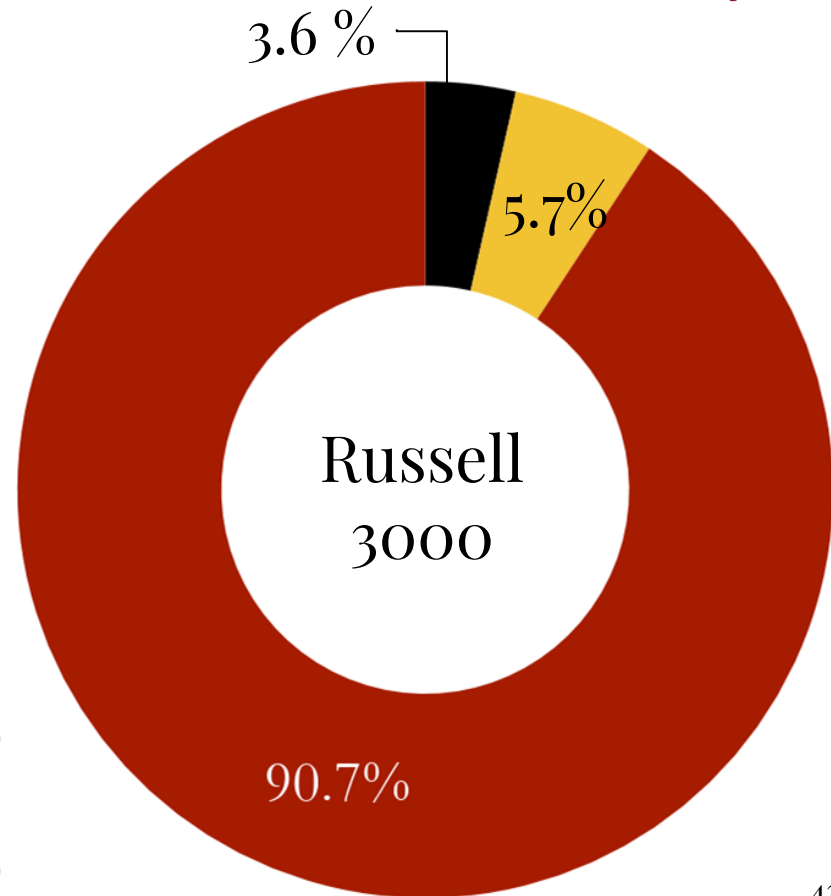
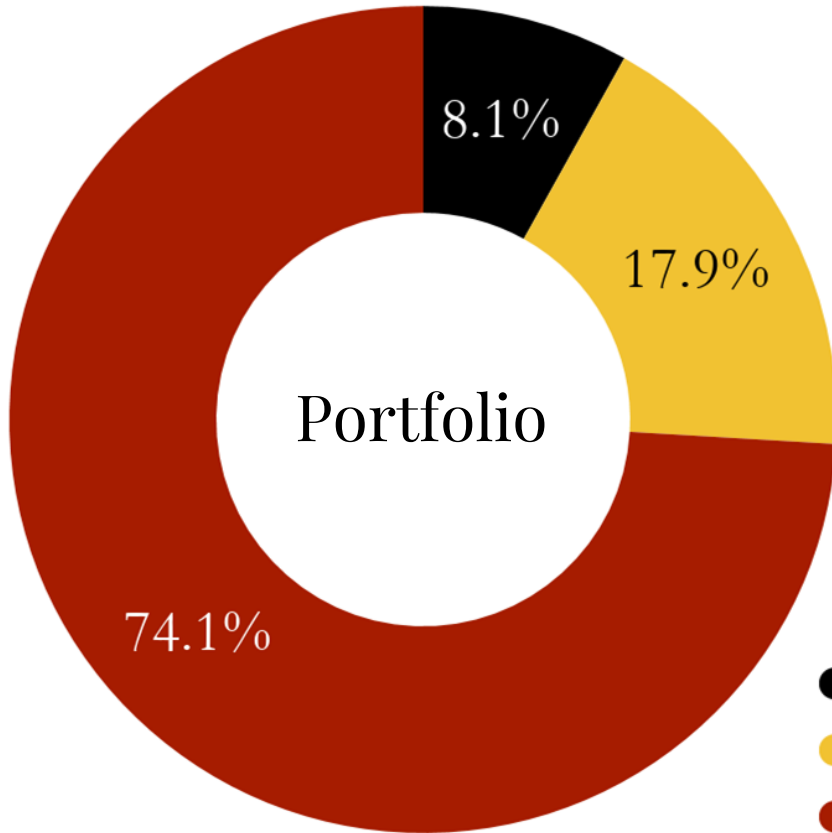
Bloomberg beta:

- Ex-post
- Regresses the portfolio returns on the benchmark returns

Bloomberg tracking error:

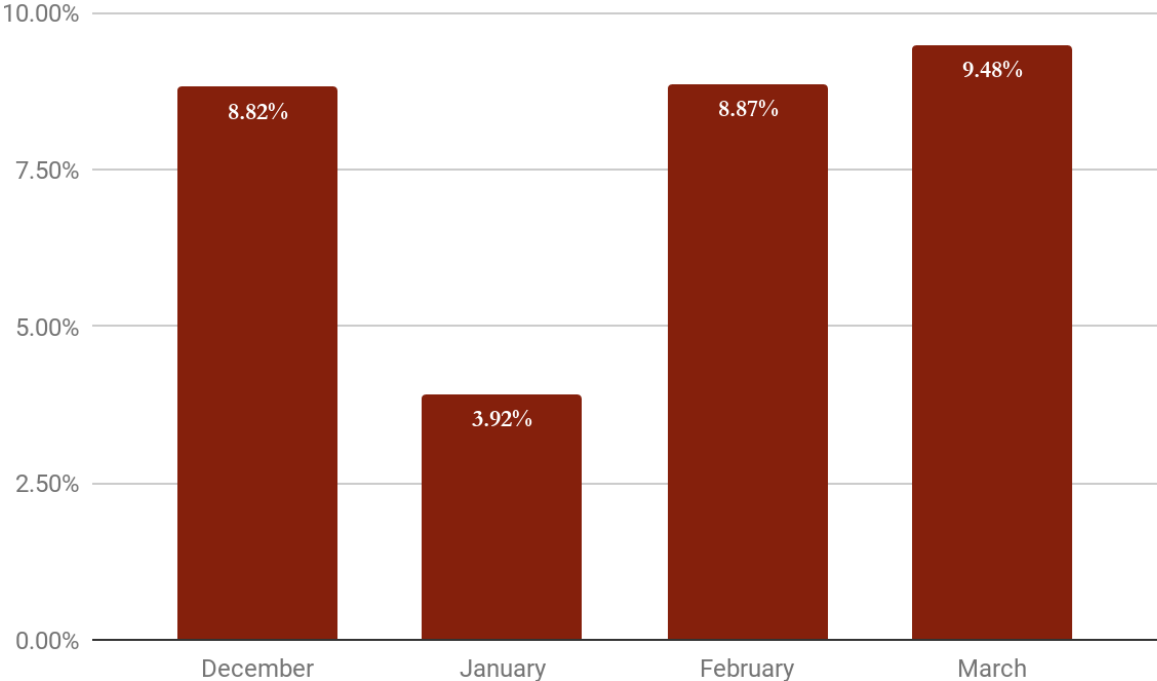
- Standard deviation of the excess returns relative to the benchmark, annualized

Firm Size Weights



- Small Cap
- Mid Cap
- Large Cap

Monthly Turnover



Number of Securities Per Sector Per Month					
	Seed November	December	January	February	March
Consumer Discretionary	8	6	5	6	
Consumer Staples	4	4	3	4	
Energy	4	8	8	7	
Financials	8	8	8	6	
Healthcare	3	6	8	10	
Industrial	9	9	10	10	
InfoTech	11	10	10	9	
Materials	2	2	2	2	
Real Estate	2	3	3	3	
Telecom	2	2	1	1	
Utilities	1	1	3	3	

	Buys Value	Sells Value	Portfolio Value	Turnover	Date Rebalanced
December	\$84,333	\$80,483	\$912,605	9.24%	12/15/2017
January	\$33,185	\$39,289	\$1,003,027	3.92%	1/23/2018
February	\$84,333	\$80,483	\$950,684	8.87%	2/28/2018
March	\$87,615	\$90,842	\$957,855	9.48%	3/27/2018

Port v R3

Main View | Summary | UGSIMTEAM2 vs ISHARES RUS by GICS Sectors in USD Time Custd 11/17/17 - 04/02/18

Model Total Return vs Unit Percenta...

Name	Avg % Wgt			Tot Rtn			CTR			Alloc	Selec	Cu
	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-			
UGSIMTEAM2	100.00	100.00	0.00	7.11	0.80	6.31	7.11	0.80	6.31	0.40	7.18	0.00
Consumer Discretionary	13.54	12.67	0.87	24.24	4.60	19.64	3.19	0.54	2.65	0.05	2.33	0.00
Consumer Staples	10.02	7.04	2.98	0.41	-4.72	5.14	0.28	-0.31	0.59	-0.18	0.45	0.00
Energy	4.15	5.52	-1.37	-7.86	-0.93	-6.93	-0.23	-0.04	-0.19	0.03	-0.37	0.00
Financials	15.07	15.17	-0.10	5.49	3.91	1.59	0.95	0.56	0.39	0.05	0.26	0.00
Health Care	11.55	13.43	-1.88	19.14	-0.44	19.58	1.20	-0.07	1.27	0.00	2.55	0.00
Industrials	9.64	10.86	-1.23	3.60	3.17	0.43	0.35	0.34	0.02	-0.02	0.06	0.00
Information Technology	23.46	23.38	0.08	2.32	1.70	0.61	0.32	0.36	-0.04	-0.14	0.29	0.00
Materials	5.97	3.38	2.58	21.09	-3.36	24.45	1.27	-0.10	1.37	-0.11	0.84	0.00
Real Estate	1.94	3.64	-1.70	12.93	-7.84	20.77	0.28	-0.30	0.57	0.20	0.76	0.00
Telecommunication Services	1.88	1.78	0.10	-21.30	3.49	-24.79	-0.63	0.06	-0.69	0.22	-0.48	0.00
Utilities	2.16	2.86	-0.70	7.96	-8.40	16.36	0.13	-0.26	0.38	0.26	0.51	0.00
Not Classified	0.62	0.33	0.29	0.00	2.25	-2.25	0.00	0.01	-0.01	0.06	-0.01	0.00
Offset Cash	0.00	-0.06	0.06		0.00	0.00		0.00	0.00	-0.01	0.00	0.00

Holdings as of: 11/17/17 - 3/27/18 (!) 51 Notices Submitted at: 15:00:33 Zoom - + 100%

300) Edit Panel 301) Expand Panel

1) View ▾ 2) Actions ▾ 3) Settings ▾ 14) Trade Simulation ▾ Portfolio & Risk Analytics
 Intraday Holdings Characteristics VaR Scenarios Tracking Error/Volatility Performance Attribution
 Main View **Total Return** Period Analysis Seasonal Analysis Statistical Summary
UGSIMTEAM2 vs **ISHARES RUS** by **GICS Sectors** in **USD** Time Custd **11/17/17** - **04/02/18**
 Unit Percentage Freq **Daily**



Main View Summary

UGSIMTEAM2 vs ISHARES RUS by GICS Sectors in USD Time Custc 11/17/17 - 04/02/18

Model Total Return Unit Percenta...

Name	Avg % Wgt			Tot Rtn			CTR			Alloc	Selec	C
	Port	Bmrk	+/-	Port	Bmrk	+/-	Port	Bmrk	+/-			
UGSIMTEAM2	100.00	100.00	0.00	7.11	0.52	6.59	7.11	0.52	6.59	0.21	8.77	0.00
Consumer Discretionary	13.54	12.37	1.17	24.24	0.76	23.48	3.19	0.12	3.07	0.03	2.78	0.00
Consumer Staples	10.02	2.61	7.41	0.41	-0.48	0.89	0.28	0.00	0.28	-0.08	0.06	0.00
Energy	4.15	3.80	0.35	-7.86	-6.86	-1.01	-0.23	-0.26	0.03	0.00	-0.03	0.00
Financials	15.07	17.99	-2.92	5.49	1.02	4.47	0.95	0.19	0.76	0.00	0.82	0.00
Health Care	11.55	15.78	-4.23	19.14	7.40	11.74	1.20	1.03	0.17	-0.37	1.66	0.00
Industrials	9.64	15.36	-5.72	3.60	1.03	2.57	0.35	0.15	0.20	-0.03	0.44	0.00
Information Technology	23.46	16.94	6.52	2.32	2.67	-0.35	0.32	0.45	-0.13	-0.02	-0.01	0.00
Materials	5.97	4.49	1.47	21.09	-1.08	22.17	1.27	-0.03	1.30	0.00	0.99	0.00
Real Estate	1.94	6.41	-4.47	12.93	-10.17	23.10	0.28	-0.68	0.96	0.53	1.50	0.00
Telecommunication Services	1.88	0.69	1.19	-21.30	-9.77	-11.53	-0.63	-0.06	-0.57	-0.19	-0.12	0.00
Utilities	2.16	3.34	-1.18	7.96	-10.80	18.76	0.13	-0.39	0.52	0.28	0.69	0.00
Not Classified	0.62	0.29	0.33	0.00	2.07	-2.07	0.00	0.01	-0.01	0.06	-0.01	0.00
Offset Cash	0.00	-0.06	0.06		0.00	0.00		0.00	0.00	-0.01	0.00	0.00

Port v R2

