

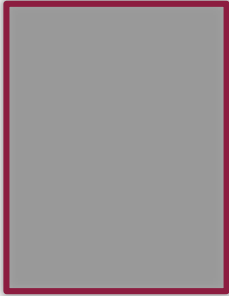
Undergraduate Student Investment Management Fund

Semi-Annual Presentation

Team A
November 2018

Team Introduction

Fund Manager



Drew Kudlinski

Fund Analysts



Jenna Snittjer



Vishnu Patel



John Michael
Hayes



Andrew Fox



Neil Jha



John Remy

Table of Contents

I.	Investment Thesis	4
<hr/>		
II.	Strategy Implementation	11
<hr/>		
III.	Tentative Returns	22
<hr/>		
IV.	Appendix	25
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Investment Thesis

Thesis Overview

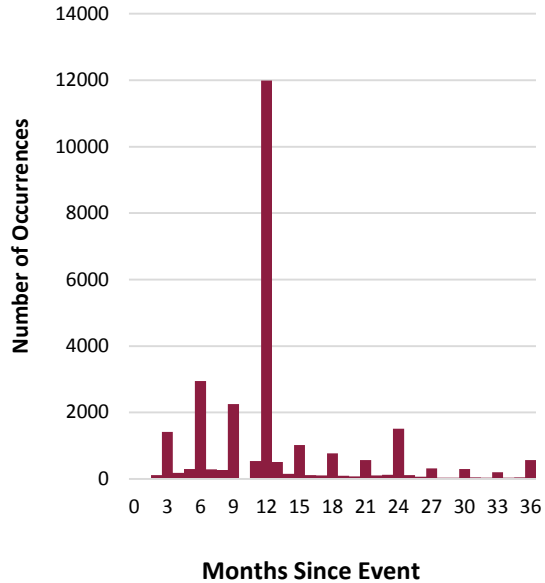
Event-based portfolio based upon research performed by Hendrik Bessembinder and Feng Zhang

Dividend increase at $t - 12$ → Dividend increase likely in t
Special dividends at $t - 12$ → Special dividends likely in t
Stock dividend at $t - 12$ → Stock dividend likely in t

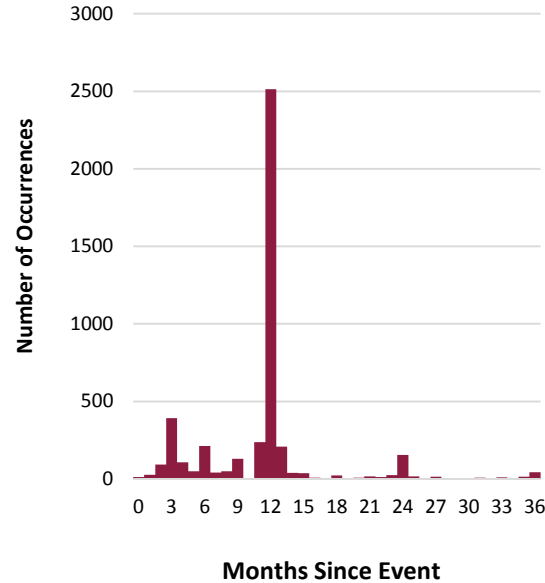
Bessembinder, Hendrik, and Feng Zhang. "Predictable Corporate Distributions and Stock Returns." *The Review of Financial Studies*, vol. 28, no. 4, 30 Dec. 2014, pp. 1199–1241.

Frequency of Follow-on Events

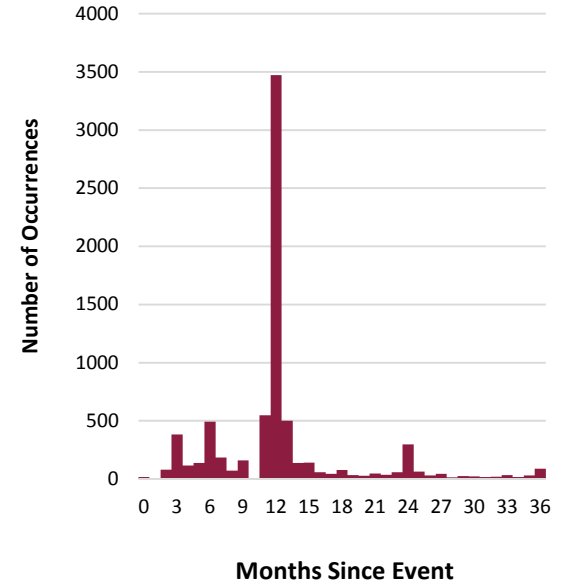
Dividend Increases



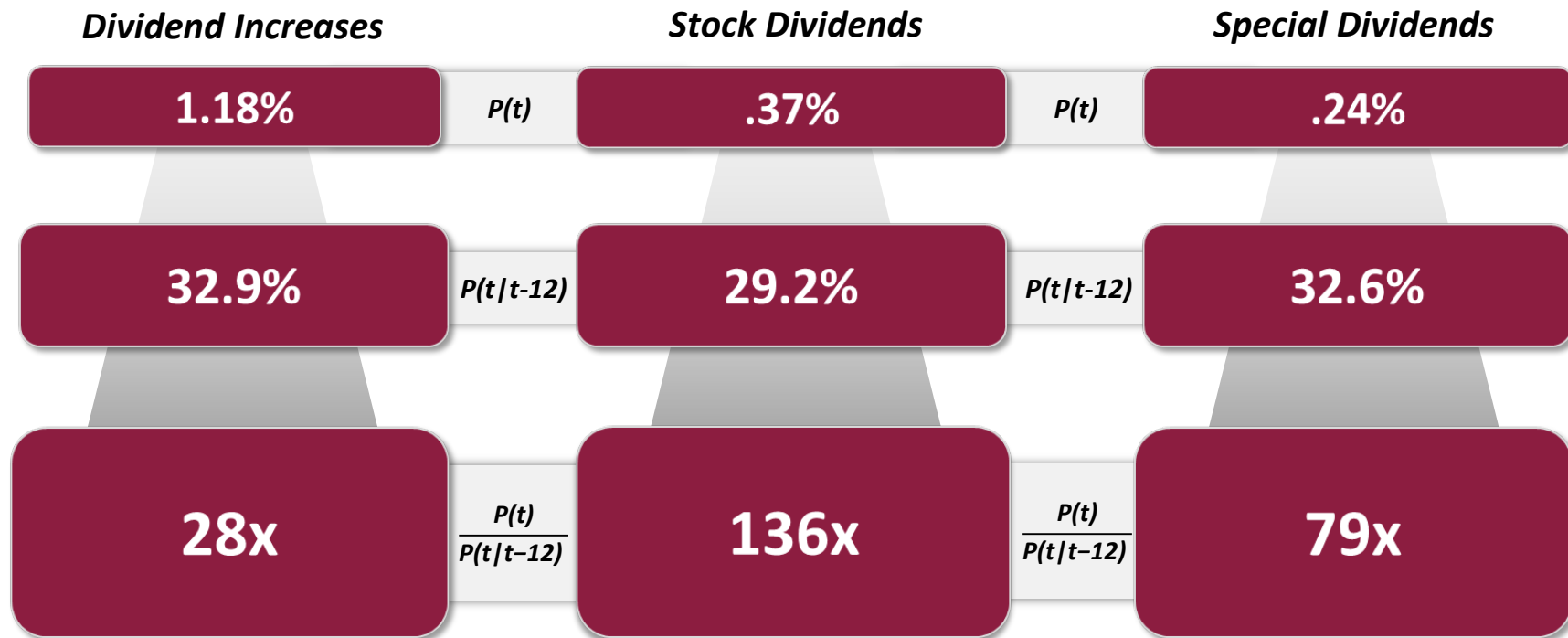
Special Dividends



Stock Dividends



Conditional Probabilities

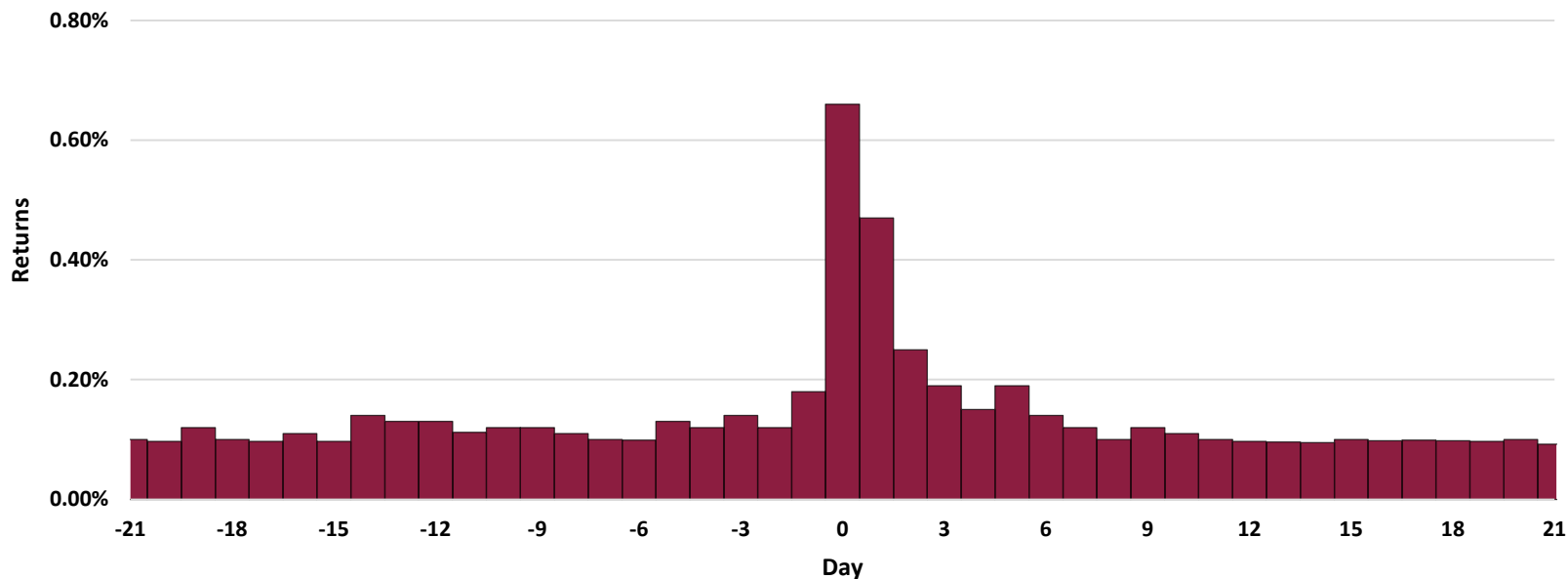


Probabilities of Follow-on Events

Conditional Probabilities					
Bessembinder and Zhang					
Event Types	P(t)	P(t t-12)	P(t t-12, t-24)	P(t t-12, t-24, t-36)	P(t t-12, t-24, t-36, t-48)
Dividend Increase	1.2%	32.9%	55.3%	62.7%	66.8%
Special Dividend	0.2%	32.6%	59.9%	65.0%	68.1%
Stock Dividend	0.4%	29.2%	57.6%	64.6%	68.8%

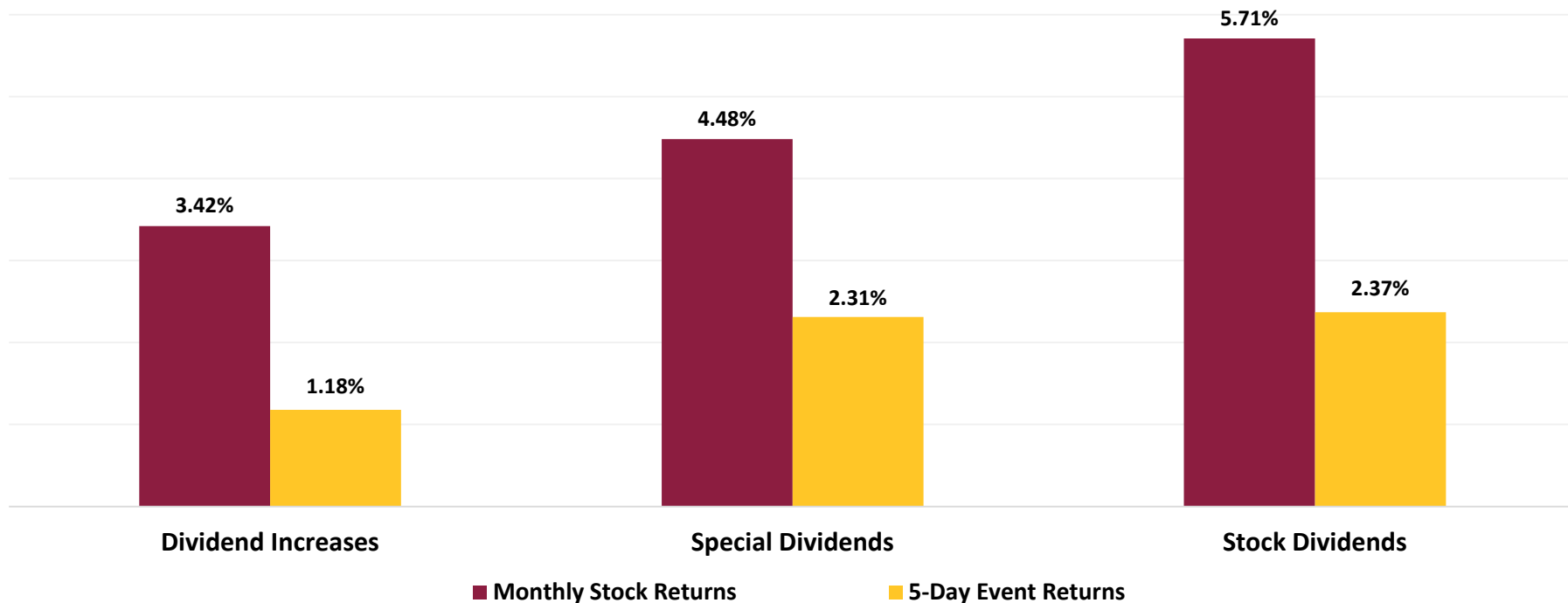
Daily Stock Returns

Daily Stock Returns Around Event Announcements *Dividend Increases*



Return Comparison

Return Comparison Around Event Announcement, 1963-2012



Strategy Implementation

Implementation Process



Implementation – The *What*

Data Organization

Probability Assignment

Ranking Securities

Security Selection

		2017						2018					
		Jan			Feb			Jan			Feb		
Security	DI	Sp.Div	St.Div	DI	Sp.Div	St.Div	DI	Sp.Div	St.Div	DI	Sp.Div	St.Div	
14593	0	0	0	0	0	0	0	0	0	0	0	0	
10107													
84788													
90319													
14542													
13407													
22111													
47896													
11850													
55976				1						1			
92611													
59408													
92655													
21936													
38703													

Implementation – The *What*

Data
Organization

**Probability
Assignment**

Ranking
Securities

Security
Selection

Conditional Probabilities

Bessembinder / Zhang

Event Types	P(t)	P(t t-12)	P(t t-12, t-24)	P(t t-12, t-24, t-36)	P(t t-12, t-24, t-36, t-48)
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Implementation – The *What*

Data
Organization

Probability
Assignment

**Ranking
Securities**

Security
Selection

Abnormal Return-Weighted Probability

$$P_i(t)_{weighted} = \frac{\sum CAR_{[t-2,t+2]_{ij}} * P_{ij}(t)}{\sum CAR_{[t-2,t+2]_{ij}}}$$

Dividend Increases CAR

1.18%

Lowest weight

Stock Dividends CAR

2.31%

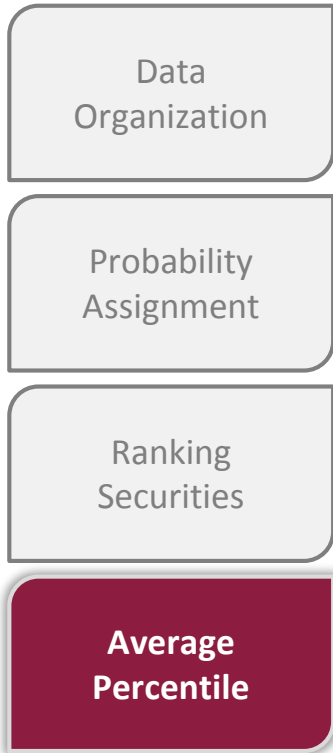
Middle weight

Special Dividends CAR

2.37%

Highest weight

Implementation – The *What*



High
 ↑
 ↓
 Low

2018-2019				
Nov	Dec	Jan	Feb	Mar
<i>Max{P(t)}</i>	<i>Max{P(t)}</i>	<i>Max{P(t)}</i>	<i>Max{P(t)}</i>	<i>Max{P(t)}</i>
.
.
.
.
.
.
.
.
<i>Min{P(t)}</i>	<i>Min{P(t)}</i>	<i>Min{P(t)}</i>	<i>Min{P(t)}</i>	<i>Min{P(t)}</i>

2nd percentile on average per month

Implementation – The *When*

Data Organization

Certainty Buckets

Holding Period Visualization

Weekly

Year	2018					
Month	November					
Week #	1	1	1	2	2	2
	<i>DI</i>	<i>Sp.D</i>	<i>St.D</i>	<i>DI</i>	<i>Sp.D</i>	<i>St.D</i>

22752 0

57665

39642

44644 3

22103

52038

32870

84381

89155

Daily

Month	Nov					
Week	Week 1					
Weekday	Th	Th	Th	F	F	F
	<i>DI</i>	<i>Sp.D</i>	<i>St.D</i>	<i>DI</i>	<i>Sp.D</i>	<i>St.D</i>

22752 0 0

57665

39642

44644 2 1

22103

52038

32870

84381

89155

Implementation – The *When*

Data Organization

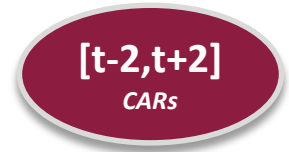
Certainty Buckets

Holding Period Visualization

Certainty Bucket	Minimum Occurrences	Holding Period
Monthly	--	1 Month
Weekly	4	9 Weekdays
Daily	4	5 Weekdays



Bessembinder / Zhang

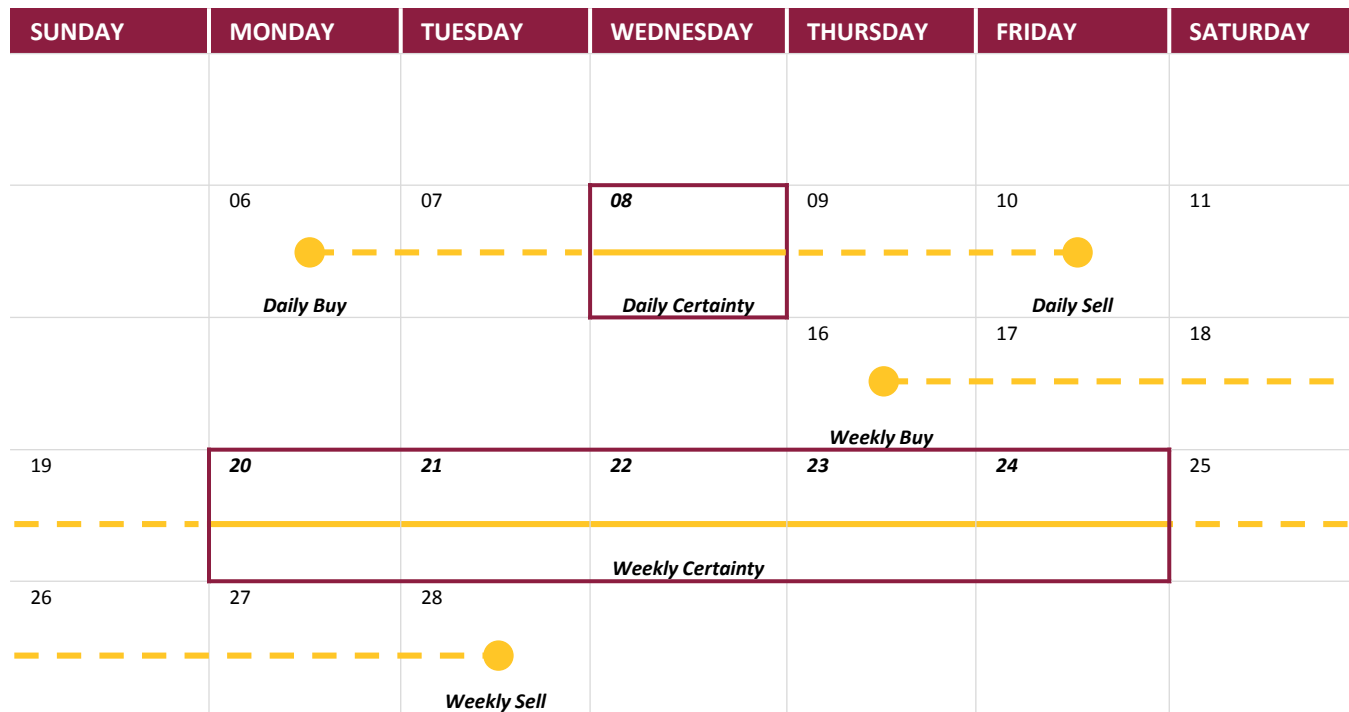


Implementation – The *When*

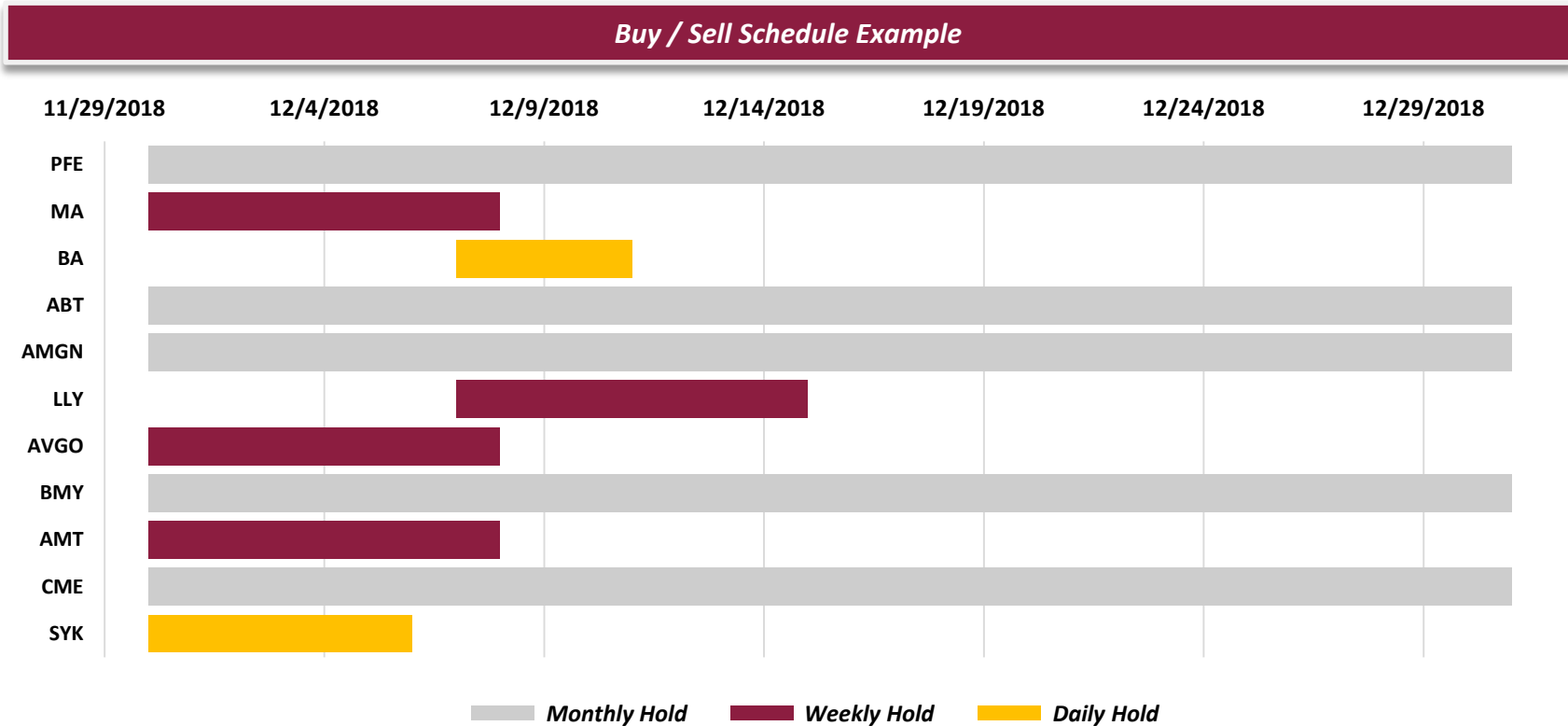
Data Organization

Certainty Buckets

Holding Period Visualization

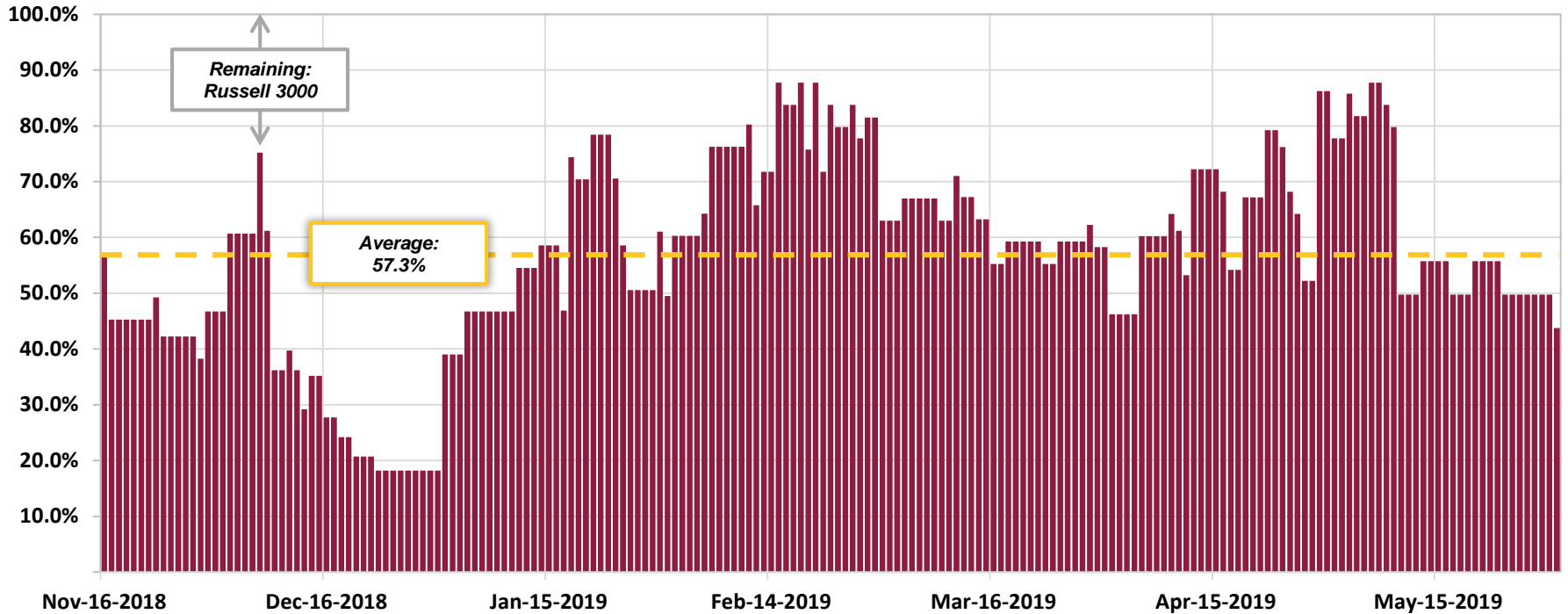


Timeline of Trades



Portfolio Allocation: Strategy vs. Russell 3000

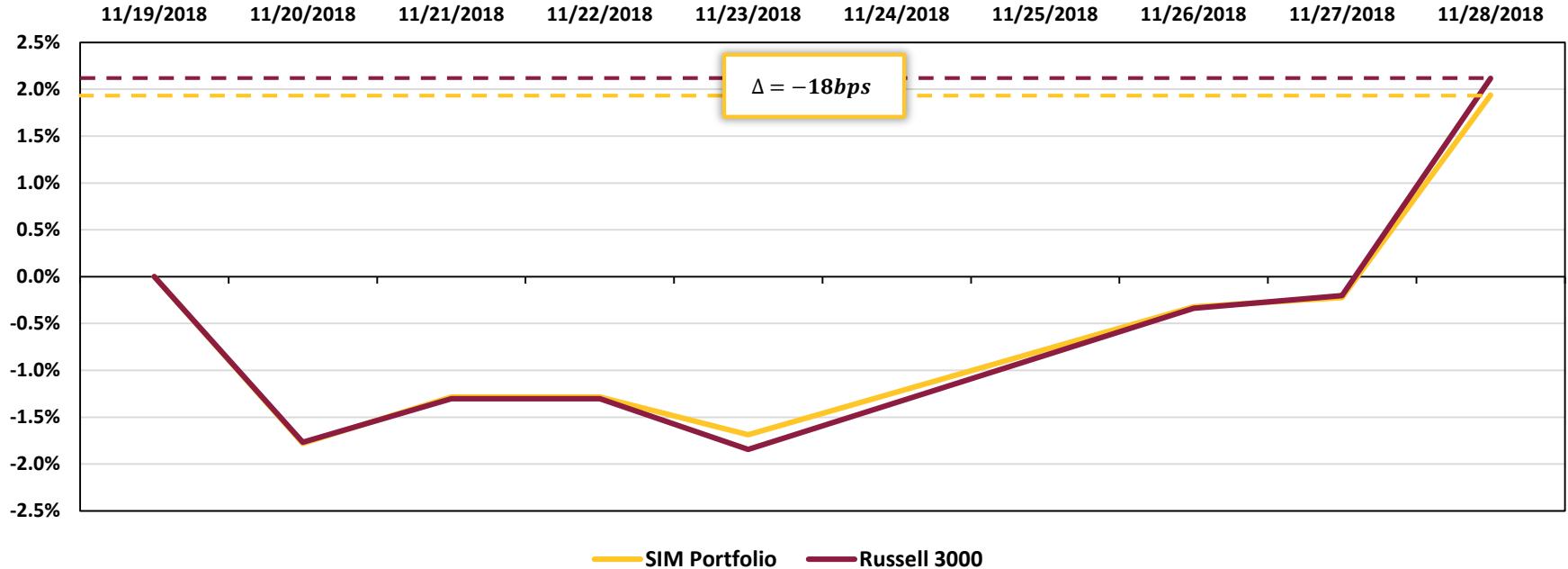
% of Portfolio Allocated to Strategy



Tentative Returns

Portfolio Returns

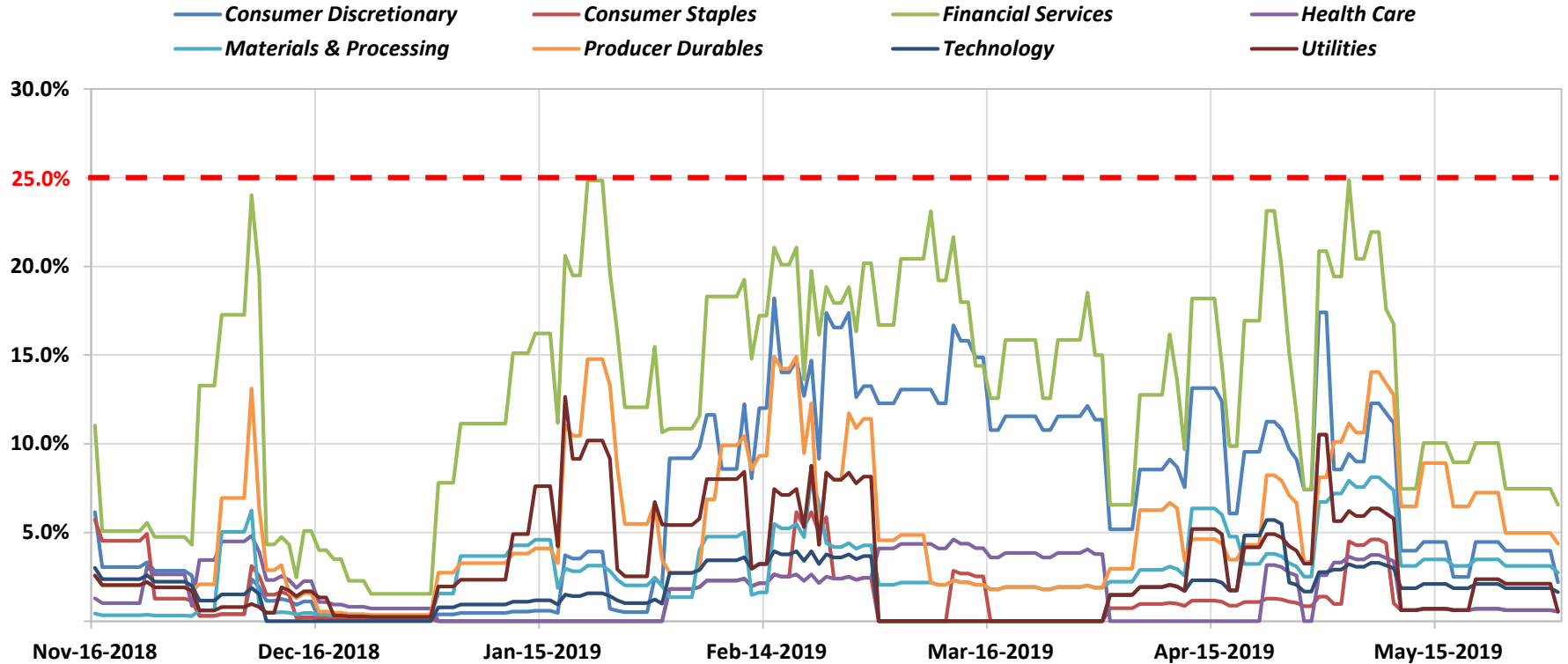
Active Strategy vs. Russell 3000 (11/19 – 11/28)



Q&A

Appendix

Daily Strategy Sector Exposure



Security Weighting by Month

1 *November*

Bucket	Count	Weighting
Daily	5	4.00%
Weekly	7	3.50%
Unknown	51	0.75%

4 *February*

Bucket	Count	Weighting
Daily	15	4.00%
Weekly	27	1.50%
Unknown	61	0.75%

2 *December*

Bucket	Count	Weighting
Daily	10	3.50%
Weekly	14	2.50%
Unknown	28	0.65%

5 *March*

Bucket	Count	Weighting
Daily	7	4.00%
Weekly	1	3.75%
Unknown	17	3.25%

3 *January*

Bucket	Count	Weighting
Daily	8	4.00%
Weekly	6	3.85%
Unknown	39	1.00%

6 *April*

Bucket	Count	Weighting
Daily	13	4.00%
Weekly	7	3.00%
Unknown	27	1.60%

7 *May*

Bucket	Count	Weighting
Daily	3	4.00%
Weekly	16	3.00%
Unknown	35	1.25%