



# Advisory Board Presentation

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AIM XLIV | May 1, 2017

# AIM XLIV

## Analyst Introductions

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**Aruhan**

*Inner Mongolia, China  
Versik Analytics, Infinera*

**Sylvia Banda**

*Carmel, Indiana  
Activision Blizzard,  
Royal Caribbean*

**Andy Burrow**

*North Lawrence, Ohio  
Wabtec Corporation, Kroger*

**Samuel Chitrit**

*San Antonio, Texas  
Alphabet, Facebook*

**Jason Davis**

*Kennewick, Washington  
Exxon Mobil, M&T Bank*

**Graham Gardner**

*Rochester, New York  
Intel, Exelon*

**Bhavuk Ghai**

*Patiala, India  
Market Axxess, LAM Research*

**Sean Hanley**

*Chicago, Illinois  
American Tower, IBM*

**Dylan Koehler**

*Lakeville, Connecticut  
Hanesbrands, Mas Tec*

**Conor Larkin**

*Buffalo, New York  
Align Technology,  
Calavo Growers*

**Meng Li**

*Hebei, China  
Nvidia, Analog Devices*

**Silei Li**

*Guangdong, China  
Gilead Sciences,  
Walgreens Boots Alliance*

**Garrett Logan**

*Boston, Massachusetts  
Digital Realty Trust, Francesca's*

**Elizabeth Lynch**

*Grosse Pointe Farms, Michigan  
Kinder Morgan, Target Corp.*

**Andrew Roehl**

*Greenville, South Carolina  
VeriSign,  
Thermo Fisher Scientific*

**Elizabeth Sadler**

*Boston, Massachusetts  
Mosaic, Palo Alto Networks*

**Karissa Schuchardt**

*Sheboygan, Wisconsin  
Herman Miller, CVS Health*

**Jessie Sun**

*Jiangsu, China  
Equifax, Vulcan Materials*

**Fernando Turrent**

*Mexico City, Mexico  
Under Armour, AECOM*

**Patrick Veltman**

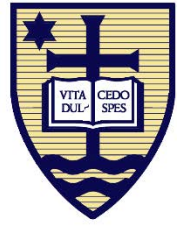
*Richmond, Virginia  
Total System Services,  
Synchrony Financial*

**Nancy Xia**

*Fujian, China  
Microsoft, Priceline*

**Ross Zimmerman**

*Utica, Michigan  
Rockwell Collins,  
Intercontinental Exchange*



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## Agenda

Course Overview

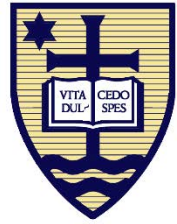
Economic Outlook

Portfolio Performance

Selection Methodology

Security Analysis

AIM XLIV Review



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## Course Overview

Fundamentals

Analyst Responsibilities

Investment Philosophy



Applied Investment Management

Winter 2017

# Course Overview

## Fundamentals



### Course Objectives

- Hands-on immersion in portfolio management
- Bridges course work with practical experience
- Weekly presentations, final board presentation to the advisory panel composed of key industry executives
- Analysts selected on application basis considering:
  - Academic performance
  - Relevant work experience
  - Personal goals

### Course Outline

- **1<sup>st</sup> Half:**
  - Inherit stock from the previous portfolio
  - Thorough analysis; reports findings to investment team
- **2<sup>nd</sup> Half:**
  - Select a stock to research and pitch
  - Class builds and executes a portfolio of existing and pitched stocks



# Course Overview

## Analyst Responsibilities



Individual Responsibility	Team Projects	Student Driven Classroom
<ul style="list-style-type: none"><li>• Execute a series of reports on individual stocks culminating in a valuation of that firm</li><li>• Analysts maintain coverage of their stocks and sectors, updating the class on pertinent developments</li><li>• Beyond individual assignments, analysts must participate through questions and comments to hold each other accountable</li></ul>	<ul style="list-style-type: none"><li>• Monthly Economic and Portfolio Performance Updates</li><li>• Industry and Sector Outlook Reports</li><li>• AIM Alumni communication through Newsletter and Webpage</li></ul>	<ul style="list-style-type: none"><li>• Each day, an analyst acts as “CIO” and leads the course like a meeting –working down agenda items</li><li>• Discussions flow from analyst questions, and contributions are moderated by peers not professors</li><li>• During portfolio selection each analyst has an equal voice</li></ul>

# Course Overview

## Investment Philosophy & Policies



### Investment Philosophy

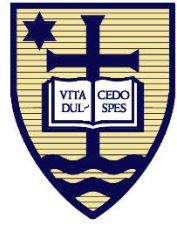
- Outperform the S&P since inception
- Bottom-up approach, accompanied by top down consideration
- Well-researched trade decisions that contribute to the growth of the portfolio's value for the use of future classes

### Investment Constraints

- Common equities traded on major US exchanges
- Target allocation ( $\pm 10\%$ ):
  - 35% Small & Mid Cap
  - 65% Large Cap
- No stock  $> 10\%$  of portfolio
- Portfolio Sector weights  $\cong$  S&P 500 weights

### Allocations

Sector	Proposed Portfolio	S&P 500
Technology	27%	22%
Financials	12%	14%
Healthcare	8%	14%
Consumer Discretionary	15%	12%
Industrials	12%	10%
Consumer Staples	12%	9%
Energy	4%	7%
Utilities	4%	3%
Real Estate	8%	3%
Materials	0%	3%
Telecomm	0%	2%



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## Economic Outlook

United States Economy

Current Political Environment

Market Reactions to Political Events

Global Economy

Investment Considerations

Economic Takeaways

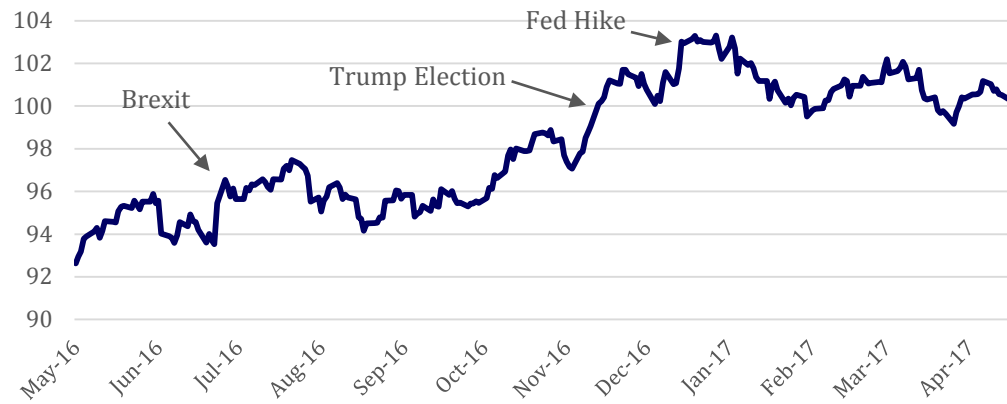


# United States Economy

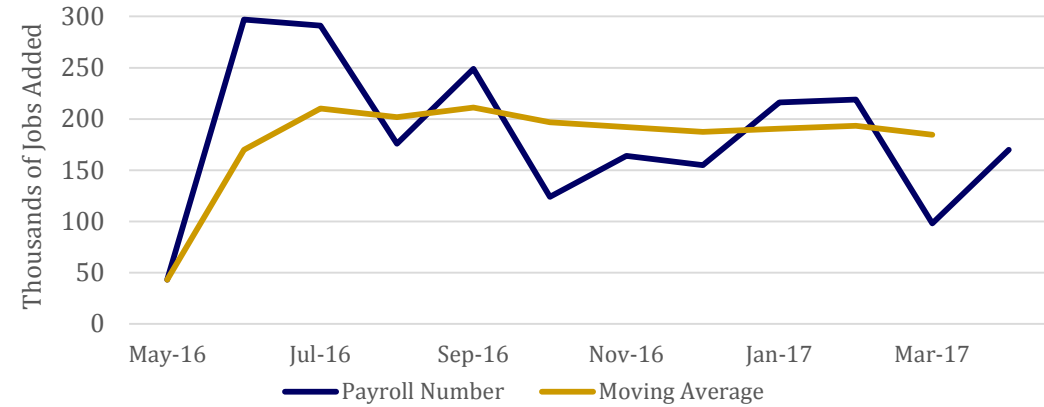
## Economic Overview



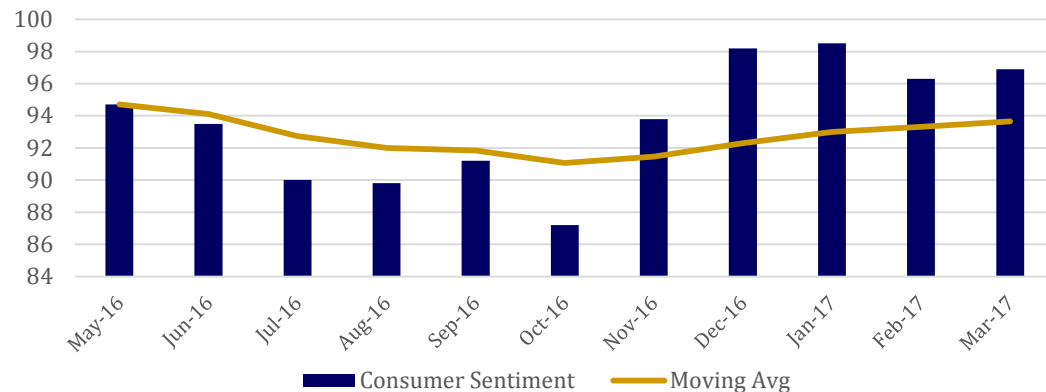
### USD Index



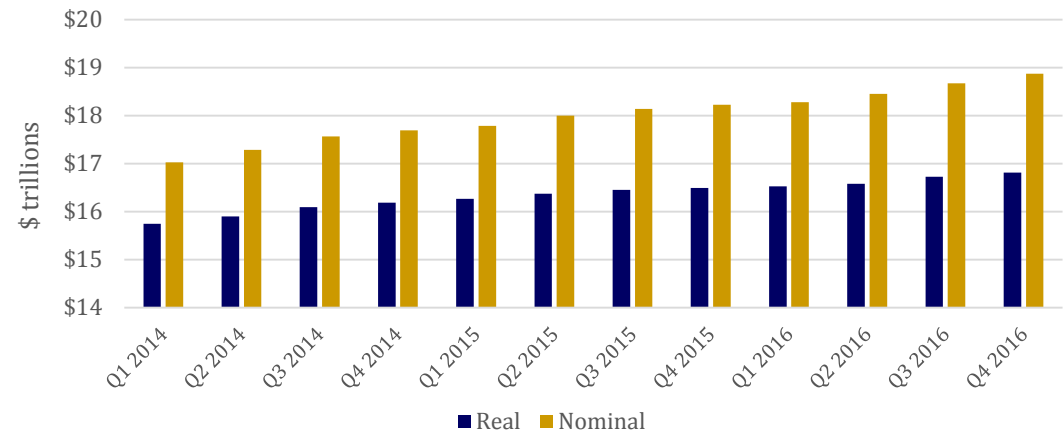
### Non-Farm Payrolls Additions



### University of Michigan Consumer Sentiment



### U.S. GDP 2014-2016



# United States Economy

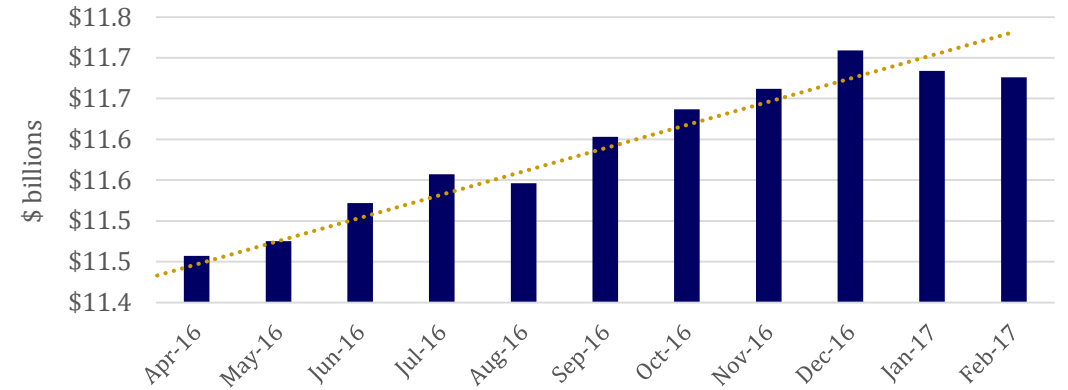
## Federal Reserve Policy



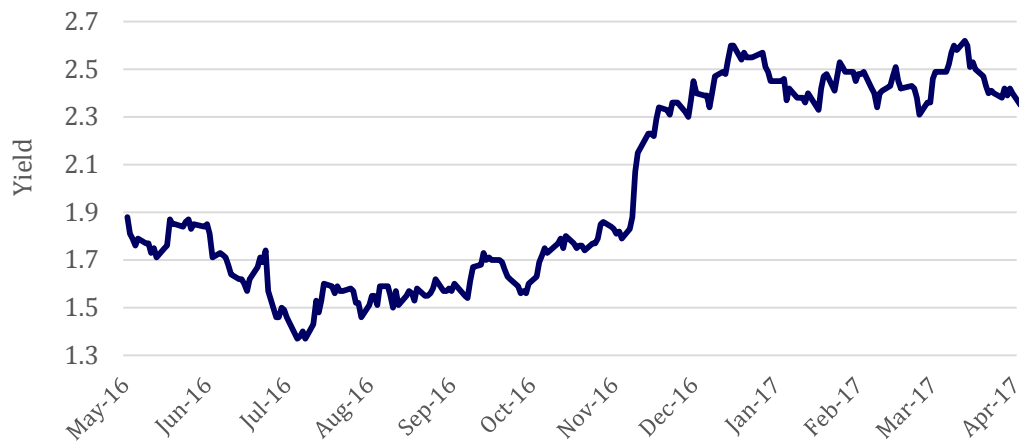
### Federal Reserve Minutes

- Expected to raise rates 2-3 more times in 2017 (50-75bps)
- Target 2% inflation rate
- Real GDP growing at moderate pace
- Unemployment rate of 4.7% is positive indicator
- Real personal consumption and investment spending both increased in Q4-16

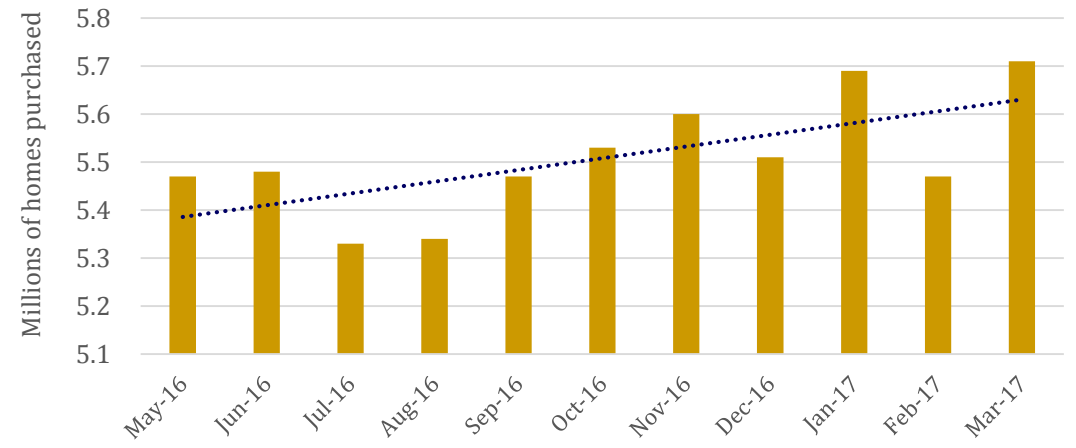
### Personal Consumption



### U.S. 10-Year Treasury Note



### Existing Home Purchases



Source: S&P Capital IQ, Bureau of Economic Analysis

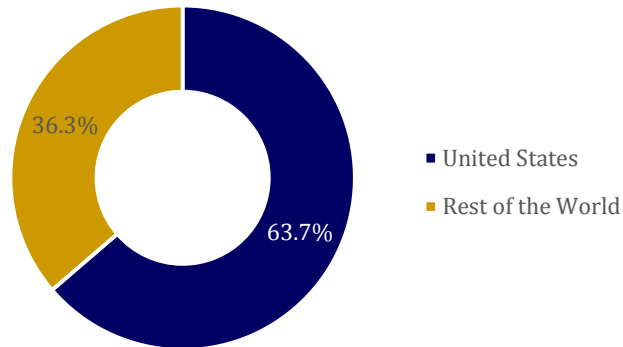
# Current Political Climate

## Unpredictable Trump Agenda



### Trade

S&P 500 % of FY-16 Revenue



### Taxes & Regulation

- Trump Tax Plan:
  - 35% to 15% corporate taxes
  - 7 to 3 Income Brackets with top at 35%
- CBO: Trump Tax Plan +\$10T to the Federal Deficit
- Dismantle CFPB in the Federal Courts
- Major cuts EPA

### Infrastructure

- Election called for \$1.0T - \$1.5T stimulus package focused on infrastructure
- Tabled the issue until 2018
- Not included in Trump FY-17 Budget submitted to Congress

### Healthcare

- Push for ACA repeal
- Negotiations directly with pharmaceutical companies
- Ability to buy insurance over state lines
- Ryan pulls AHCA after CBO estimated 24 million would lose coverage
- Strategy of letting Obamacare collapse on itself

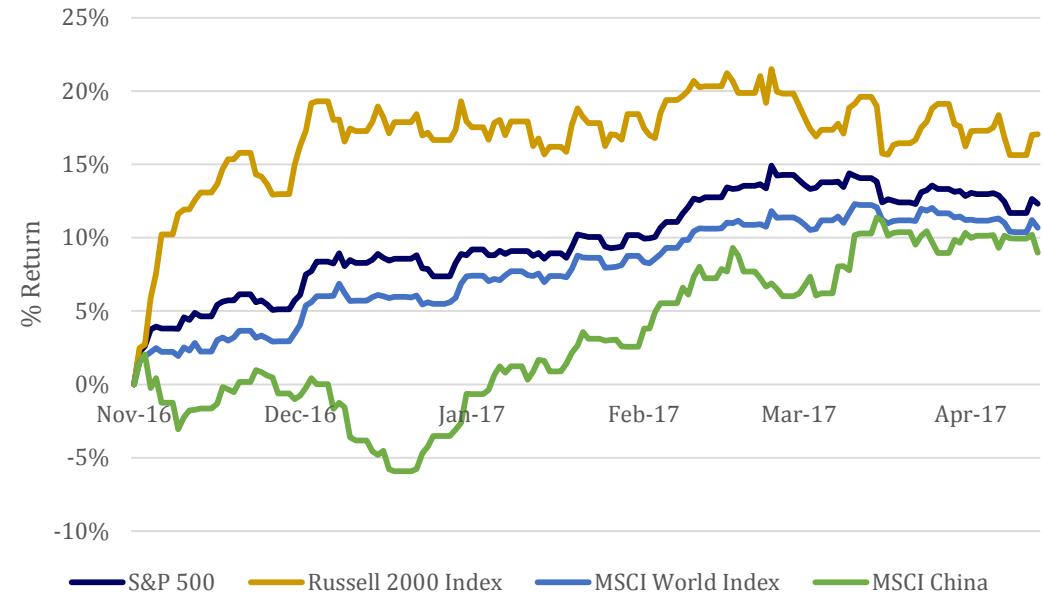
# Market Reactions

## Significant Political Events Driving Industry Performance



Industry Sector	Industry Group	% S&P 500	Election to Mar. 1	Since Mar. 1
Consumer Discretionary	Automobiles and Components	0.6%	15.1%	-8.6%
	Consumer Durables and Apparel	1.3%	4.3%	-1.2%
	Consumer Services	1.7%	18.2%	3.0%
	Media	3.6%	18.1%	0.4%
	Retailing	5.5%	11.1%	0.7%
Consumer Staples	Food and Staples Retailing	2.4%	4.6%	-0.7%
	Food, Beverage and Tobacco	5.8%	6.0%	1.3%
	Household and Personal Products	1.9%	5.3%	-0.3%
Energy	Energy	6.0%	7.8%	-4.0%
Financials	Banks	5.8%	36.9%	-10.6%
	Diversified Financials	5.5%	24.8%	-7.3%
	Insurance	2.5%	16.7%	-4.2%
Healthcare	Healthcare Equipment and Services	5.0%	14.4%	-1.6%
	Pharmaceuticals, Biotechnology and Life Sciences	7.8%	11.5%	-3.8%
Industrials	Capital Goods	6.9%	17.4%	-2.3%
	Commercial and Professional Services	0.6%	12.6%	-1.2%
	Transportation	2.1%	19.6%	-5.6%
Information Technology	Semiconductors and Semiconductor Equipment	3.1%	15.2%	0.9%
	Software and Services	16.0%	11.5%	0.9%
	Technology Hardware and Equipment	5.2%	22.1%	-1.1%
Materials	Materials	2.7%	16.4%	-3.1%
Real Estate	Real Estate	2.9%	8.5%	2.6%
Telecomm	Telecomm	2.2%	10.7%	-2.4%
Utilities	Utilities	3.0%	6.9%	2.0%

### Benchmark Returns



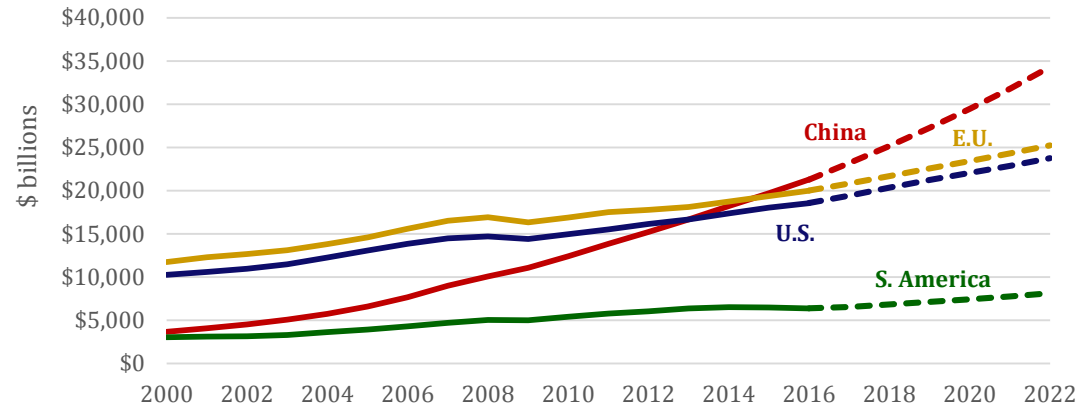
Index	Election to March 1	Since March 1
S&P 500	12.4%	-2.2%
Russell 2000	18.6%	-3.7%
MSCI World	10.1%	-1.0%
MSCI China	5.3%	2.0%

# Global Economy

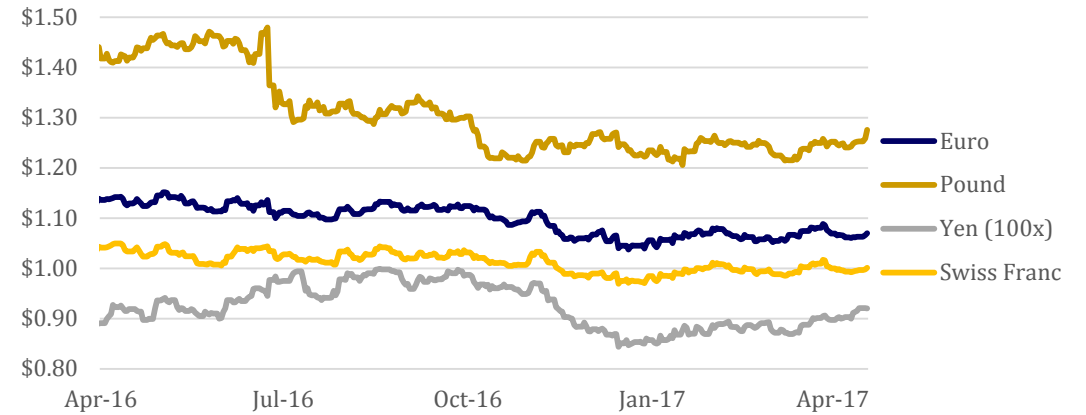
## Consistent Growth Throughout



### IMF Growth Projections



### Global Currency Performance vs. USD



### Future of the European Union

- Breakup?
  - Rise of the Alt Right
  - French Election R1: Macron: 24.0% | Le Pen: 21.3%
  - Brexit – Target 2019
    - Surprise Election: June 2017
    - Polling: Conservatives 48% | Labor: 22%
    - Economy stabilized since exit vote

### Economic Overview

- Germany & France: consumer confidence & markets climb
- Japan: Slow but consistent (1-2%) economic growth
- China:
  - 6.9% Q1-17 GDP Growth – strong growth in retail
  - Est. \$1.1T in implied capital outflows (08/15 – 12/16)
- India: highs in GDP growth, consumer confidence

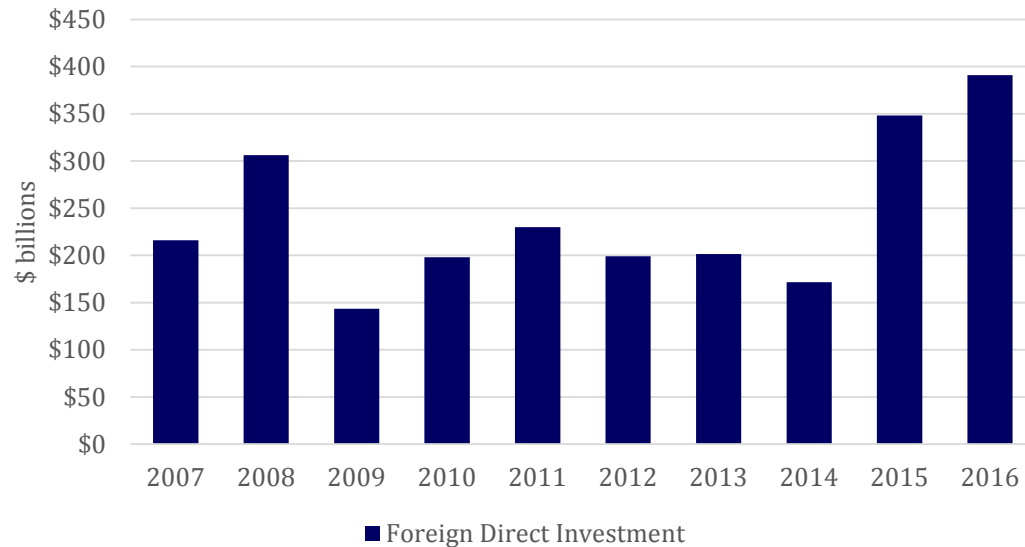
# Investment Considerations

## Bull & Bear Indications

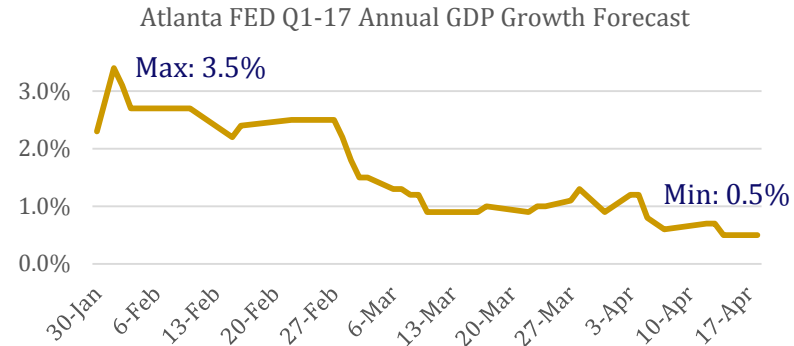


### Upside

- Increases in employment & disposable income will continue to drive investments & spending
- The Fed is pushing inflation at a conservative pace and continuously adjusting to the political landscape
- Foreign Direct Investment in the United States is at historical highs



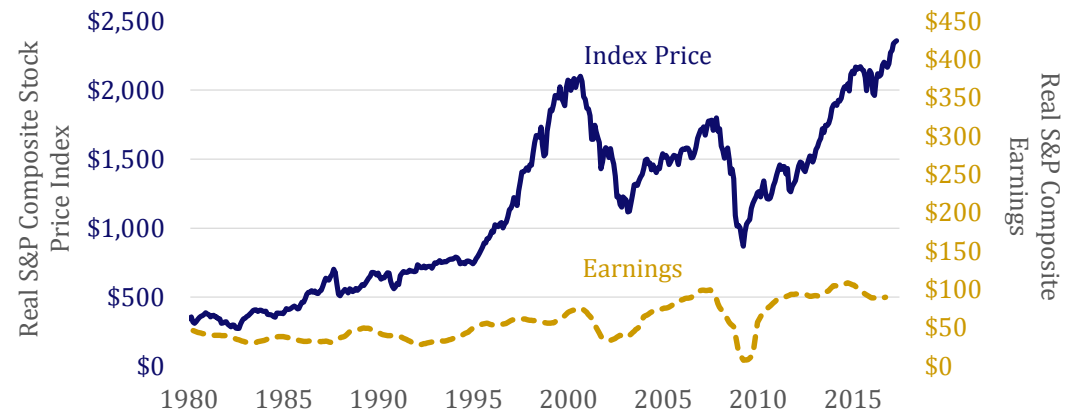
### Downside



#### Projections:

- S&L: -2.0%
- PCE: -0.9%
- Gov.: -0.6%

- *NYT (03/31): "Caution Signals Are Blinking for the Trump Bull Market" - Shiller*



# Economic Takeaways

## AIM Portfolio Strategies

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### Diversification

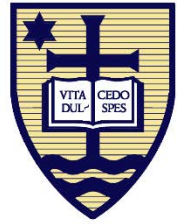
- *Increased our position in **Financials & Consumer Discretionary** to capture market upside; **decreased in Technology, Industrials, and Energy***

### Tariff Risk

- *Considered segmented **geographic revenue** in earnings analysis to account for threats of trade wars*

### Trump Bounce

- *Accounted for market upside with projected future returns and the risks presented by potential political events*



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## Portfolio Performance

AIM Portfolio Returns

Risk-Adjusted Performance

Attribution Analysis

Top & Bottom Performers

Portfolio Additions & Deletions

Finalized Portfolio



# Portfolio Performance

## Key Themes



### AIM Portfolio Returns

- *Long-term outperformance muted by near-term underperformance*

### Risk-Adjusted Performance

- *Beta to S&P 500 dropped **below 1.0** during last 12 months; Sharpe Ratio below benchmark indices indicates disappointing results for riskiness of portfolio*

### Attribution Analysis

- *Allocation effect + Selection effect = Net management effect*

### Top and Bottom Performers

- *Consumer Goods at the bottom end of recent performance **Technology and Real Estate** at the top end of recent performance*

### Portfolio Additions and Deletions

- *13 additions and 11 deletions*

### Finalized Portfolio

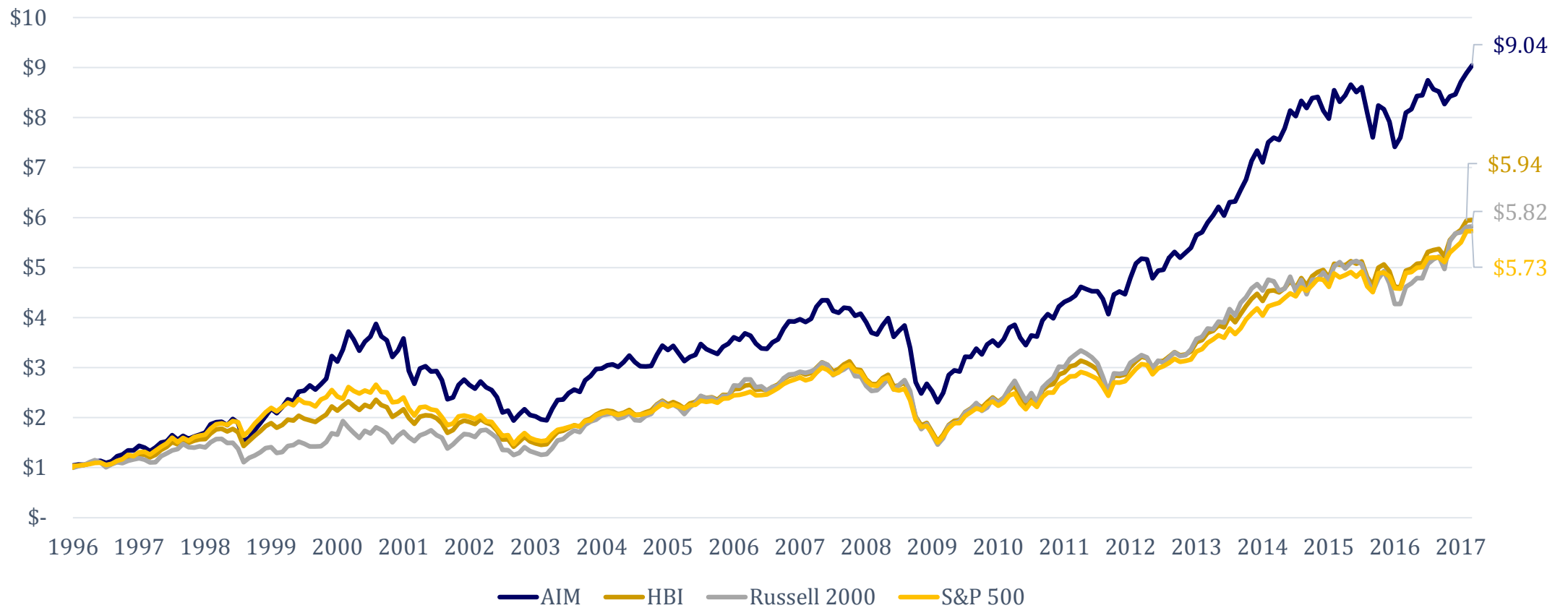
- *Allocation shift toward **Consumer Staples, Consumer Discretionary, and Financials**, away from **IT and Industrials***

# Portfolio Performance

## Historical Returns Against Benchmarks



### Cumulative Return of \$1 Investment Since Inception (as of March 31, 2017)

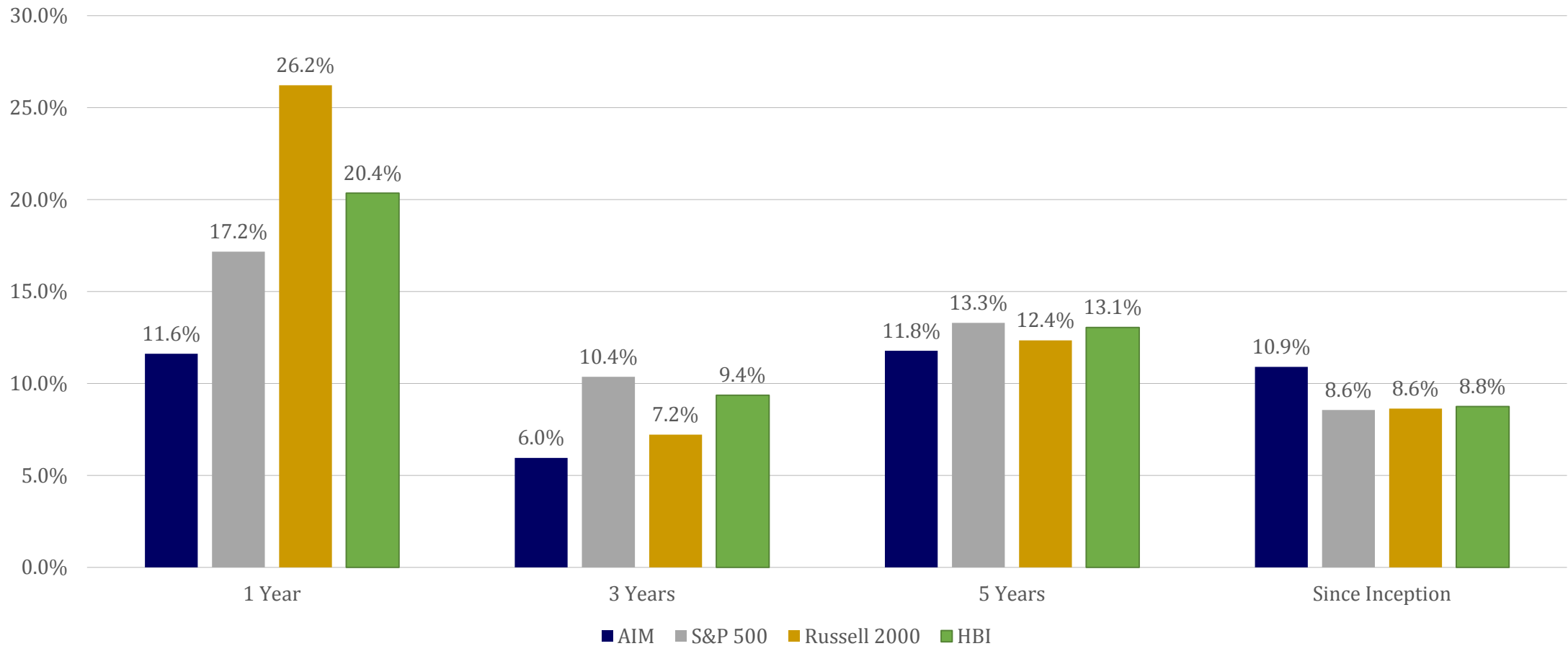


# Portfolio Performance

## Historical Returns Against Benchmarks



### Returns Against Benchmark Indices (as of March 31, 2017)

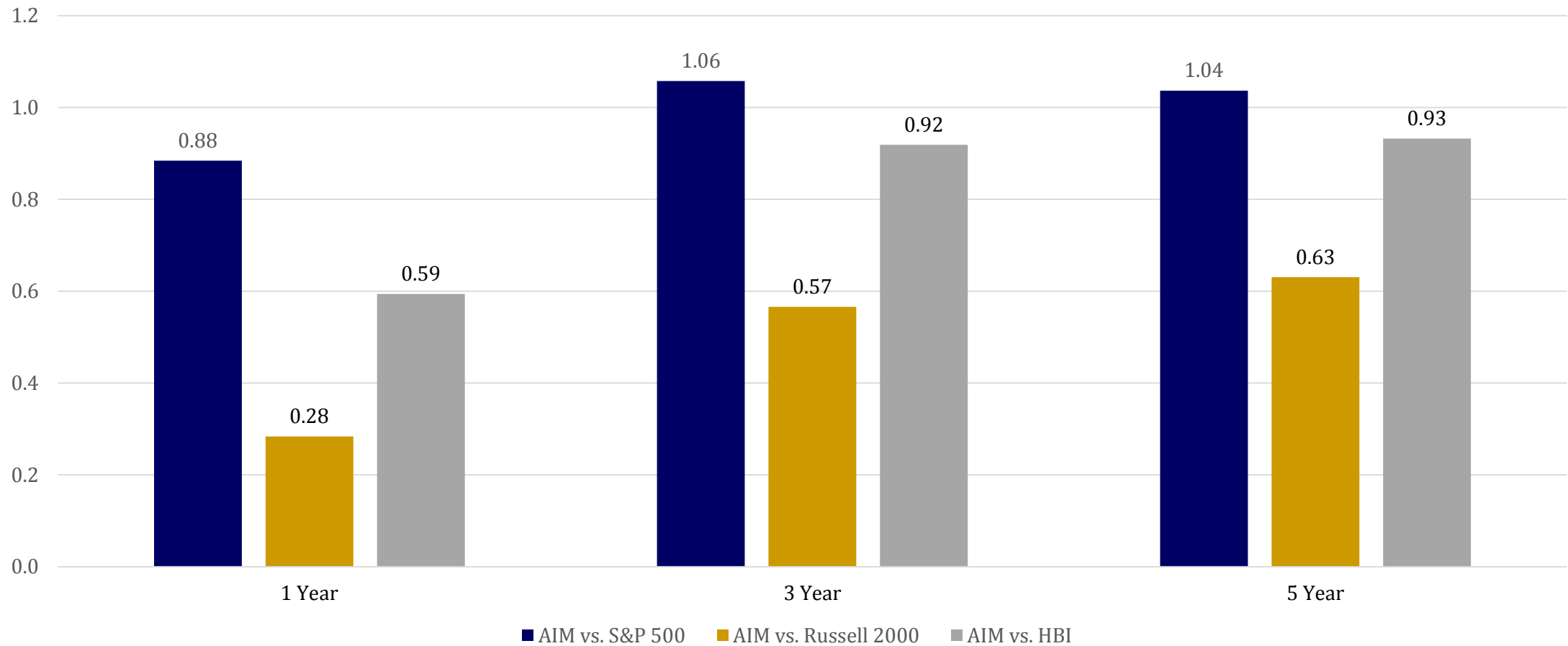


# Portfolio Performance

## Risk Profile



### Beta to Benchmark Indices (as of March 31, 2017)

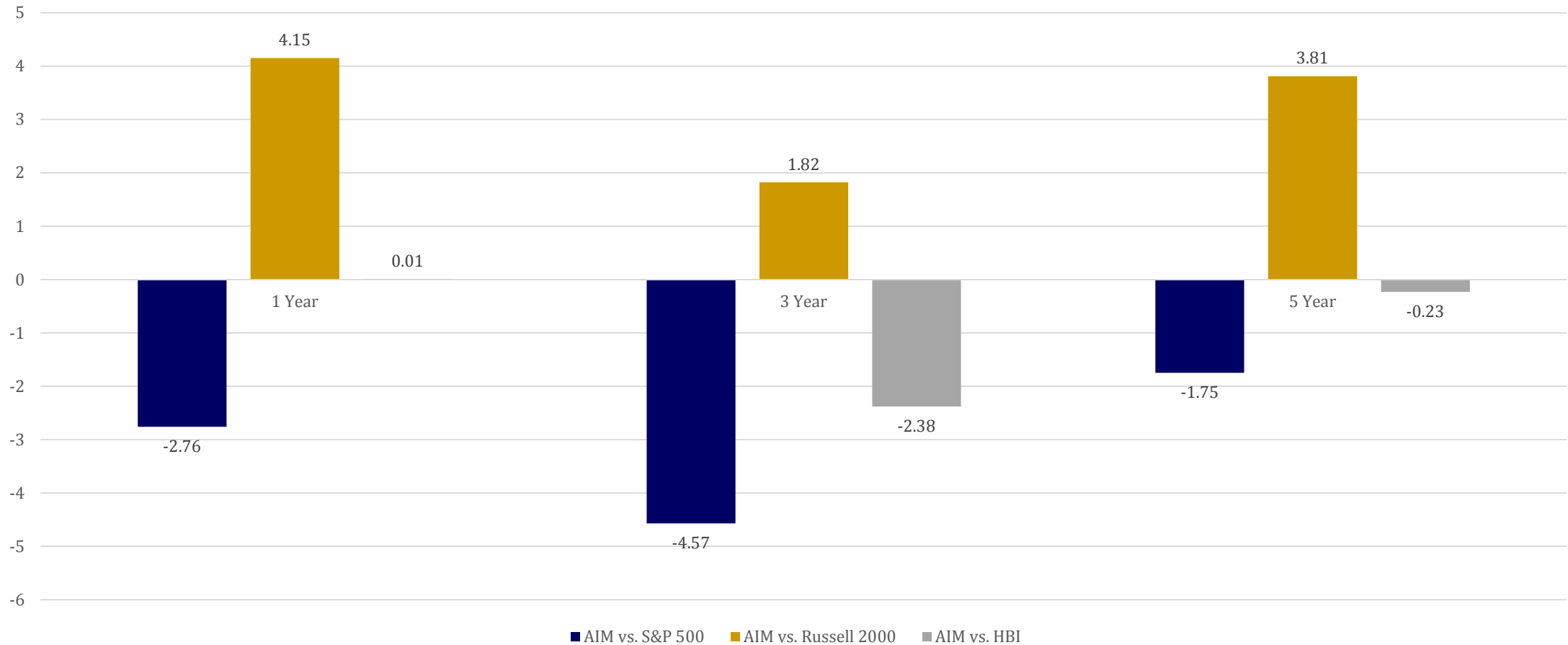


# Portfolio Performance

## Risk-Adjusted Performance



### Jensen's Alpha (as of March 31, 2017)

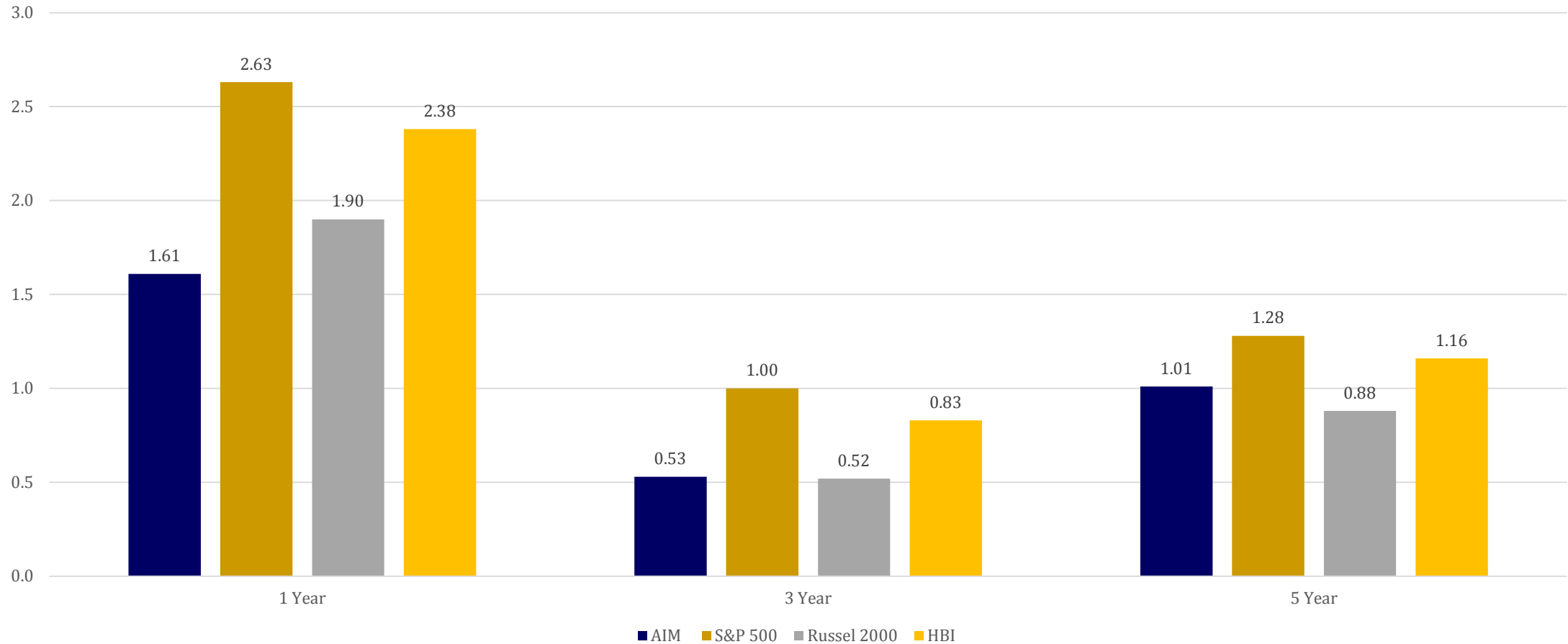


# Portfolio Performance

## Risk-Adjusted Performance



### Sharpe Ratio (as of March 31, 2017)



# Portfolio Performance

## Key Themes



### AIM Portfolio Returns

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### Portfolio Additions and Deletions

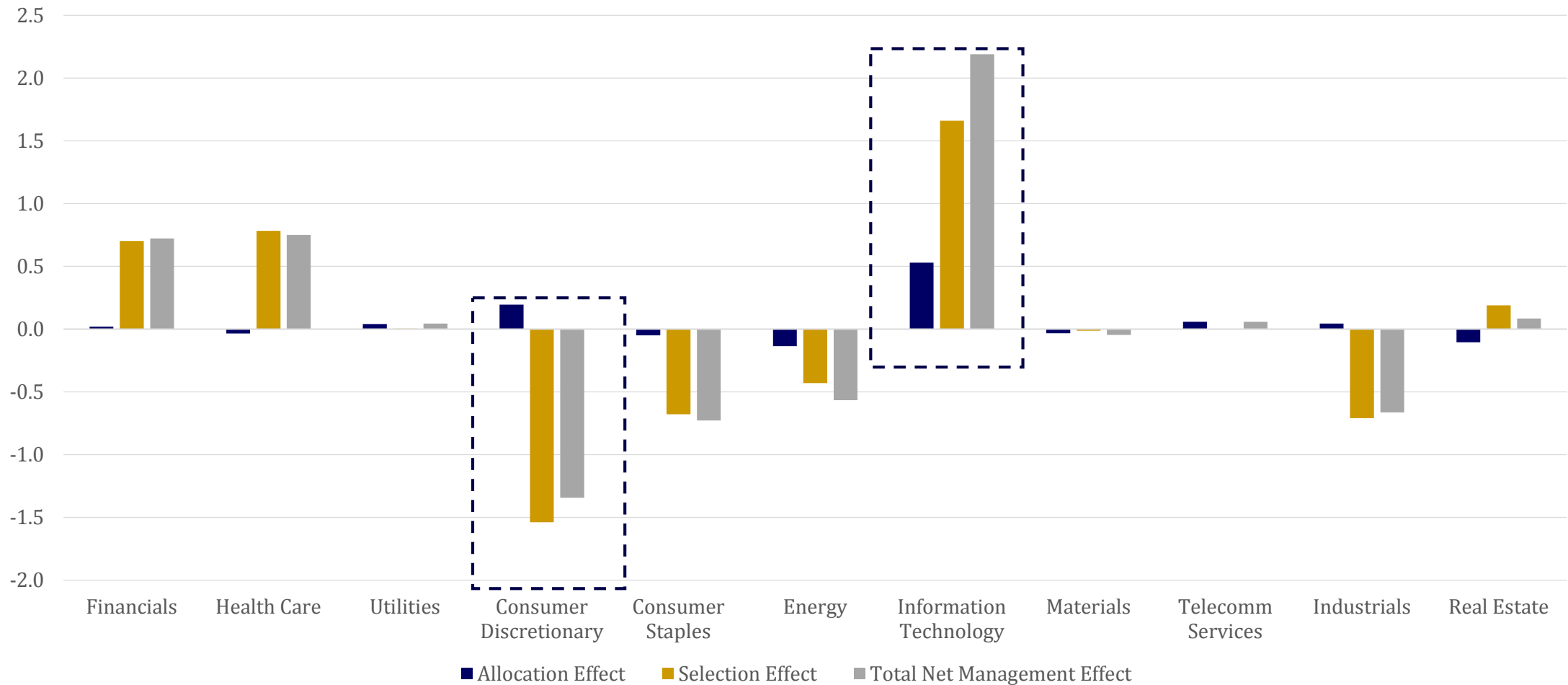
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### Finalized Portfolio

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# Portfolio Performance

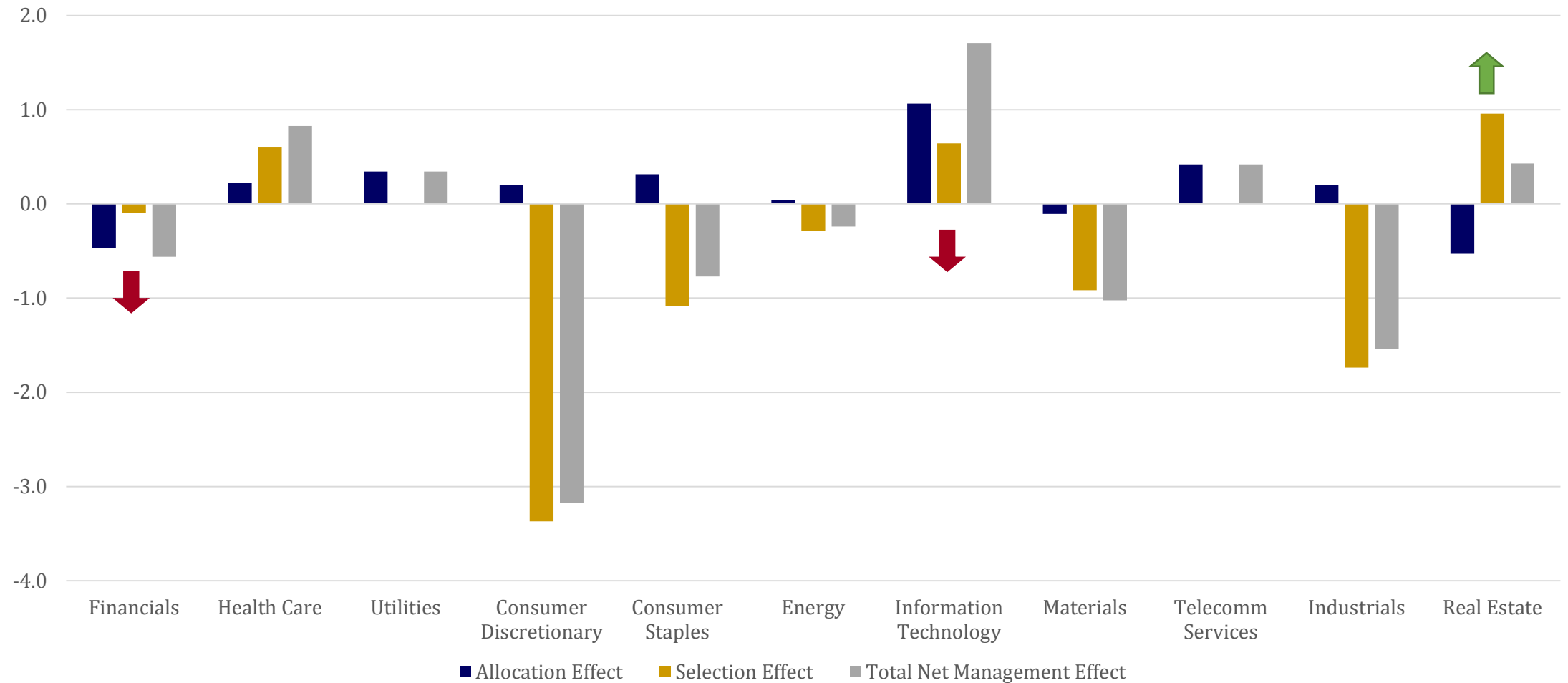
## Attribution Analysis: 5-Year Annualized





# Portfolio Performance

## Attribution Analysis: 1-Year Annualized

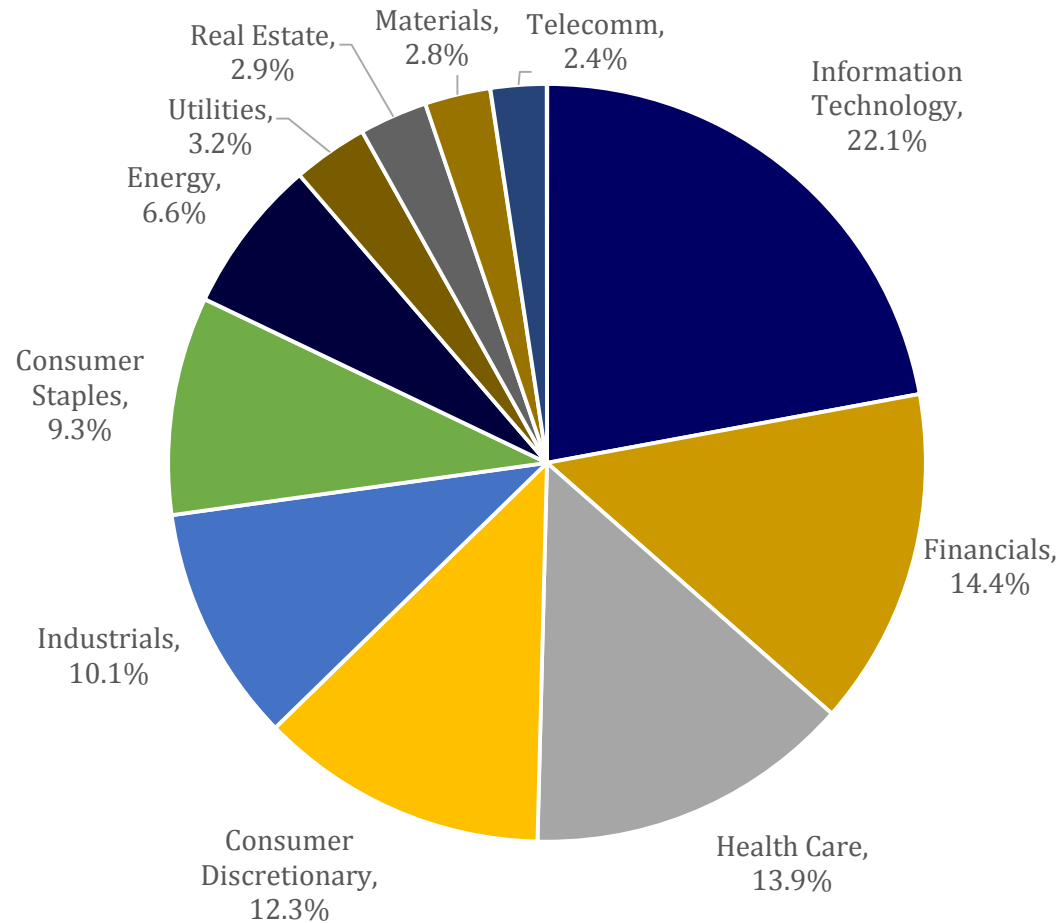


# Portfolio Performance

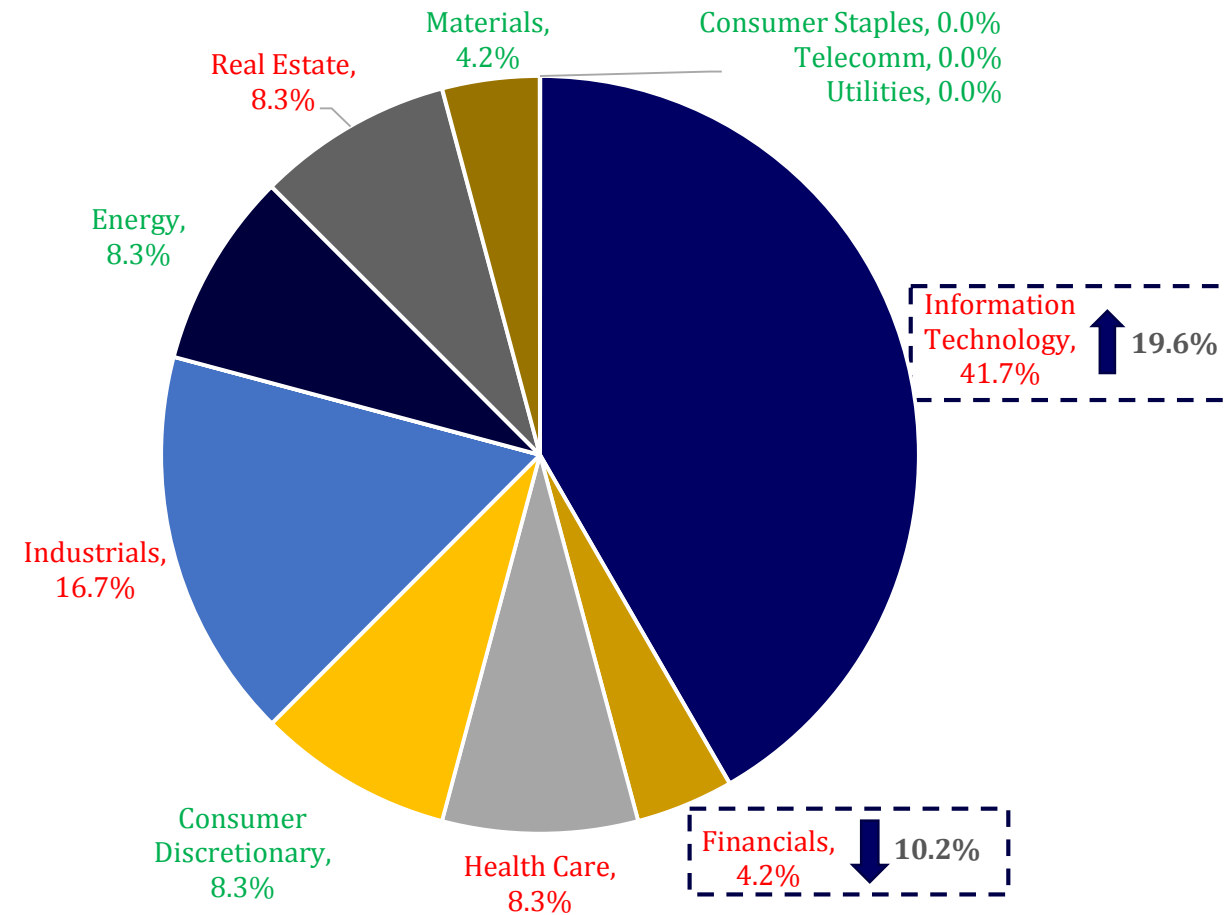
## Target Weighting



Target Portfolio Weights



Current Configuration



Source: S&P Global, BNY Mellon Statements

Note: Green indicates current compliance and red indicates incompliant

# Portfolio Performance

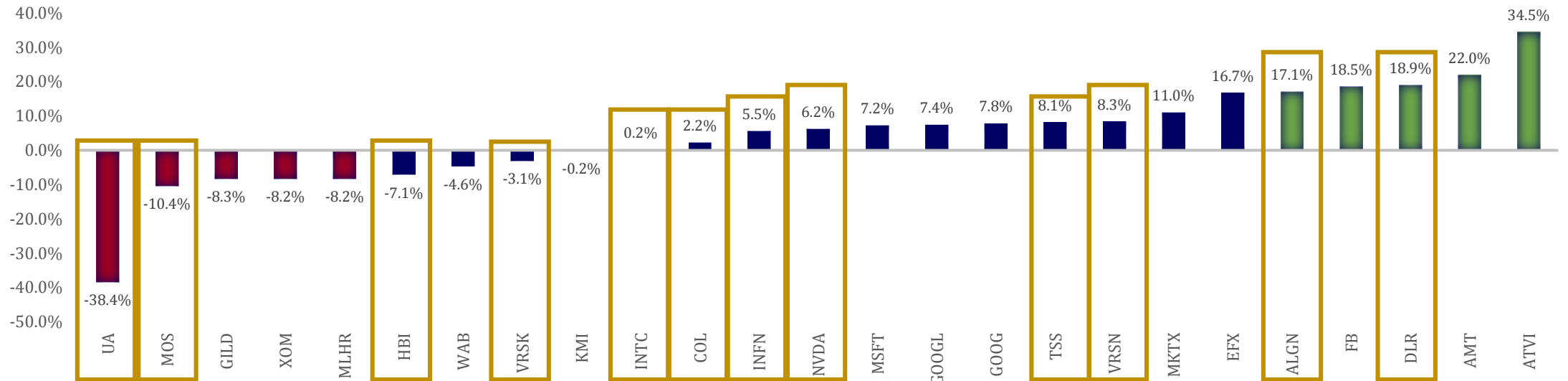
## Top and Bottom Performers: Holding Period Return



Top 5 Performers		
Company	Industry	Return
Activision Blizzard	Technology	34.51%
American Tower	Real Estate	21.95%
Digital Realty Trust	Real Estate	18.88%
Facebook	Technology	18.54%
Align Technology	Healthcare	17.14%

Bottom 5 Performers		
Company	Industry	Return
Under Armour	Consumer Goods	-38.38%
Mosaic	Basic Materials	-10.40%
Gilead Sciences	Healthcare	-8.28%
ExxonMobil	Energy	-8.23%
Herman Miller	Consumer Goods	-8.22%

### PERFORMANCE SINCE DECEMBER 7, 2016



Stocks added by AIM XLIII on December 7, 2016

# Portfolio Performance

## Key Themes



### AIM Portfolio Returns

- *Long-term outperformance muted by near-term underperformance*

### Risk-Adjusted Performance

- *Beta to S&P 500 dropped **below 1.0** during last 12 months; Sharpe Ratio below benchmark indices indicates disappointing results for riskiness of portfolio*

### Attribution Analysis

- *Allocation effect + Selection effect = Net management effect*

### Top and Bottom Performers

- **Consumer Goods** at the bottom end of recent performance **Technology** and **Real Estate** at the top end of recent performance

### Portfolio Additions and Deletions

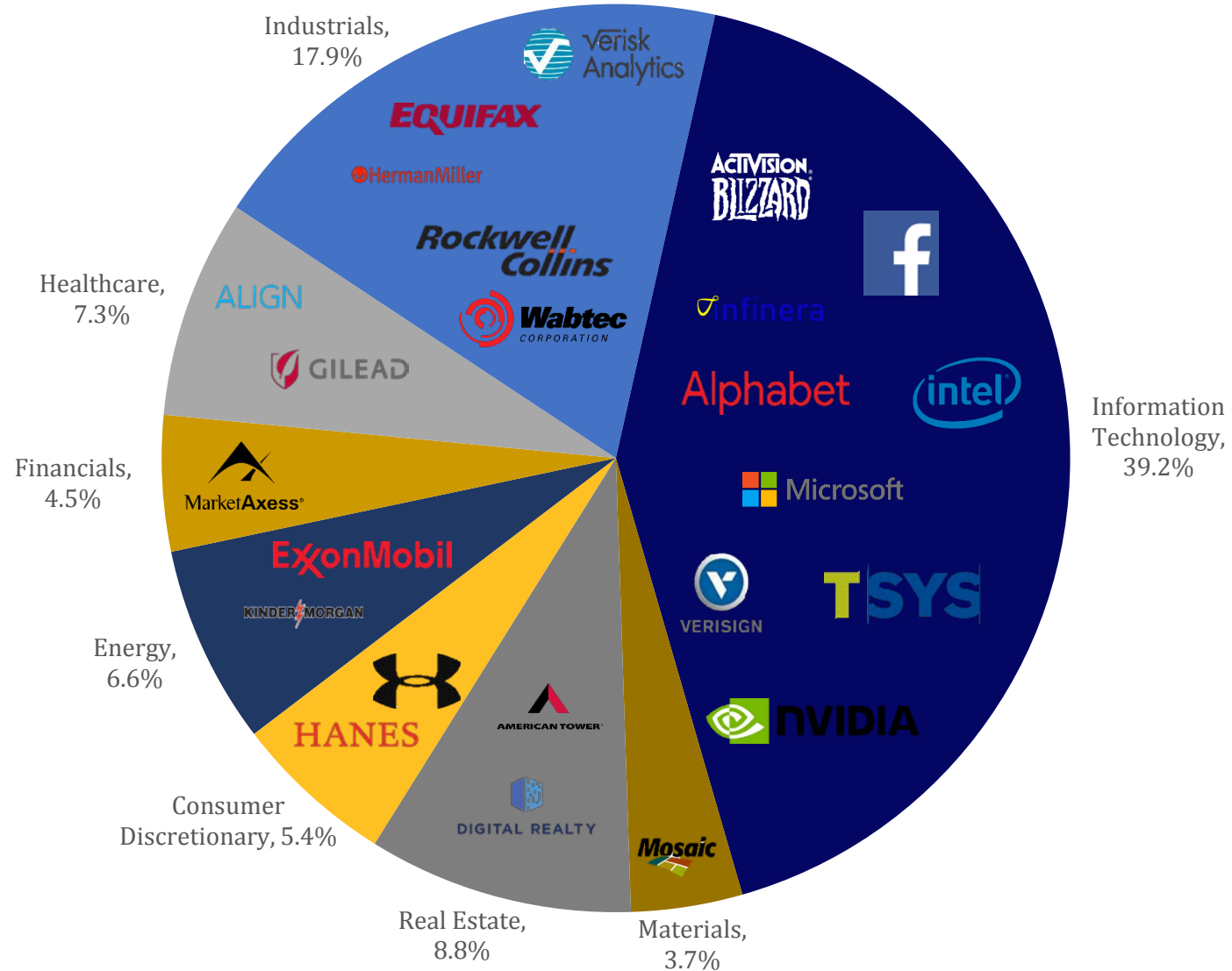
- **13 additions and 11 deletions**

### Finalized Portfolio

- *Allocation shift toward **Consumer Staples, Consumer Discretionary, and Financials**, away from **IT and Industrials***

# Portfolio Performance

Allocation: Inherited Portfolio



# Portfolio Performance

## Additions and Deletions



### Portfolio Additions

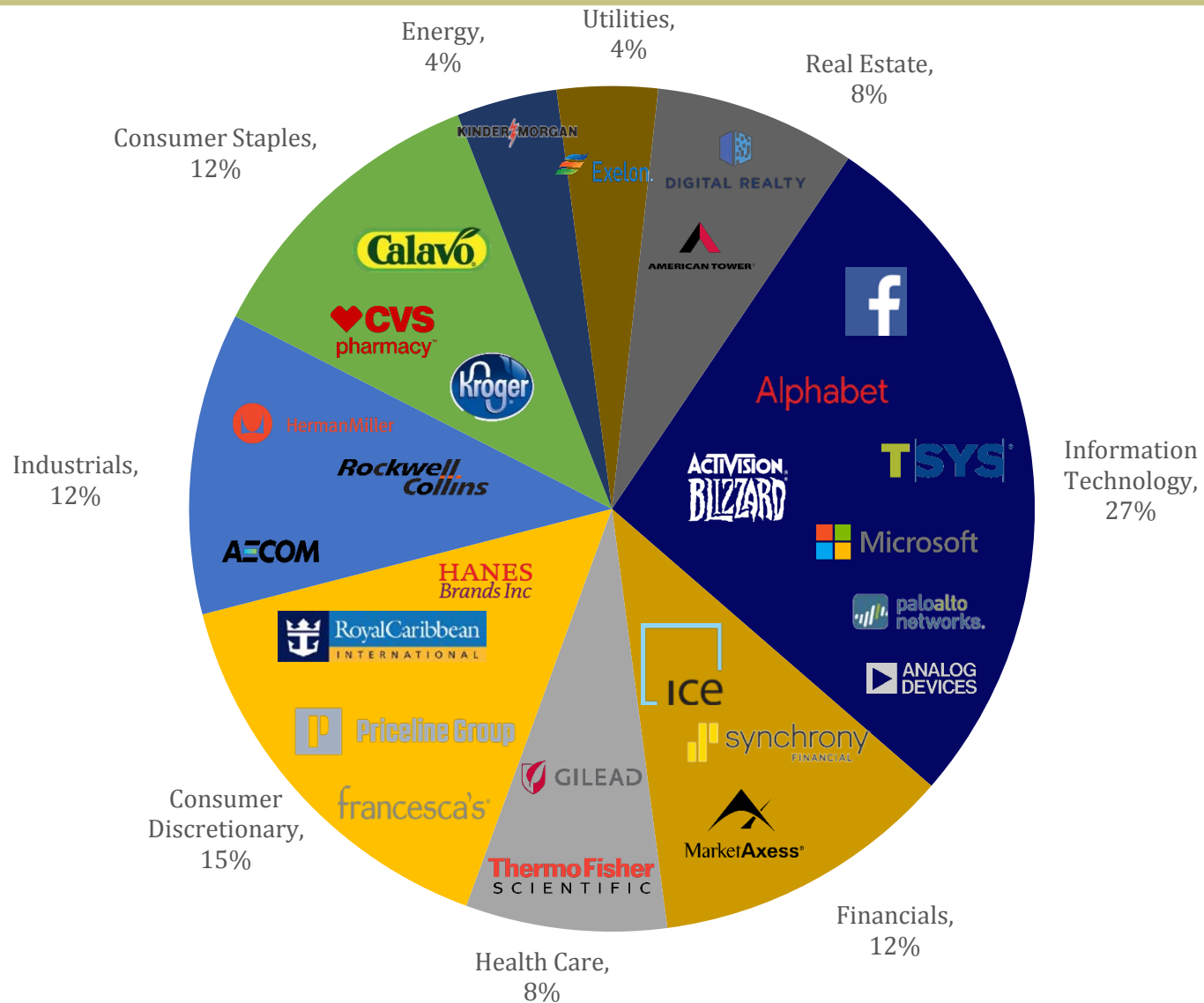
Company	Industry
Royal Caribbean	Consumer Discretionary
Priceline	Consumer Discretionary
Francesca's	Consumer Discretionary
CVS	Consumer Staples
Kroger	Consumer Staples
Calavo Growers	Consumer Staples
ICE	Financials
Synchrony Financial	Financials
Thermo Fisher Scientific	Healthcare
AECOM	Industrials
Analog Devices	Technology
Palo Alto Networks	Technology
Exelon	Utilities

### Portfolio Deletions

Company	Industry
Hanesbrands	Consumer Discretionary
Exxon Mobil	Energy
Align Technology	Healthcare
Verisk Analytics	Industrials
Equifax	Industrials
Westinghouse Airbrake	Industrials
Mosaic Company	Materials
Nvidia	Technology
Intel	Technology
Infinera	Technology
Verisign	Technology

# Portfolio Performance

Allocation: AIM XLIV Portfolio

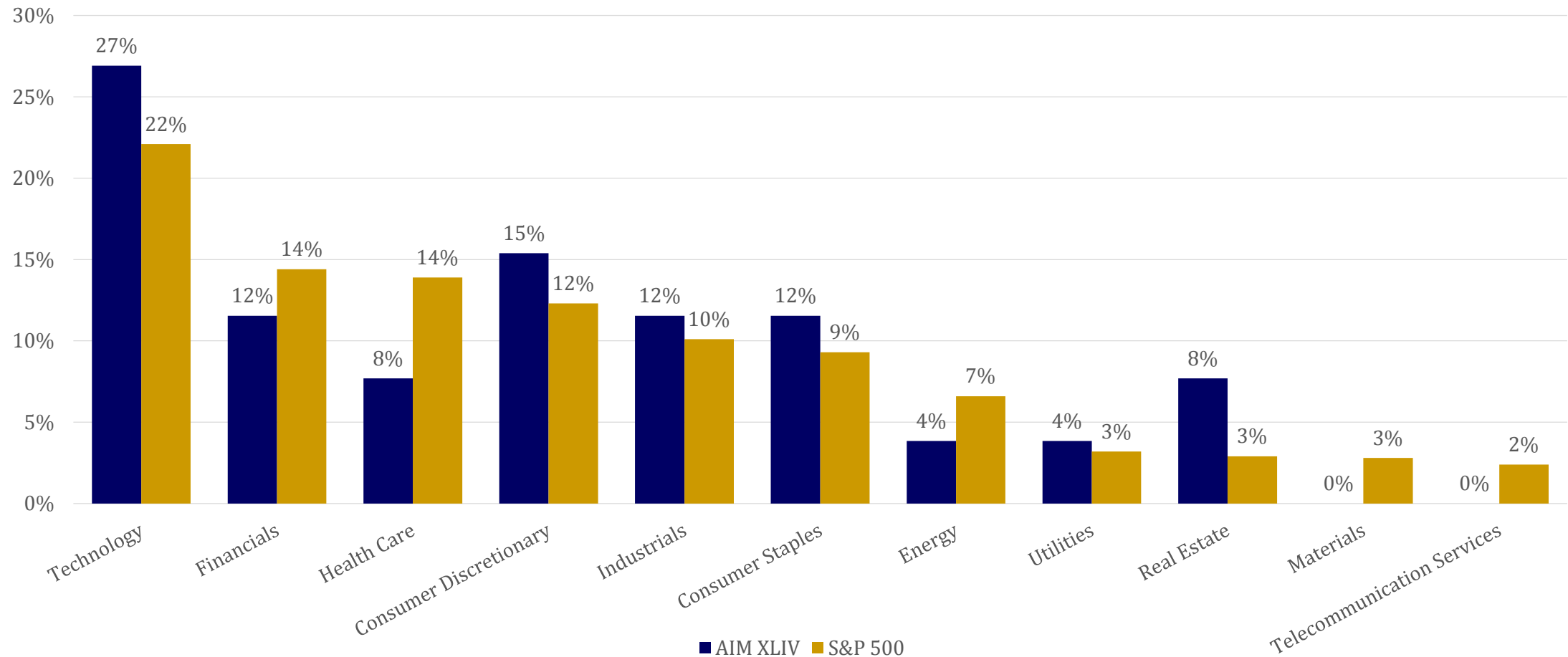


# Portfolio Performance

## Sector Allocation



### AIM XLIV Final Portfolio vs. S&P 500 (As of April 18, 2017)



Source: BNY Mellon Statement, AIM / Xia 2017



# Portfolio Performance

## Key Takeaways



### AIM Portfolio Returns

- *Long-term outperformance muted by near-term underperformance*

### Risk-Adjusted Performance

- *Beta to S&P 500 dropped **below 1.0** during last 12 months; Sharpe Ratio below benchmark indices indicates disappointing results for riskiness of portfolio*

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### Top and Bottom Performers

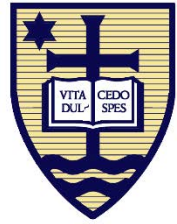
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### Portfolio Additions and Deletions

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### Finalized Portfolio

- *Allocation shift toward **Consumer Staples**, **Consumer Discretionary**, and **Financials**, away from **IT** and **Industrials***



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## Security Analysis

Company & Industry Overview

Fundamental Analysis

Discovery

Earnings Analysis

Beta Analysis

Relative Valuation

Discounted Cash Flow Valuation

Alternative Valuation

# Course Overview

## Portfolio Selection Process



### Methodology

- Investment committee-based process
- Multiple portfolios considered
- 22 equal votes

### Process

- 2-minute “quick pitch”
- Initial round voting – 80% threshold
- Actively updated:
  - Portfolio allocations vs. S&P 500
  - Small/Mid/Large cap mix
- Second round voting – filled last third of open slots

Stock	Ticker	Analyst	Sector	Market Cap	Current Portfolio?	Rec	Target Price	Round 1 Yes	Round 1 No	%	Round 2 Yes	Round 2 No
Exxon Mobil	XOM	Jason Davis	Energy	Large	Yes	Sell	\$ 83.17	8	14	36%		22
Facebook	FB	Sam Chitrit	Technology	Large	Yes	Buy	\$ 166.87	21	1	95%		
Francesca's	FRAN	Garrett Logan	Consumer Discretionary	Small	No	Buy	\$ 21.34	14	8	64%	13	9
Gilead Sciences	GILD	Silei Li	Healthcare	Large	Yes	Buy	\$ 91.79	16	6	73%		
Hanesbrands	HBI	Dylan Koehler	Consumer Discretionary	Mid	Yes	Buy	\$ 29.90	14	8	64%	11	11
Herman Miller	MLHR	Karissa Schuchardt	Industrials	Small	Yes	Hold	\$ 34.60	11	11	50%	15	7
IBM	IBM	Sean Hanley	Technology	Large	No	Sell	\$ 179.71	0	22	0%		22
ICE	ICE	Ross Zimmerman	Financials	Large	No	Buy	\$ 76.92	19	3	86%		

# Security Analysis

## Equities & Focus of Analysis



### Current Holdings

Company & Industry



Discovery



Earnings



Beta



Discounted Cash Flow



Earnings



Company & Industry



Discounted Cash Flow



Company & Industry



Relative Analysis



Discounted Cash Flow



Technical Analysis



Discounted Cash Flow



Company & Industry



# MarketAxess Holdings

NYSE: MKTX



Price (as of 4/18/17):	\$183.06
TTM Price-to-Earnings:	56.6x
Market Capitalization:	\$6.9 bn
Dividend Yield:	0.57%
TTM Earnings Per Share:	\$3.35

### One-Year Price Chart



Focus

Company & Industry Overview

# MarketAxess Holdings

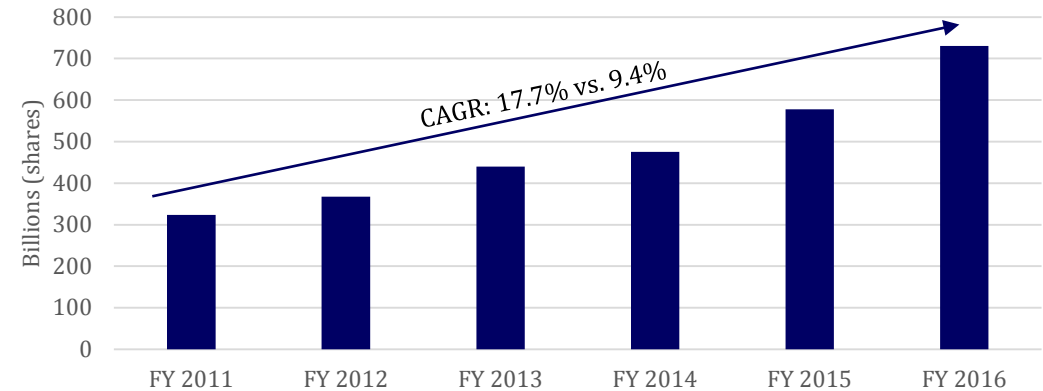
## Company & Industry Overview



### Industry Background

- Traditionally, big banks provided liquidity by holding bonds on their balance sheets. However, post the 2008 financial crisis the Basel III accord and the Volcker Rule have forced banks to clean up their balance sheets.<sup>1,2</sup>
- Also, since 80 % of bond trading is carried out on phone investors are looking for alternative platforms in search of liquidity and better price discovery.<sup>2</sup>

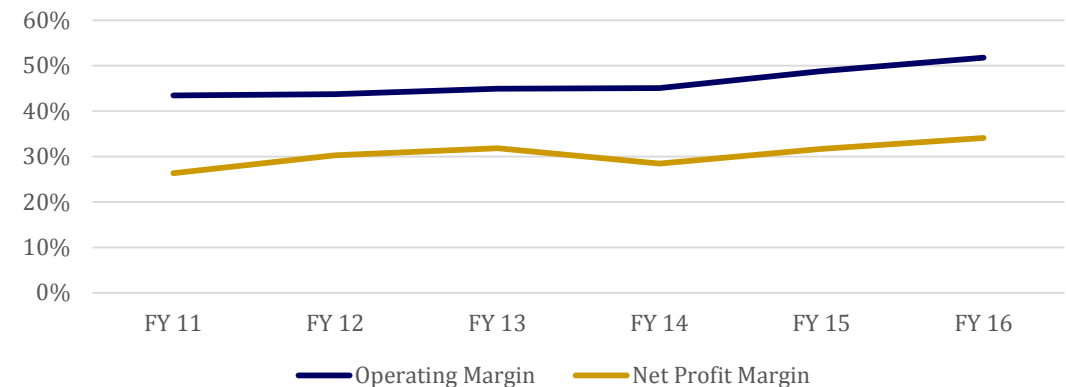
### High Grade Trading Volume



### Company Background

- The firm holds 80 percent market share in the electronic corporate bond trading in US, leading Bloomberg and Tradeweb.<sup>3</sup>
- The firm has implemented the RFQ platform which allows for online bond trading which reduces the average transaction cost by 3 basis points in yield, or \$1,800 per million traded.<sup>1</sup>

### Historical Margins

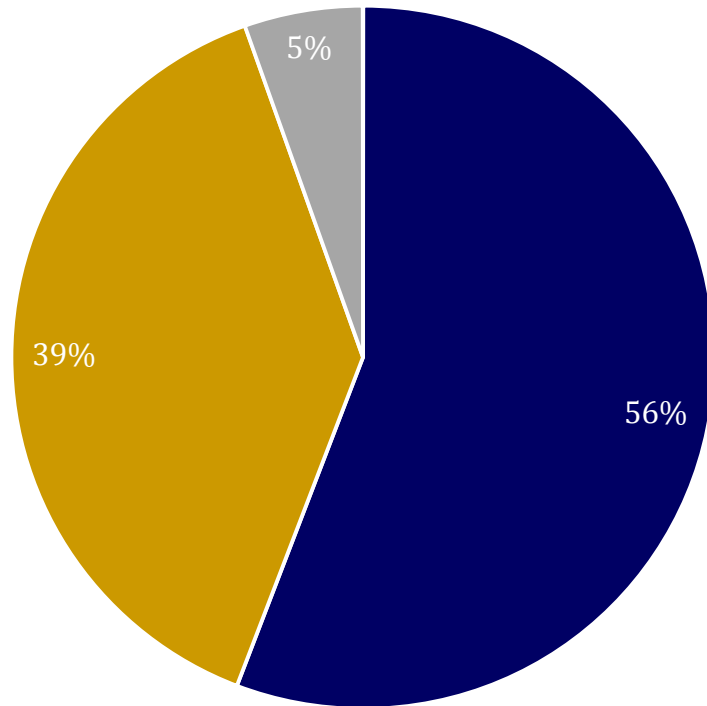


# MarketAxess Holdings

## Company & Industry Overview

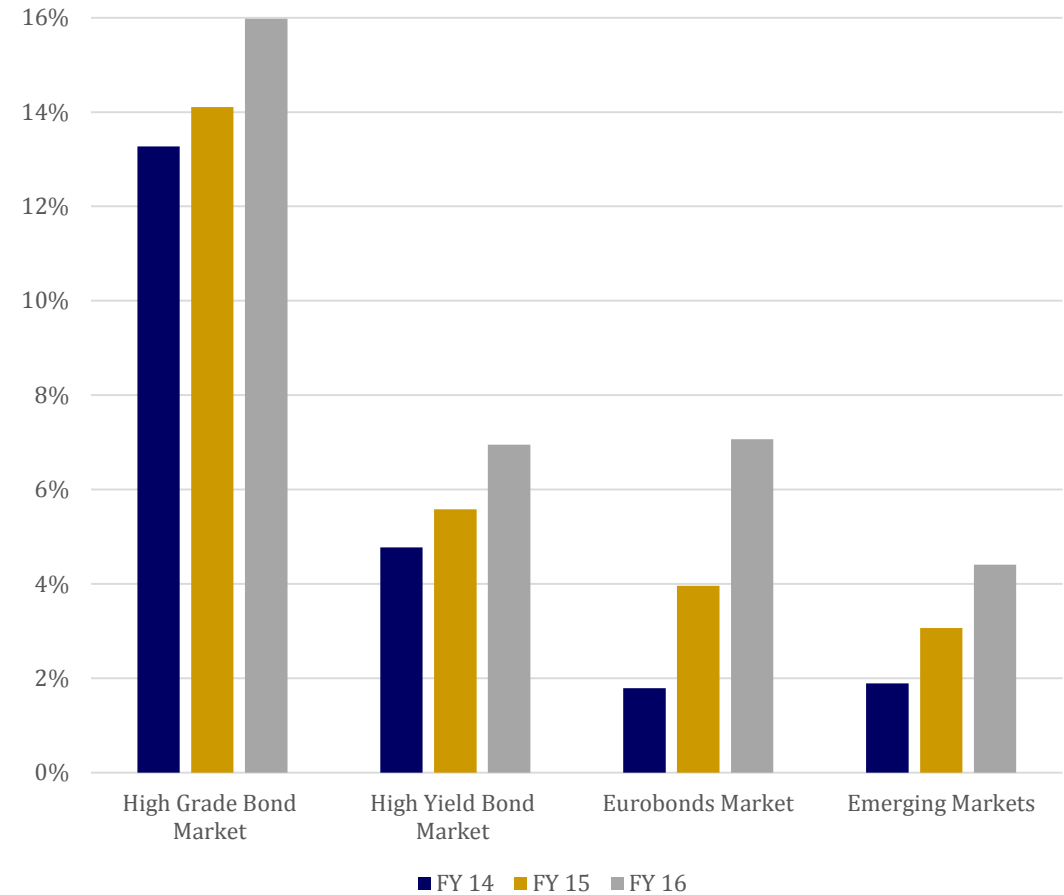


### Revenue Segments



- High Grade
- High Yield/Eurobonds/Emerging Markets
- Other Liquid Products

### Market Share Expansion



# MarketAxess Holdings

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Retain	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	100%	\$229.00	\$229.00
Forward P/E	0%	\$146.00	\$0.00
Forward EV/EBITDA	0%	\$91.00	\$0.00
LTM EV/Sales	0%	\$74.00	\$0.00
<b>Intrinsic Value</b>			<b>\$229.00</b>
Price (as of April 18, 2017)			\$183.06
<b>Estimated Upside / (Downside)</b>			<b>25.1%</b>

### Investment Thesis

1. Company is well-positioned for growth with market share growing across each of its product offerings in FY15 and FY16
2. International revenue streams with the Eurobond and Emerging Markets trading volumes growing at 79% and 54%, respectively
3. Current low interest rate environment and the increased volatility in the debt markets, augurs well for corporate bond trading



# Gilead Sciences, Inc.

NYSE: GILD



Price (as of 4/18/17):	\$66.06
TTM Price-to-Earnings:	6.8x
Market Capitalization:	\$86.6 bn
Dividend Yield:	18.20%
TTM Earnings Per Share:	\$10.08

One-Year Price Chart



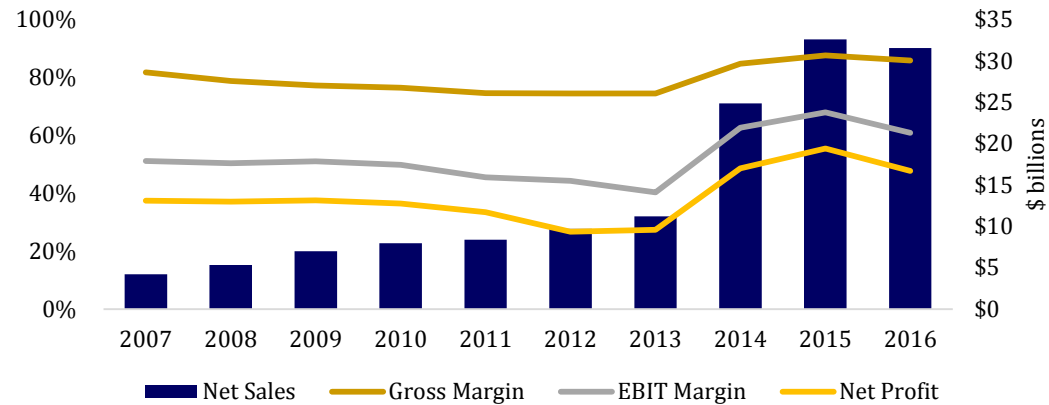
Focus  
Fundamental Analysis

# Gilead Sciences, Inc.

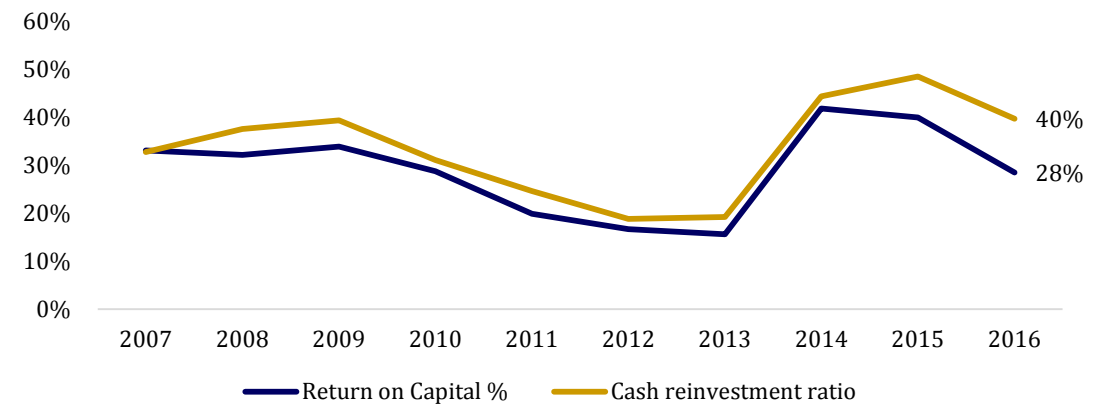
## Fundamental Analysis



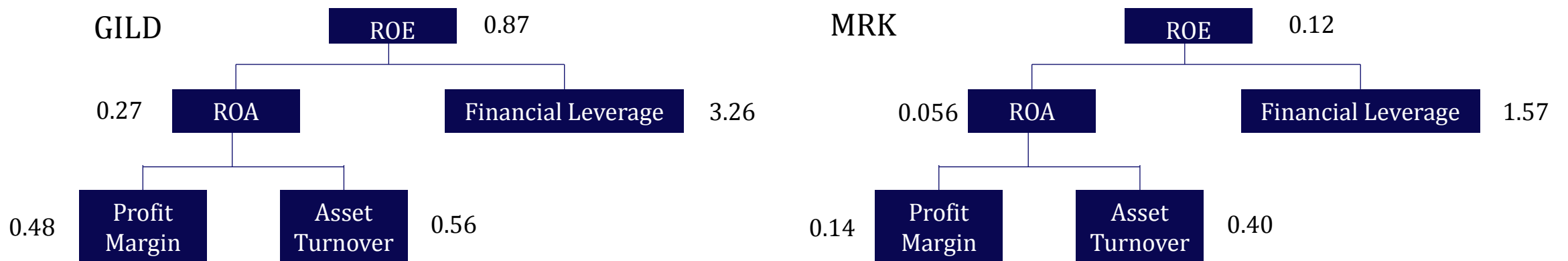
### Sales & Profitability



### Growth Analysis



### DuPont Analysis



# Gilead Sciences, Inc.

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Retain	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	85%	\$86.08	\$73.17
Forward P/E	5%	\$121.28	\$6.06
EV/EBITDA	5%	\$135.30	\$6.76
EV/Revenue	5%	\$115.87	\$5.79
<b>Intrinsic Value</b>			<b>\$91.79</b>
Price (as of April 18, 2017)			\$66.06
<b>Estimated Upside / (Downside)</b>			<b>38.9%</b>

### Investment Thesis

1. The competitive advantages of Gilead Sciences lie in strong R&D capability and healthy product pipeline.
2. The strong cash flow and healthy financial position supports continuous R&D activities and potential acquisitions.
3. Gilead Sciences is currently undervalued according to both methods.

# Herman Miller

NYSE: MLHR



Price (as of 4/18/17):	\$31.25
TTM Price-to-Earnings:	15.1x
Market Capitalization:	\$1.96 bn
Dividend Yield:	2.17%
TTM Earnings Per Share:	\$2.17

One-Year Price Chart



Focus

Earnings Analysis

# Herman Miller

## Earnings Per Share Forecast



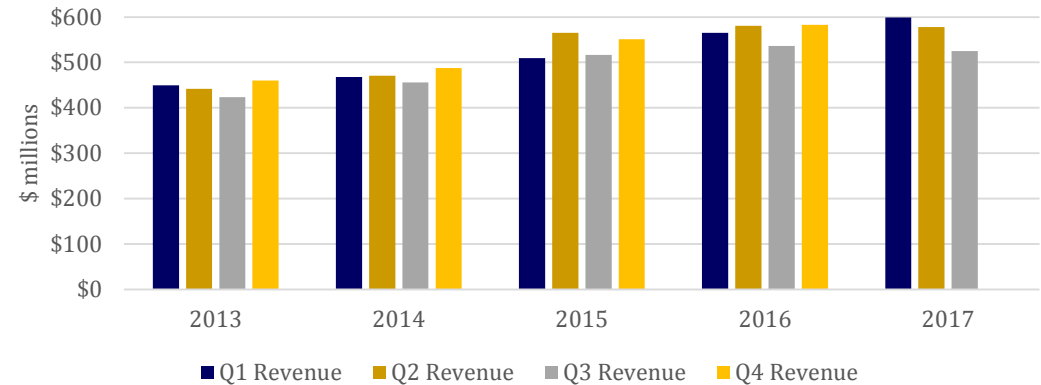
### Overview

- Developed EPS forecasts for next two quarters and next two fiscal years using projected financial statements
- Suggests strong seasonality of earnings
- Estimates track with management guidance and street consensus

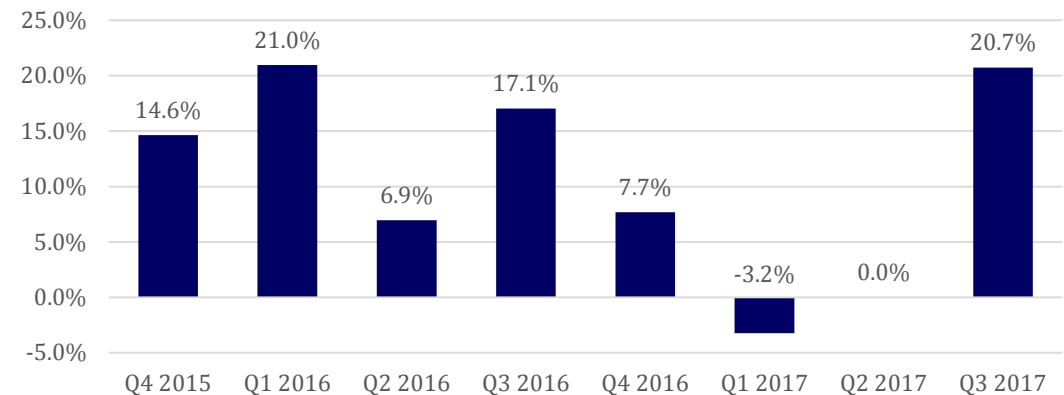
### Pro Forma Assumptions

- Seasonal sales drive estimates
- Historical trends as a percentage of sales used for other income statement items
- Consistent turnover ratios based on 10-year annual data
- Balance Sheet values held constant as a percentage of sales

### Seasonal Revenue

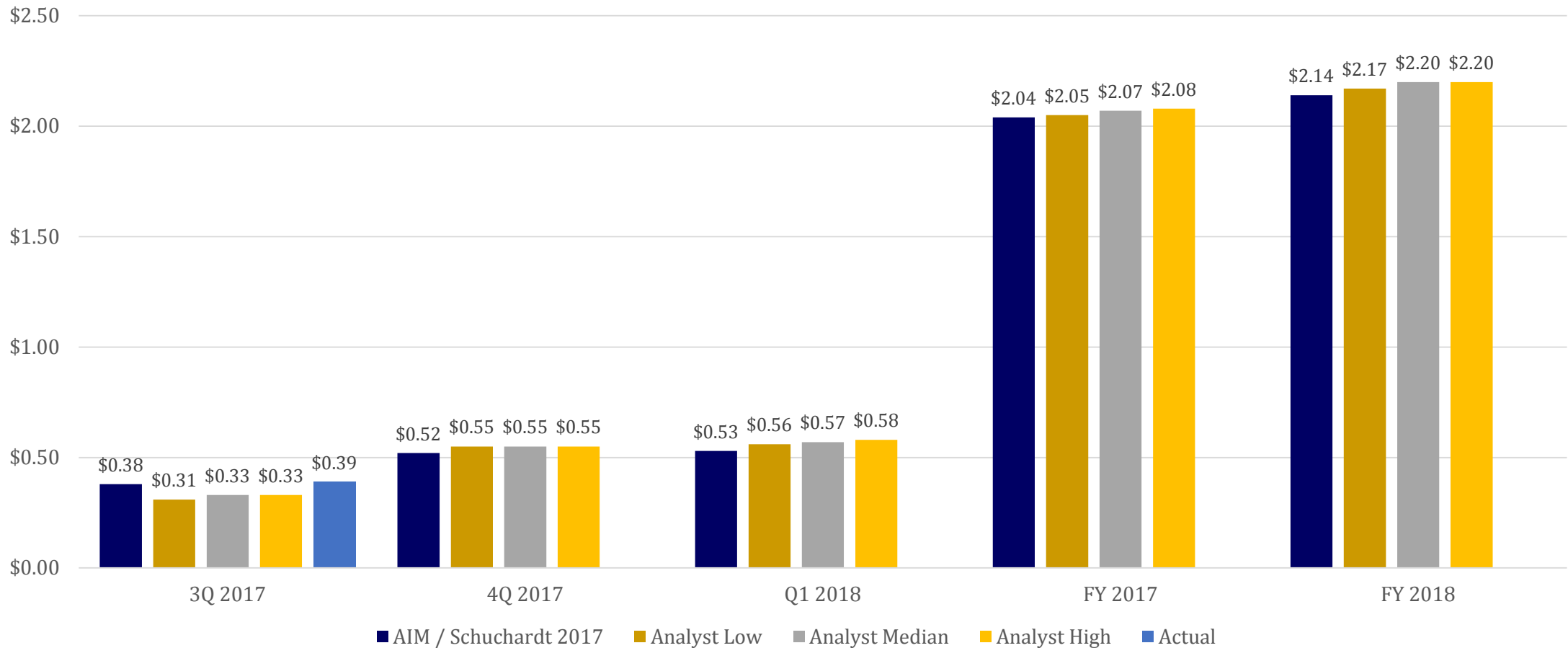


### EPS Surprise



# Herman Miller

## Earnings Per Share Forecast



# Herman Miller

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Neutral		Portfolio Decision: Retain	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	80%	\$34.63	\$27.70
Forward P/E	6.67%	\$33.27	\$3.33
Forward EV/EBITDA	6.67%	\$37.68	\$3.77
Forward P/BV	6.67%	\$32.93	\$2.20
<b>Intrinsic Value</b>			<b>\$34.60</b>
Price (as of April 18, 2017)			\$31.25
<b>Estimated Upside / (Downside)</b>			<b>10.7%</b>

### Investment Thesis

1. Progress on strategic agenda as a global, multi-channel modern lifestyle brand
2. Organic revenue growth supported by expanded retail studio footprint and diversified distribution
3. Continued operational excellence of low fixed costs and lean manufacturing

# Activision Blizzard, Inc.

NASDAQ: ATVI



Price (as of 4/18/17):	\$49.17
Market Capitalization:	\$38.6 bn
Dividend Yield:	0.58%
TTM Earnings Per Share:	\$1.28

### One-Year Price Chart



Focus

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Beta



# Activision Blizzard, Inc.

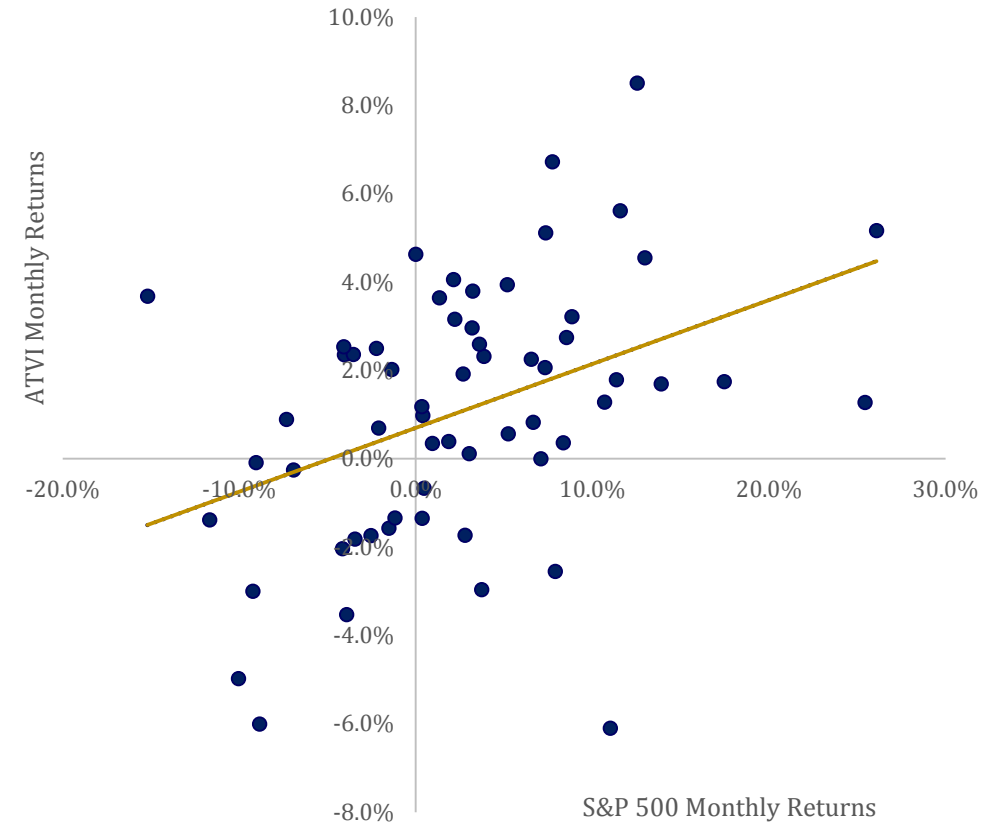
## Beta Analysis



### Beta Calculation (5-Year)

Regression	Daily	Weekly	Monthly
Calculated	1.04	1.08	1.10
Adjusted for Mean Reversion	1.02	1.05	1.07

Public Estimates	Beta
Bloomberg	1.04
Thomson Reuters	1.09
Google	1.03



# Activision Blizzard, Inc.

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Retain	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	85%	\$54.90	\$46.67
Forward P/E	5%	\$57.98	\$2.90
EV/EBITDA	5%	\$39.04	\$1.95
P/BV	5%	\$53.74	\$2.69
<b>Intrinsic Value</b>			<b>\$54.20</b>
Price (as of April 18, 2017)			\$49.17
<b>Estimated Upside / (Downside)</b>			<b>10.2%</b>

### Investment Thesis

1. The firm has posted strong early results as a result of its KING acquisition
2. Significant growth rates in international markets (Asia Pacific) have proven promising
3. Company is well-positioned to capture the move to digital-gaming through streamlined content and acquisition activity

# Align Technology

NASDAQ: ALGN



# ALIGN TECHNOLOGY

Price (as of 4/18/17):	\$116.32
TTM Price-to-Earnings:	49.9x
Market Capitalization:	\$9.5 bn
Dividend Yield:	n/a
TTM Earnings Per Share:	\$2.33

### One-Year Price Chart



Focus

Discounted Cash Flow

# Align Technology

## Discounted Cash Flow



### Company Facts

- Competitive advantage mainly reliant on over 400 domestic and 300 foreign patents
- Key patents will begin to expire in 2017
  - 40 “key early” patents expire in October
- Management claims competitive advantage will be maintained via “tooth movement” algorithms
- Maintains significant operations in Mexico and Costa Rica

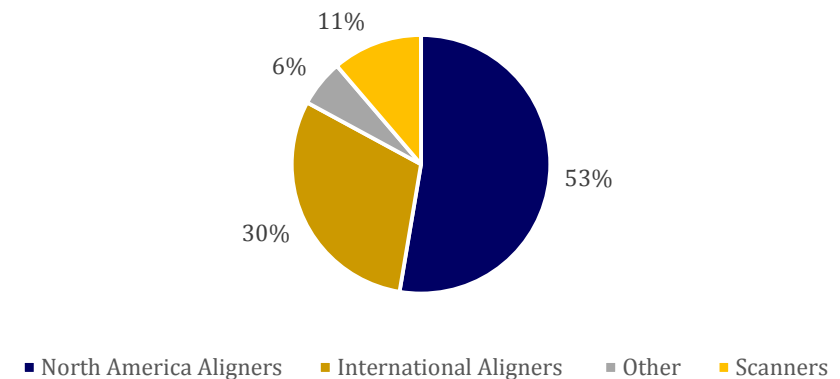
### Scenario Overview

- Best Case Scenario – Management target for operating margin hit. Revenue growth remains high on ability to sustain competitive advantage. No border tax.
- Base Case Scenario - Margins improve, but miss management guidance or hit at low end of range. Growth is slowed as new players enter market. Border tax equivalent to 5%.
- Worst Case Scenario - New treatment facilities see no gains in margin improvement. Revenue growth slows as new players enter market. Border tax forces production into the US and ALGN is now taxed at 35%.

### Share Price Scenario Analysis

	Best	Base	Downside
<b>Share Price</b>	\$143.27	\$101.11	\$69.26
<b>Probability</b>	30%	60%	10%
<b>Weighted Average Share Price</b>		\$110.57	
<b>Current Share Price (4/18/17)</b>		\$116.32	
<b>% Implied Premium</b>		(4.9%)	

### FY 2016 Revenue Breakdown



# Align Technology

## Discounted Cash Flow



Revenue Build								WACC	
	2017	2018	2019	2020	2021	2022	2023		
<b>Revenue</b>	1,252.7	1,434.3	1,620.7	1,807.1	1,987.8	2,156.8	2,307.8	<b>Risk Free Rate</b>	2.5%
<b>% Growth</b>	16.0%	14.5%	13.0%	11.5%	10.0%	8.5%	7.0%	<b>Beta</b>	1.62
<b>Upside</b>	18.5%	17.0%	15.5%	14.0%	12.5%	11.0%	9.5%	<b>Market Risk Premium</b>	5.0%
<b>Base</b>	16.0%	14.5%	13.0%	11.5%	10.0%	8.5%	7.0%	<b>Cost of Equity</b>	<b>10.6%</b>
<b>Downside</b>	13.5%	12.0%	10.5%	9.0%	7.5%	6.0%	4.5%	<b>Cost of Debt</b>	<b>3.0%</b>
								<b>Tax Rate</b>	21.3%
								<b>Target Debt to Capital</b>	8.9%
								<b>WACC</b>	<b>9.9%</b>

### Sensitivity Analysis

		Weighted Average Cost of Capital				
		8.9%	9.4%	9.9%	10.4%	10.9%
Terminal Growth Rates	1.5%	\$103.49	\$98.70	\$94.87	\$90.70	\$87.34
	2.0%	\$108.86	\$103.38	\$99.05	\$94.37	\$90.61
	2.5%	\$115.07	\$108.75	\$103.80	\$98.50	\$94.28
	3.0%	\$122.33	\$114.96	\$109.24	\$103.19	\$98.41
	3.5%	\$130.94	\$122.23	\$115.55	\$108.56	\$103.10
	4.0%	\$141.30	\$130.83	\$122.93	\$114.77	\$108.47
	4.5%	\$154.03	\$141.20	\$131.69	\$122.03	\$114.68

# Align Technology

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Sell		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Free Cash Flow to the Firm	80%	\$109.24	\$87.39
EV/EBITDA	5%	\$82.94	\$4.15
EV/EBIT	5%	\$100.21	\$5.01
EV/Sales	5%	\$81.75	\$4.09
P/E	5%	\$82.79	\$4.14
<b>Intrinsic Value</b>			<b>\$104.78</b>
Price (as of April 18, 2017)			\$116.32
<b>Estimated Upside / (Downside)</b>			<b>(9.9%)</b>

### Investment Thesis

1. Align Technology is a stable company with a bright future, however it is currently overvalued
2. The company's main competitive advantage is in the form of patents, which are beginning to expire
3. Terminal growth rate assumptions are too high at current valuations

# Wabtec Corporation

NYSE: WAB



Price (as of 4/18/17):	\$80.70
TTM Price-to-Earnings:	24.1x
Market Capitalization:	\$7.7 bn
Dividend Yield:	0.49%
TTM Earnings Per Share:	\$3.34

One-Year Price Chart



Focus  
Earnings

# Wabtec Corporation

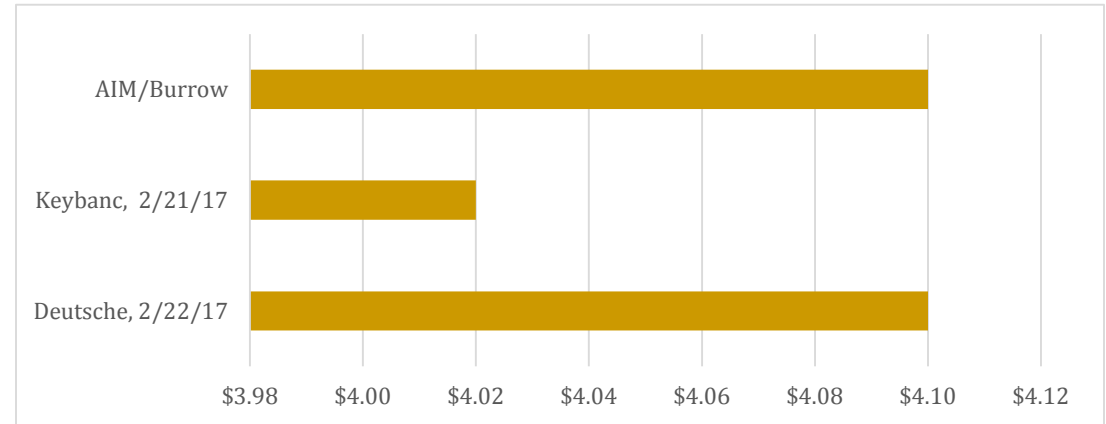
## Earnings



### Business Overview

- Provider of equipment, systems and value-added services for transit and freight rail
- Recent acquisition of Faiveley Transport, growing revenues by 33%

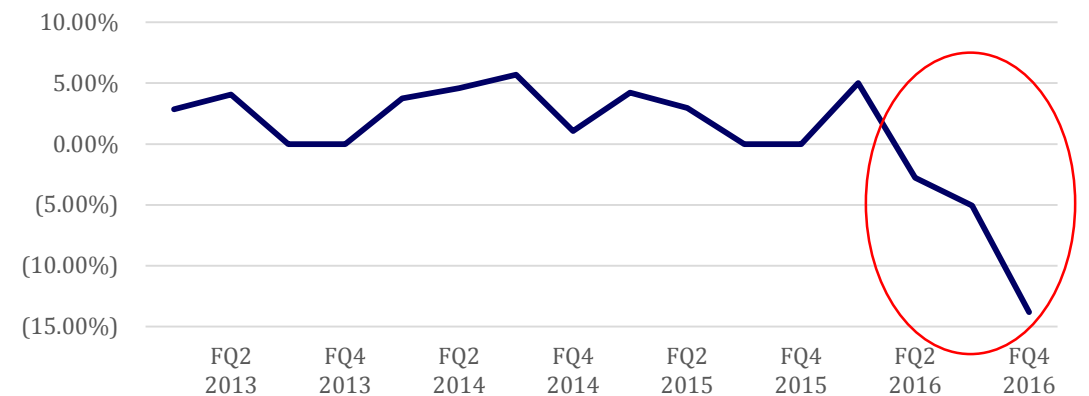
### Projected FY17 EPS consistent with analysts



### Earnings Analysis Overview

- Projected earnings over the next four quarters using heuristic and pro forma analyses
- Heuristic approach not particularly relevant due to acquisition

### Recent Earnings Surprise





# Wabtec Corporation

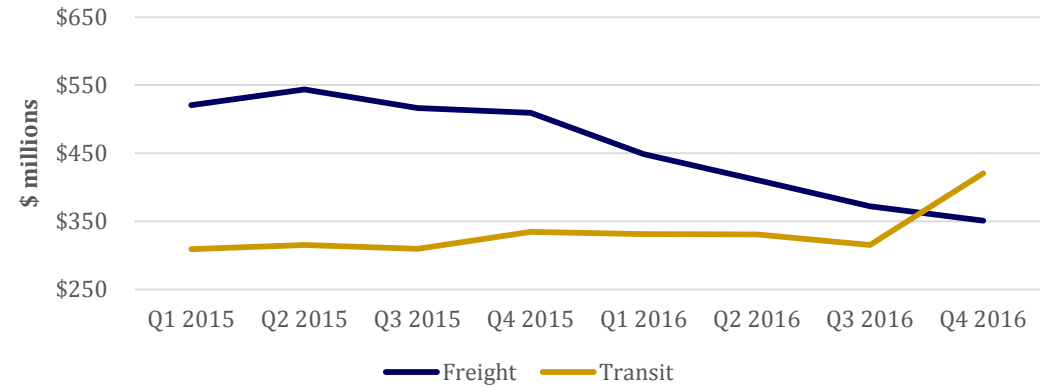
## Earnings



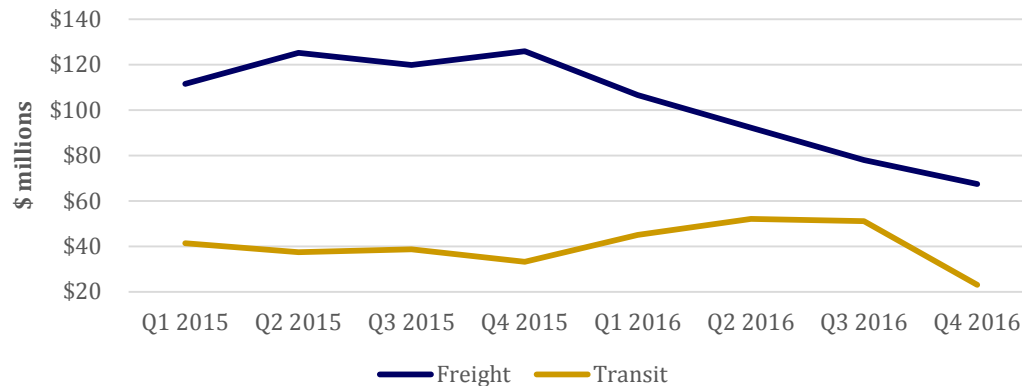
### The Story is in the Segments

- Wabtec has seen weakness in its most profitable freight segment
- Slowdown in Positive Train Control Revenues and Overall Freight Market are driving this shift

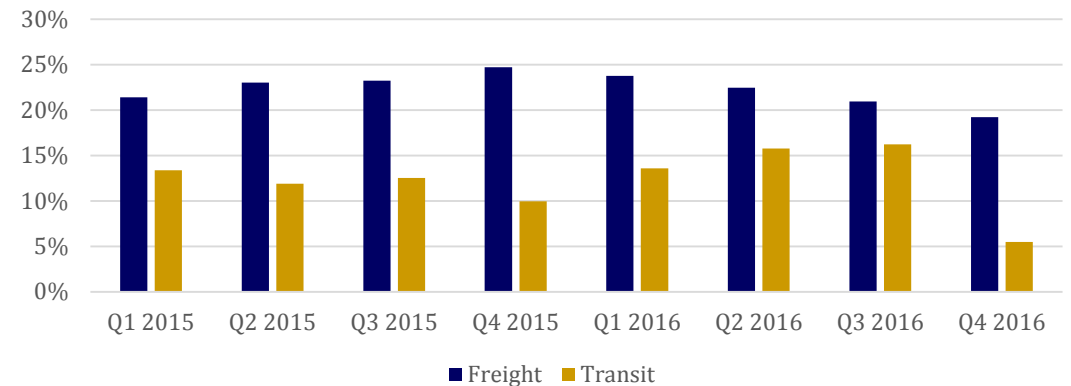
### Revenue



### Operating Profit



### Operating Margin



# Wabtec Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Sell		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	\$77.15	100%	\$77.83
Forward EV/EBITDA	\$82.38	0%	\$0.00
Forward P/E	\$82.62	0%	\$0.00
Forward EV/Revenue	\$51.42	0%	\$0.00
<b>Intrinsic Value</b>			<b>\$77.83</b>
Price (as of April 18, 2017)			\$80.70
<b>Estimated Upside / (Downside)</b>			<b>(3.6%)</b>

### Investment Thesis

1. Projected continued weakness in high margin freight segment
2. Integration risk of Faiveley Transport Group acquisition
3. Highly susceptible to trade policy & FX (about 2/3 of est. 2017 sales will be from non-USA)

# The Mosaic Company

NYSE: MOS



Price (as of 4/18/17):	\$27.04
TTM Price-to-Earnings:	31.9x
Market Capitalization:	\$9.5 bn
Dividend Yield:	2.19%
TTM Earnings Per Share:	\$0.85

One-Year Price Chart



Focus

Company & Industry Overview

# The Mosaic Company

## Company & Industry Overview



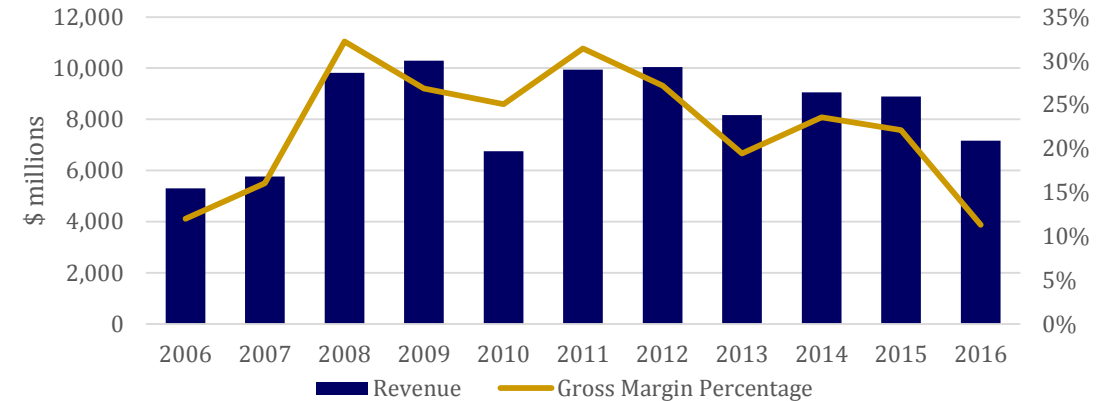
### Highlights

- Global producer and marketer of concentrated phosphate and potash crop nutrients
- Founded in 2004 from IMC Global's fertilizer division and Cargill's crop nutrient division
- Headquartered in Plymouth, MN
- Employs 8,900 people

### Industry

- Expected increase in global demand for crop nutrient products as population increases
- Fluctuating selling prices and input prices makes predictable revenue growth and margin protection difficult
  - Expected normalization of profit margins and selling prices through 2020

### Financials



### Competitors

Agrium

CF Industries®

syngenta

PotashCorp

# The Mosaic Company

## Valuation, Investment Thesis & Portfolio Decision



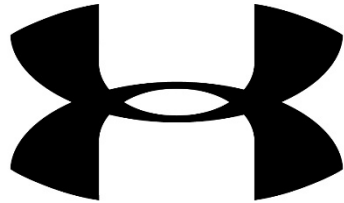
Recommendation: Neutral		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow (Base)	80%	\$31.85	\$25.48
Discounted Cash Flow (Upside)	10%	\$44.26	\$4.43
Discounted Cash Flow (Downside)	8%	\$12.25	\$0.98
EV/EBITDA	2%	\$36.26	\$0.73
<b>Intrinsic Value</b>			<b>\$31.61</b>
Price (as of April 18, 2017)			\$27.04
<b>Estimated Upside / (Downside)</b>			<b>16.9%</b>

### Investment Thesis

1. MOS is subject to seasonal demand for its products within a volatile cyclical commodity industry
2. Revenue growth is tied to selling prices and operating margins are driven by input prices
3. The valuation is derived with substantial weight on the upside; MOS does not provide enough upside for the uncertainty

# Under Armour

NYSE: UAA



**UNDER ARMOUR.**

Price (as of 4/18/17):	\$19.10
TTM Price-to-Earnings:	48.6x
Market Capitalization:	\$9.1 bn
Dividend Yield:	n/a
TTM Earnings Per Share:	\$0.44

One-Year Price Chart



Focus  
Discounted Cash Flow

# Under Armour

## Discounted Cash Flow



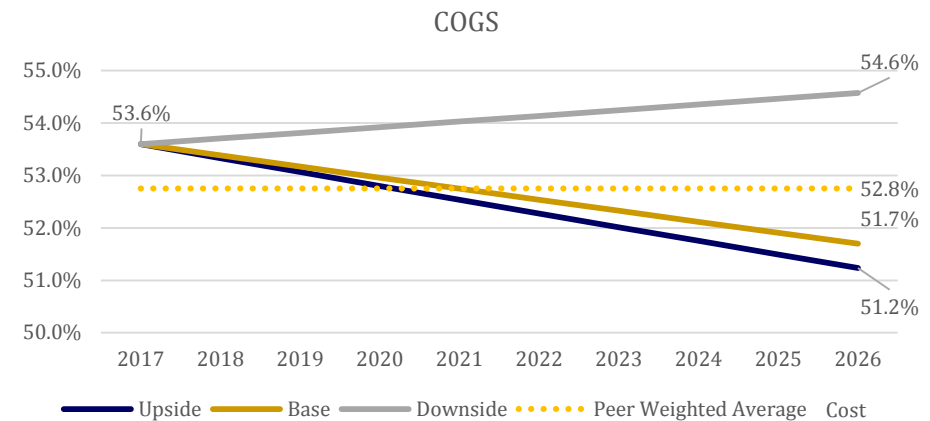
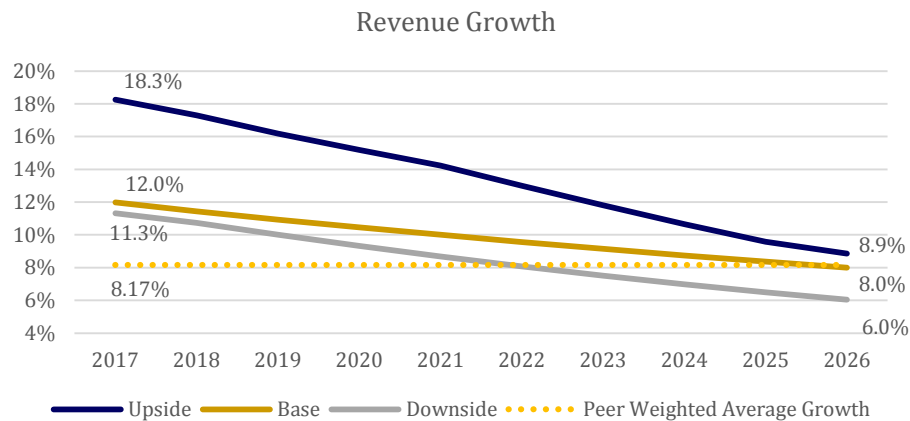
### Restructuring

- Growth has decreased from +20% to +12% for 2017
- Long-run rate dropped significantly (Will not hit 7.5B revenue mark for 2018)
- Transitioning from high growth phase to steady growth rate
- Increasing pressure in COGS
- Heavy investments planned in Footwear and Connected Fitness
- Interest Expense expected to almost double in 2017

### Beta

- Seven large movements in the stock price with a magnitude of around plus/minus 20%, if we take into account movements equal or large than 10%, there is a total of 43
- Standard 60-month Beta ignores these movements and does a poor job in explaining stock price gyrations (Raw Beta 0.15,  $R^2$  less than 0.01)
- Daily 60-month Beta embraces the movements and explains performance (Raw Beta 1.26,  $R^2$  0.19)
- In order to dampen movements, it was necessary to use an adjusted Beta of 1.17

### Three Scenarios; Two Main Drivers



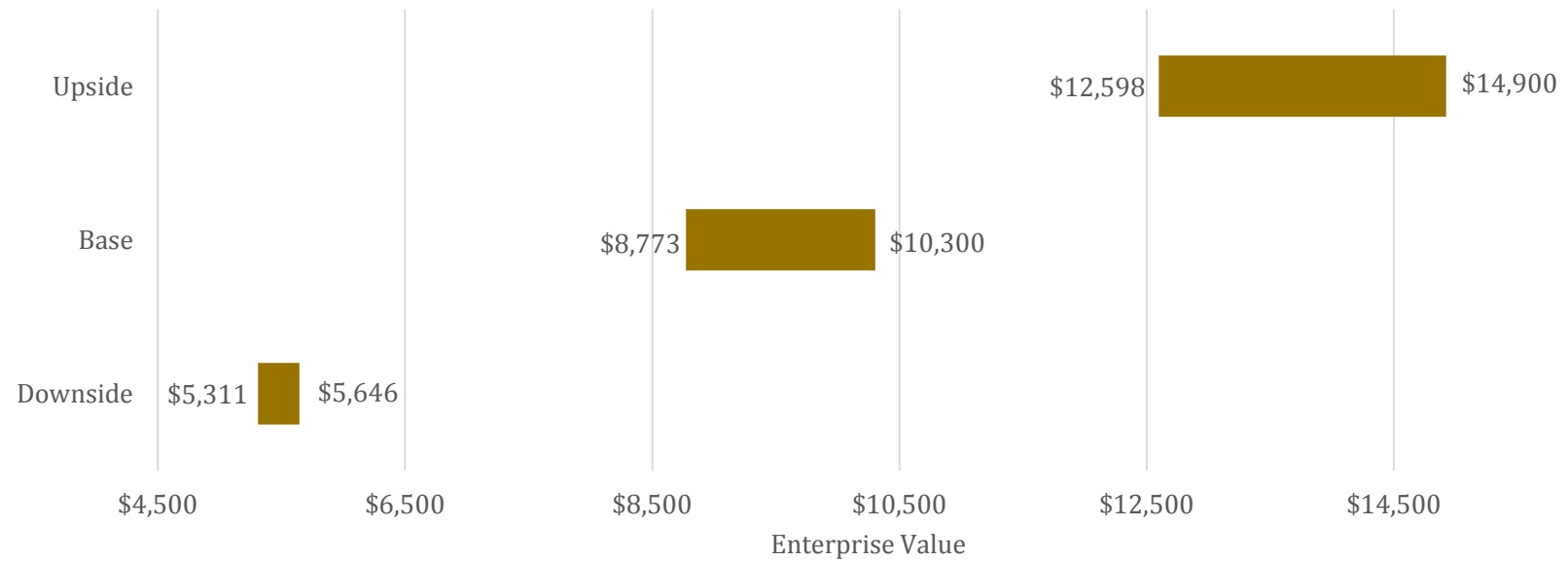
# Under Armour

## Discounted Cash Flow



### Results

**WACC**  
7.6%



Implied Stock Price	\$10.9	\$11.6	\$18.8	\$22.3	\$27.6	\$32.8
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# Under Armour

## Valuation, Investment Thesis & Portfolio Decision



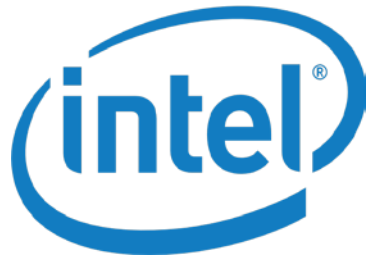
Recommendation: Sell		Portfolio Decision: Retain	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	85%	\$23.68	\$20.13
Forward P/E	5%	\$17.69	\$0.88
Forward EV/EBITDA	5%	\$20.68	\$1.03
LTM EV/Revenue	5%	\$20.78	\$1.04
<b>Intrinsic Value</b>			<b>\$23.09</b>
Price (as of April 18, 2017)			\$19.10
<b>Estimated Upside / (Downside)</b>			<b>20.9%</b>

### Investment Thesis

1. Shifting from being a high growth company to a more stable and established enterprise, which is why there was a price correction
2. Around 83% of its sales come from North America, therefore it faces substantial challenges in the overseas markets
3. Established brand that is here to stay, but needs to refocus its business model in terms of innovation and distribution

# Intel Corporation

NASDAQ: INTC



Price (as of 4/18/17): \$35.77  
TTM Price-to-Earnings: 17.4x  
Market Capitalization: \$174.1 bn  
Dividend Yield: 3.07%  
TTM Earnings Per Share: \$2.56

One-Year Price Chart



Focus  
Company & Industry Overview

# Intel Corporation

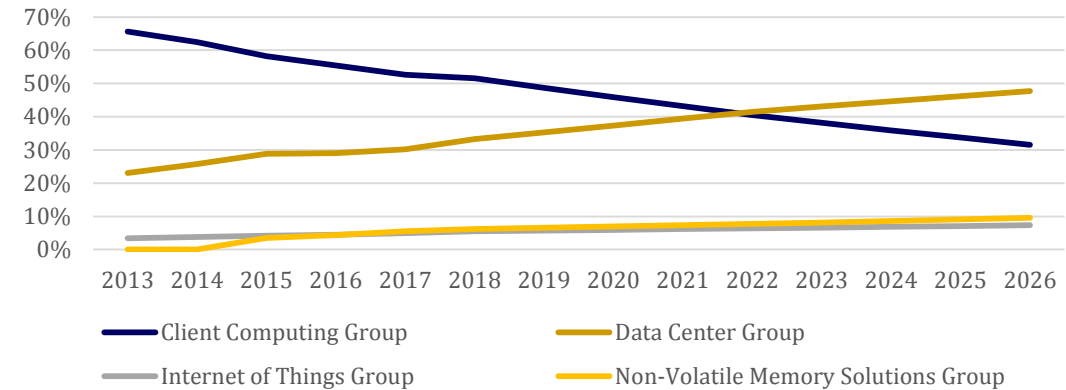
## Company & Industry Overview



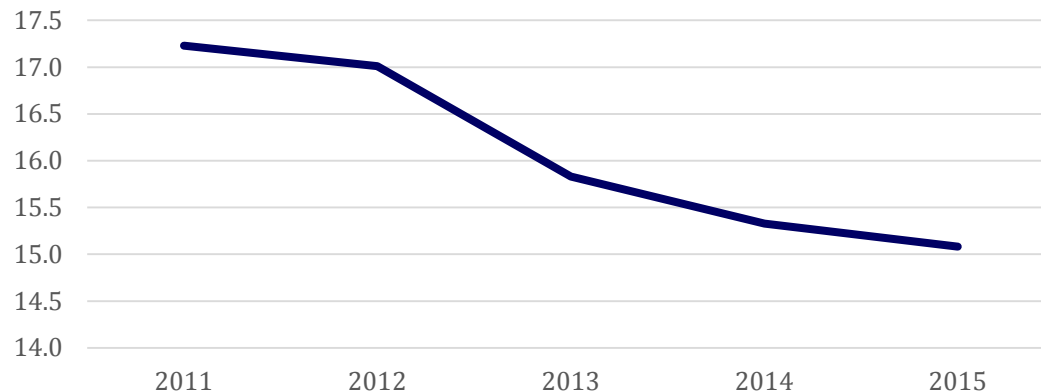
### Diminishing Strategic Advantages

- Diminishing architectural, cost, and manufacturing advantages
- Increased competition in Data Center Group and Client Computing Group
  - AMD Ryzen, Apple, etc.
- Declining PC demand will suppress revenue for 3-5 years

### Revenue Trends



### Semiconductor Market Share (Revenue)



### Acquisitions

- Altera acquisition was defensive, but servers still shifting DC workloads
  - Google has entered space with TPUs
- Mobileye acquisition aimed at autonomous vehicles signals future of company
  - Overpaid when compared to comparables
  - Significant competition in this space
  - How much and when revenues will be material is highly uncertain

# Intel Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Sell		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	90%	\$36.41	\$32.77
Forward P/E	5%	\$34.35	\$1.72
Forward EV/EBITDA	5%	\$31.88	\$1.59
Forward P/Sales	0%	\$37.90	\$0.00
<b>Intrinsic Value</b>			<b>\$36.08</b>
Price (as of April 18, 2017)			\$35.77
<b>Estimated Upside / (Downside)</b>			<b>0.9%</b>

### Investment Thesis

1. Mature company going through aggressive transformation
2. Reliance on high growth of the internet of things group and the future of autonomous vehicles
3. Declining PC revenues, reliance on riskier business units, and significant increased competition in all business units will suppress revenues

# NVIDIA Corporation

NASDAQ: NVDA



Price (as of 4/18/17):	\$99.29
TTM Price-to-Earnings:	40.74x
Market Capitalization:	\$62.2 bn
Dividend Yield:	0.55%
TTM Earnings Per Share:	\$2.57

### One-Year Price Chart



Focus  
Relative Valuation

# NVIDIA Corporation

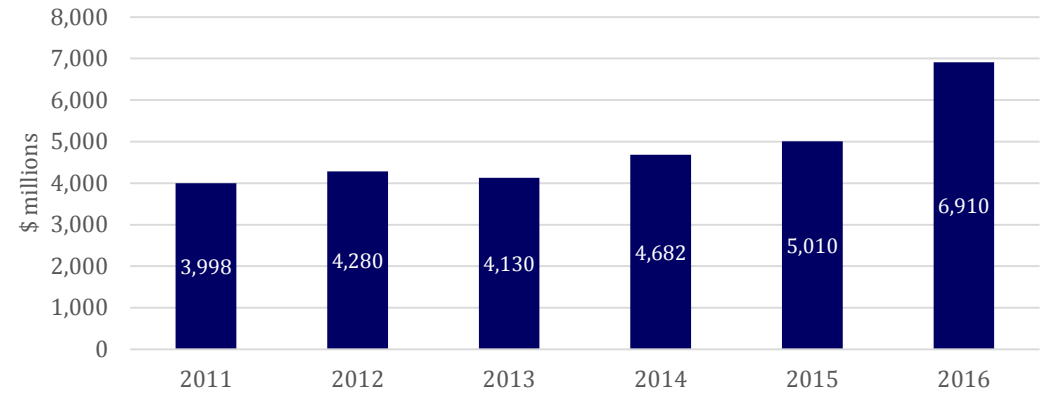
## Company Overview



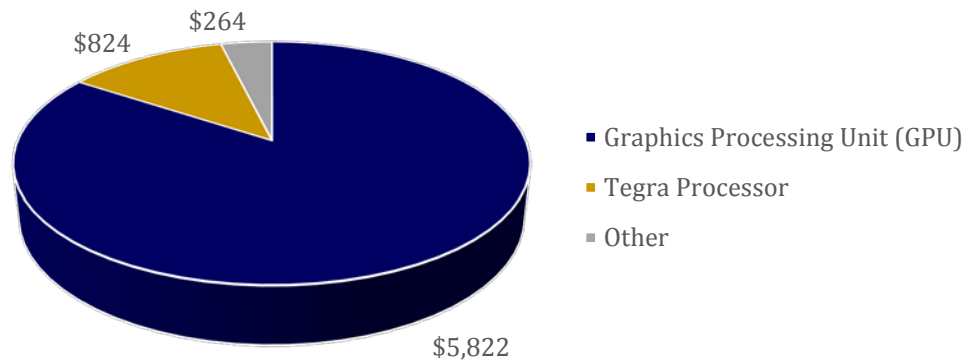
### Company Overview

- Semiconductor fabless company founded in 1993
- Main product: graphics processing units (GPUs)
- Focus on 4 markets:
  - Gaming
  - Professional Visualization
  - Data Centers
  - Auto

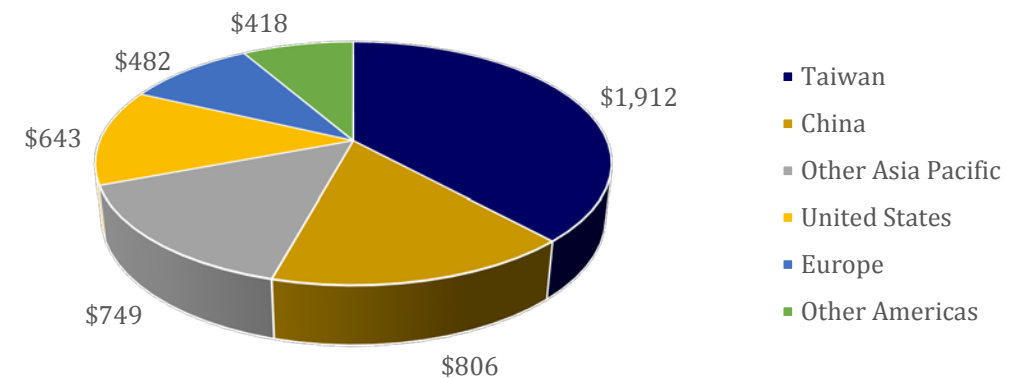
### Revenue Growth



### 2016 Revenue by Segment (\$ millions)

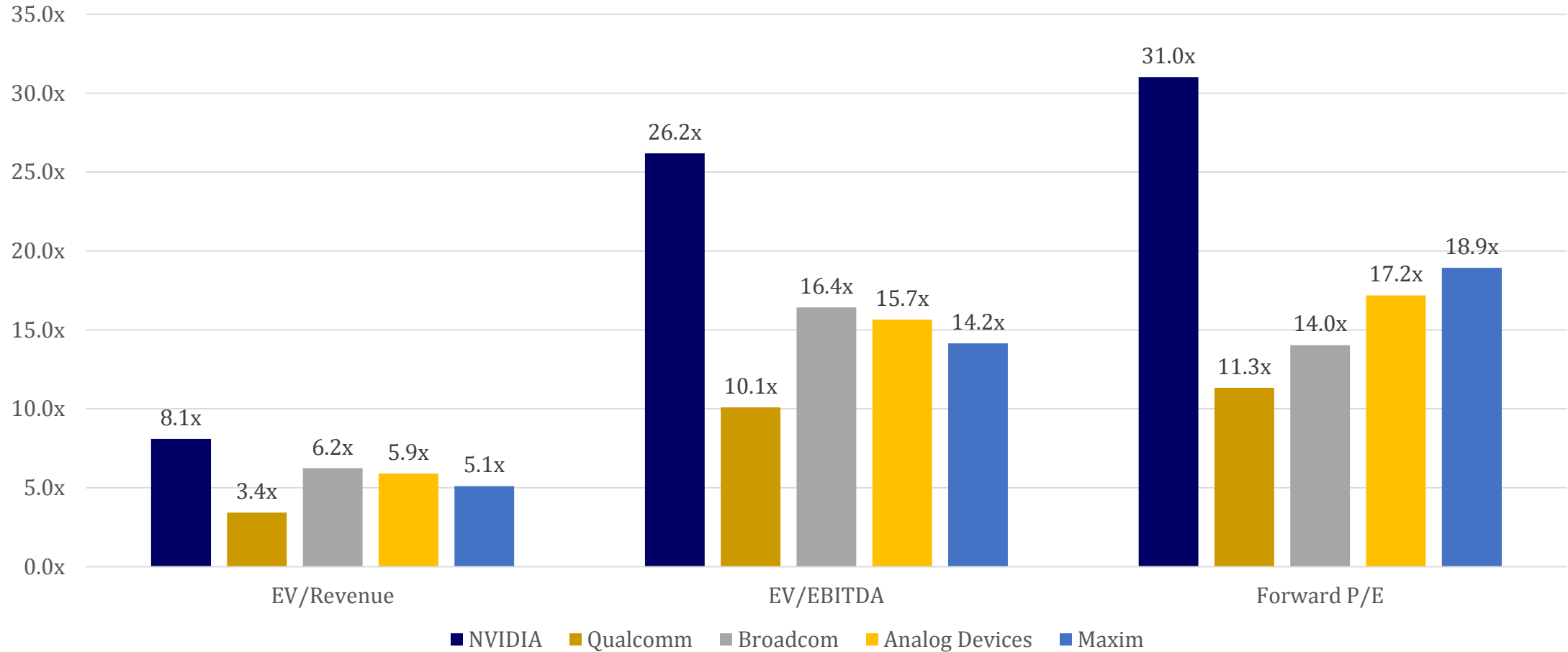


### 2016 Revenue by Region (\$ millions)



# NVIDIA Corporation

## Relative Valuation



# NVIDIA Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Sell		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	85%	\$90.20	\$76.67
EV/Revenue	5%	\$67.61	\$3.38
EV/EBITDA	5%	\$64.34	\$3.22
Forward P/E	5%	\$53.60	\$2.68
<b>Intrinsic Value</b>			<b>\$85.95</b>
Price (as of April 18, 2017)			\$99.29
Estimated Upside / (Downside)			(13.4%)

### Investment Thesis

1. Trading at much higher multiples compared to peers; most of the upside potential has been consumed during 2016
2. Many other semiconductor companies equally well positioned in the future IOT market
3. Heavily rely on the gaming market; face competition in the high end gaming market as AMD release its new product in 2017



# Alphabet

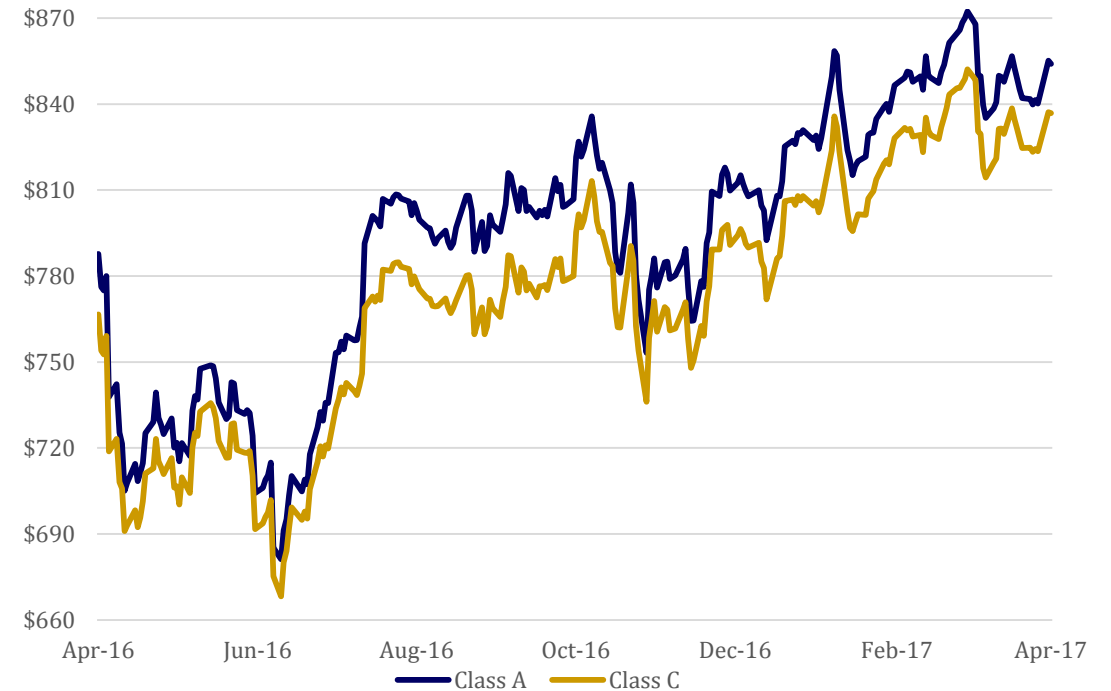
NASDAQ: GOOGL (Class A); GOOG (Class C)



# Alphabet

Class A Price (4/18/17):	\$853.99
Class C Price (4/18/17):	\$836.82
TTM Price-to-Earnings:	30.9x
Market Capitalization:	\$602 bn
Dividend Yield:	n/a
TTM Earnings Per Share:	\$27.88

One-Year Price Chart



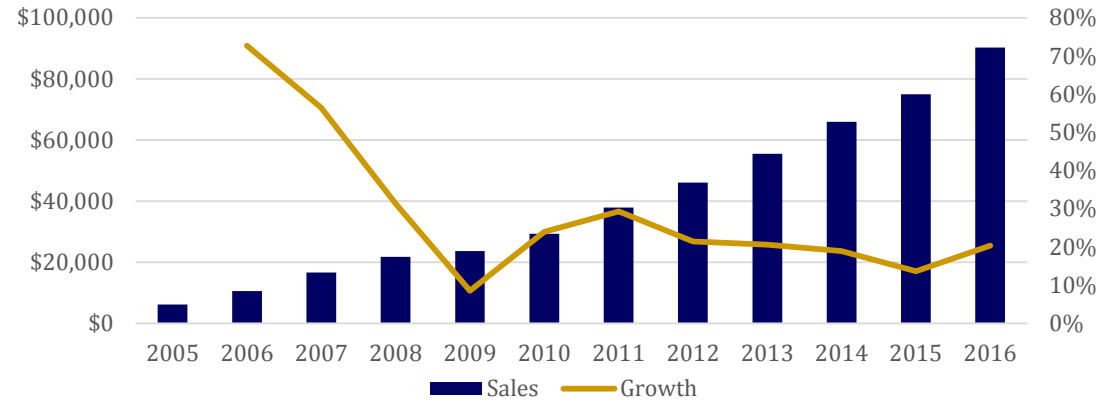
Focus  
Discounted Cash Flow

# Alphabet

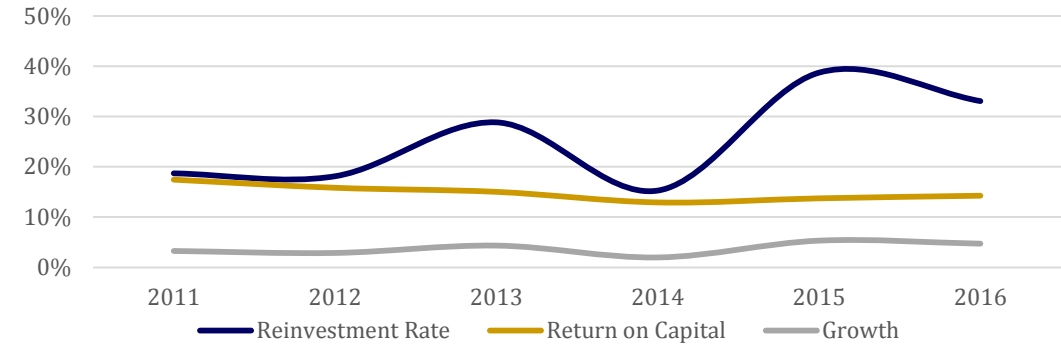
## Discounted Cash Flow Valuation



### Historical Revenues and Yearly Growth



### Historical Growth Fundamentals and Terminal Growth



**Terminal Growth**

**3.56%**

### Beta (5 Year)

Unadjusted Monthly Regression (Outliers)	1.128
Adjusted Monthly Regression (No Outliers)	1.107
R-Squared	66.7%
t-Stat	10.76

### WACC

Risk-Free Rate	2.50%
Beta	1.1
Market Risk Premium	5.00%
Cost of Equity	7.35%
Cost of Debt	2.75%
Tax Rate	35%
Debt-to-Capital	2%
Equity-to-Capital	98%
<b>WACC</b>	<b>7.24%</b>

# Alphabet

## Discounted Cash Flow



### Scenario Analysis (\$ millions)

	Downside	Base	Upside
PV of Cash Flows	\$79,004	\$98,482	\$120,504
PV of Terminal Value	\$449,233	\$613,206	\$839,059
<b>Operating Value of Firm</b>	<b>\$528,236</b>	<b>\$711,688</b>	<b>\$959,563</b>
<i>Probability</i>	20%	80%	0%
<b>Weighted Operating Value of Firm</b>			<b>\$674,998</b>
<i>Plus: Non-Operating Assets</i>			\$92,608
<b>Firm Value</b>			<b>\$767,605</b>
<i>Less: MV of Debt</i>			\$4,095
<i>Less: PV of Operating Leases</i>			\$6,910
<b>Equity Value</b>			<b>\$756,600</b>
<i>Fully-Diluted Shares Outstanding</i>			700.84
<b>Equity Value per Share (Class A)</b>			<b>\$1,103.74</b>
<b>Equity Value per Share (Class C)</b>			<b>\$1,079.55</b>

# Alphabet

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy			Portfolio Decision: Retain		
Valuation Method	Weight	Class A Valuation	Contribution	Class C Valuation	Contribution
Discounted Cash Flow	90%	\$1,103.74	\$993.36	\$1,079.55	\$971.60
Forward P/E	0%	\$964.45	\$0.00	\$945.06	\$0.00
Forward EV/EBITDA	5%	\$899.05	\$44.95	\$879.36	\$43.97
Forward P/Sales	5%	\$1,010.96	\$50.55	\$990.63	\$49.53
<b>Intrinsic Value</b>			<b>\$1,088.86</b>		<b>\$1,065.10</b>
Price (April 18, 2017)			\$853.99		\$836.82
<b>Estimated Upside / (Downside)</b>			<b>27.5%</b>		<b>27.3%</b>

Analyst Estimates (Class A): \$700 - \$1,100

Analyst Estimates (Class C): \$800 - \$1,050

### Investment Thesis

1. Revenues have increased every year since 2006.
2. Revenue growth has been 20% or more in six of the past seven years.
3. Earnings per share have increased every year since 2006.

# Hanesbrands, Inc.

NYSE: HBI



**HANES** *Brands Inc*



Price (as of 4/18/17):

\$21.26

Market Capitalization:

\$8.2 bn

52-Week High:

\$30.42

52-Week Low:

\$18.91

One-Year Price Chart



Focus

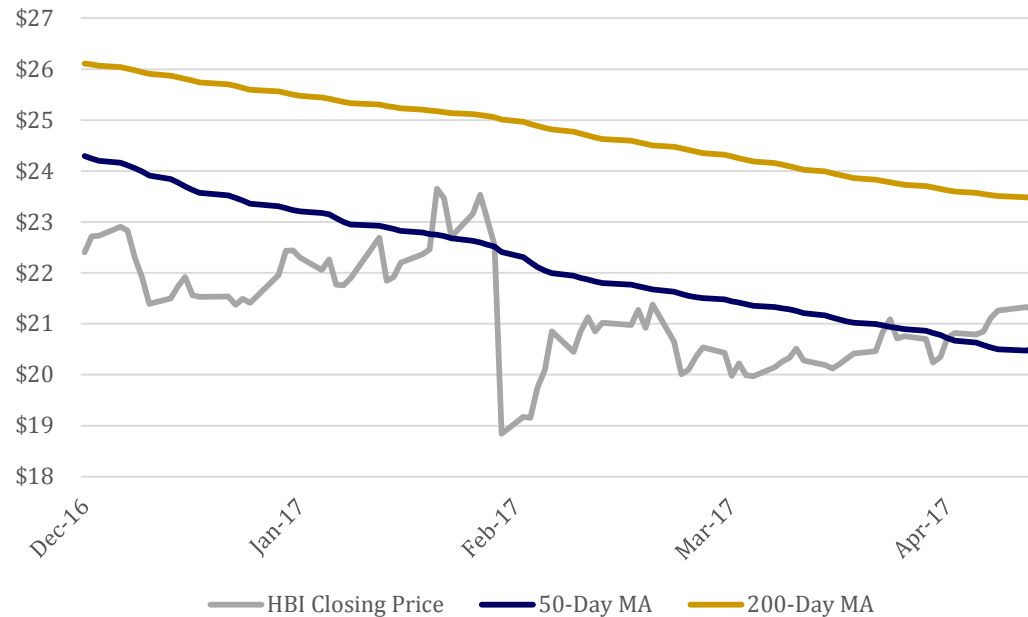
Technical Analysis

# Hanesbrands, Inc.

## Moving Average Analysis

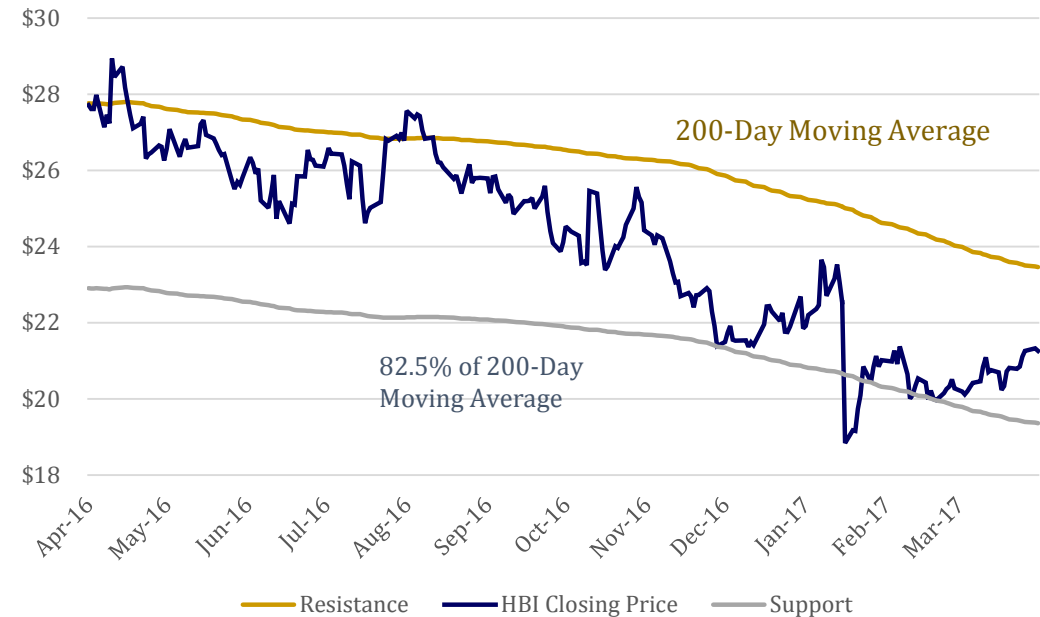


### Price Trends Since Inclusion in Portfolio



- 200-day moving average has trended downward since December 2015

### LTM Resistance and Support



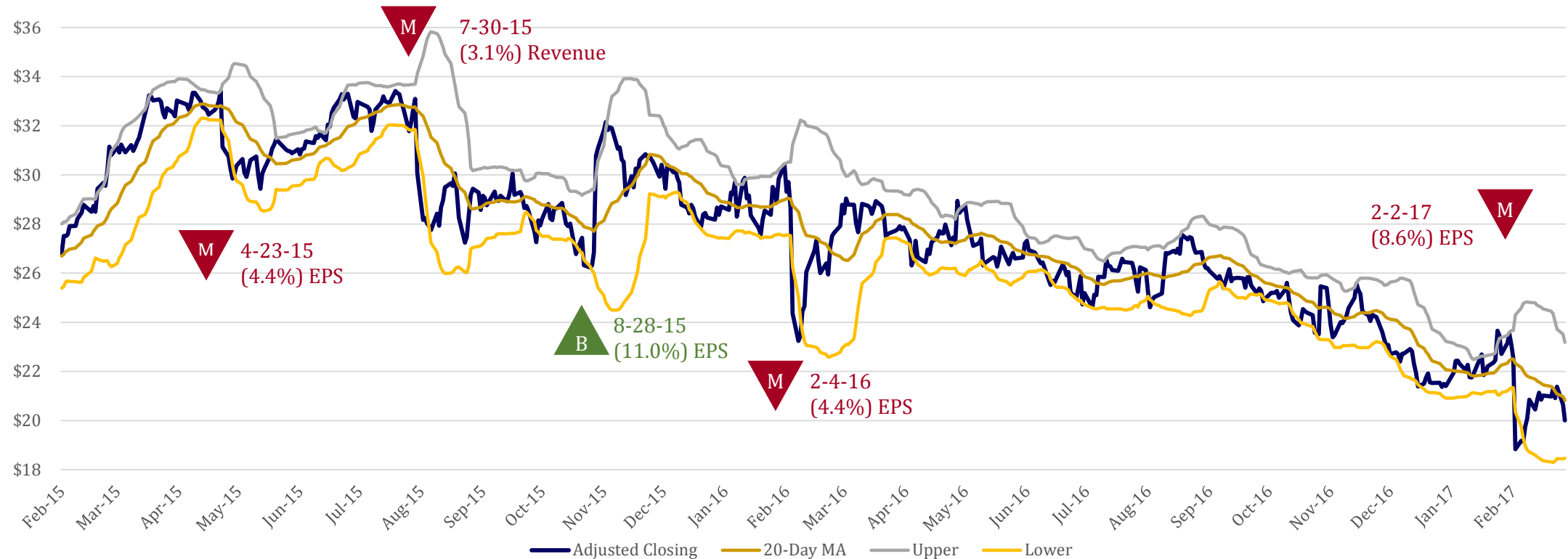
- Breaches of resistance & support levels reliably followed by reversion to trend
- Recent price drop suggests expanded upside opportunity

# Hanesbrands, Inc.

## Bollinger Bands Analysis



### 2-Year Bollinger Bands (20 Days, 2 Standard Deviations)



- HBI Price highly sensitive to earnings surprises
- Positive earnings announcement Tuesday May 2 could reduce realized loss for AIM Portfolio

# Hanesbrands, Inc.

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	80.0%	\$30.37	\$24.30
Forward P/E	7.5%	\$29.34	\$2.20
LTM P/E	5.0%	\$30.28	\$1.51
LTM EV/EBITDA	7.5%	\$17.73	\$1.33
Technical Analysis	0.0%	N/A	N/A
<b>Estimated Intrinsic Value</b>			<b>\$29.34</b>
Price (as of April 18, 2017)			\$21.26
<b>Estimated Upside / (Downside)</b>			<b>38.0%</b>

### Investment Thesis

1. Increasingly global presence provides supply chain leadership
2. Strong fundamentals signaled by steady improvements in gross and operating margins
3. Proven ability to effectively integrate acquisitions



# Infinera Corporation

NASDAQ: INFN



Price (as of 4/18/17):	\$9.59
Market Capitalization:	\$1.58 bn
Dividend Yield:	n/a
TTM Earnings Per Share:	(\$0.17)

One-Year Price Chart



Focus  
Discounted Cash Flow

# Infinera Corporation

## Company & Industry Overview

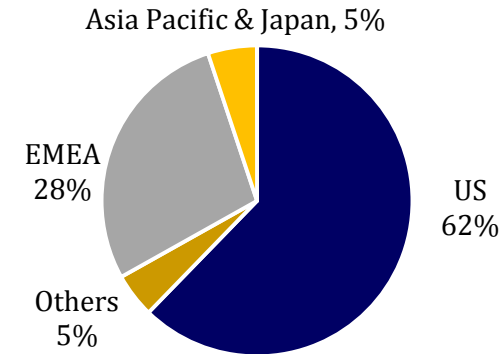


### Company Overview

Infinera is an optical transport network equipment and software provider serving three markets:

- Long-haul and subsea networks
- Metro networks
- Data center interconnect networks

### Revenue By Geography



### Industry Overview

Industry growth drivers:

- Mobile devices: 11.6 bn devices by 2020
- Video: 80% of global internet usage
- Cloud: \$141 bn public cloud services in 2019
- IoT: >24 bn networked devices by 2020

### Competitive Landscape

#### Systems Vendors

 **infinera**

 **ciena**

 **HUAWEI**

 **NOKIA**

 **CISCO**

 **Coriant**

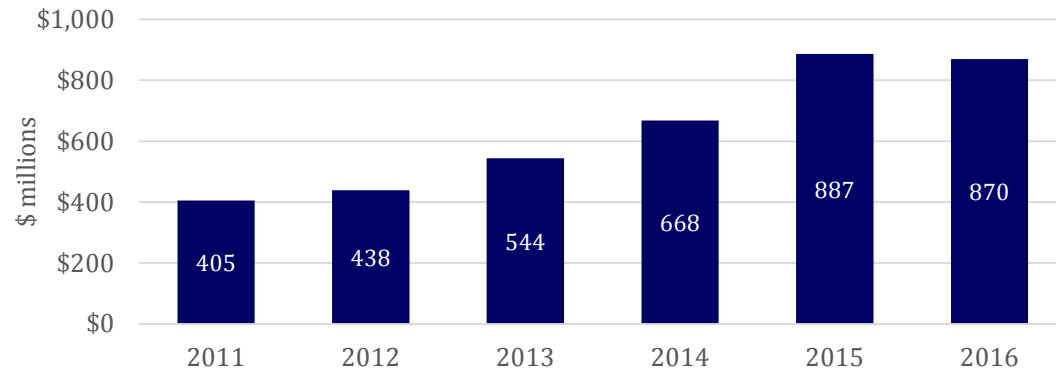
 **ADVA**  
Optical Networking

# Infinera Corporation

## Discounted Cash Flow



### Revenue



### Key Assumptions

- Revenue assumptions are based on management guidance
- Key inputs as % of sales
- Most drivers based on historical trends

### Beta

5-yr weekly regression beta	2.19
Smoothed beta	1.8
R-squared	0.248
<b>Beta</b>	<b>1.8</b>

### WACC

Risk Free Rate	2.40%
Market Risk Premium	4.50%
Cost of Equity	10.50%
Cost of Debt	3.67%
Tax Rate	37.20%
<b>WACC</b>	<b>9.21%</b>

# Infinera Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Sell	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	90%	\$10.50	\$9.45
EV/Revenue	10%	\$13.63	\$1.36
EV/EBITDA	0%	\$4.46	\$0.00
P/E	0%	(\$0.10)	\$0.00
<b>Intrinsic Value</b>			<b>\$10.81</b>
Price (as of April 18, 2017)			\$9.59
<b>Estimated Upside / (Downside)</b>			<b>12.8%</b>

### Investment Thesis

1. Strong technological advantage with its Photonic Integrated Circuit (PIC) technology
2. One of the most vertically integrated company in the industry
3. Huge growth potential in two new market segments: metro market and datacenter interconnect market

# Digital Realty Trust, Inc.

NYSE: DLR



## DIGITAL REALTY

Price (as of 4/18/17):	\$112.00
TTM Price/FFO:	19.8x
Market Capitalization:	\$17.7 bn
Dividend Yield:	3.3%
TTM FFO per Share:	\$5.67

### One-Year Price Chart

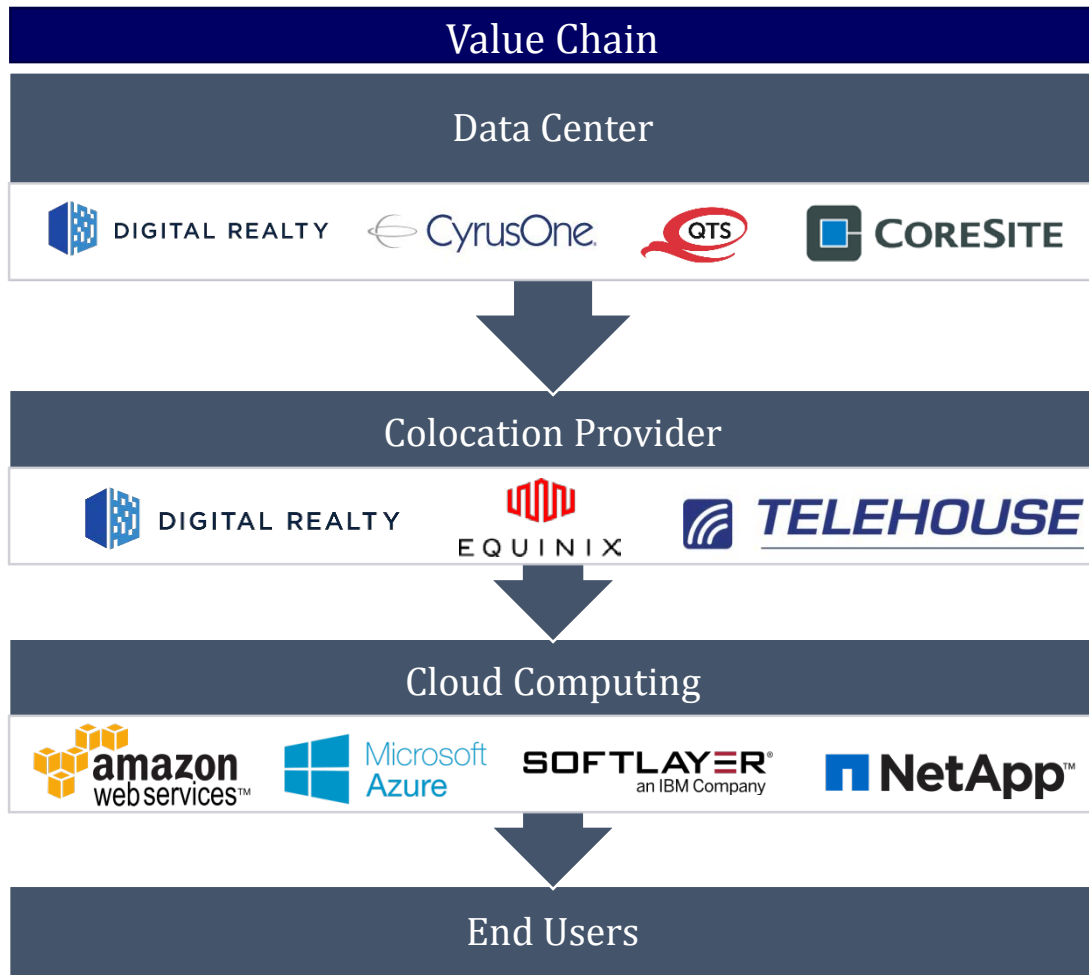


Focus

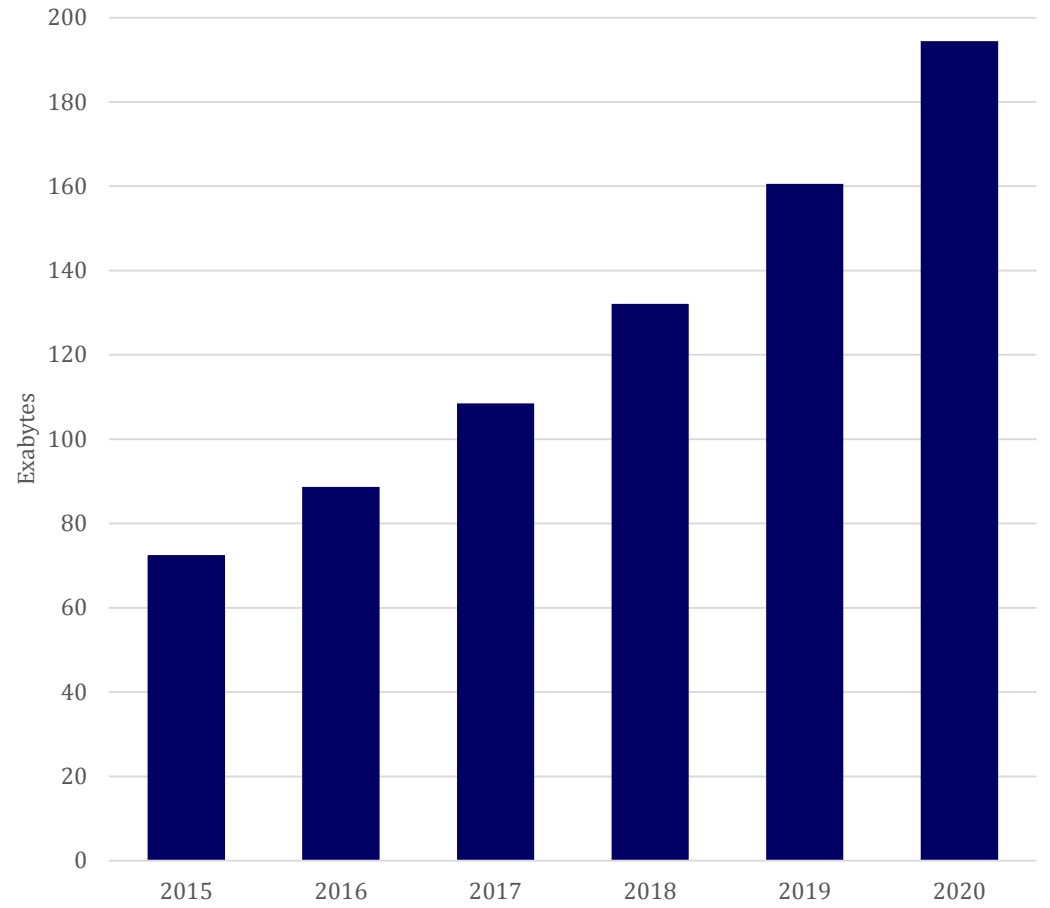
Company & Industry Overview

# Digital Realty Trust, Inc.

## Industry Dynamics



## Global Internet Traffic



Source: Cisco VNI Global IP Traffic Forecast 2015–2020, AIM / Logan 2017

# Digital Realty Trust, Inc.

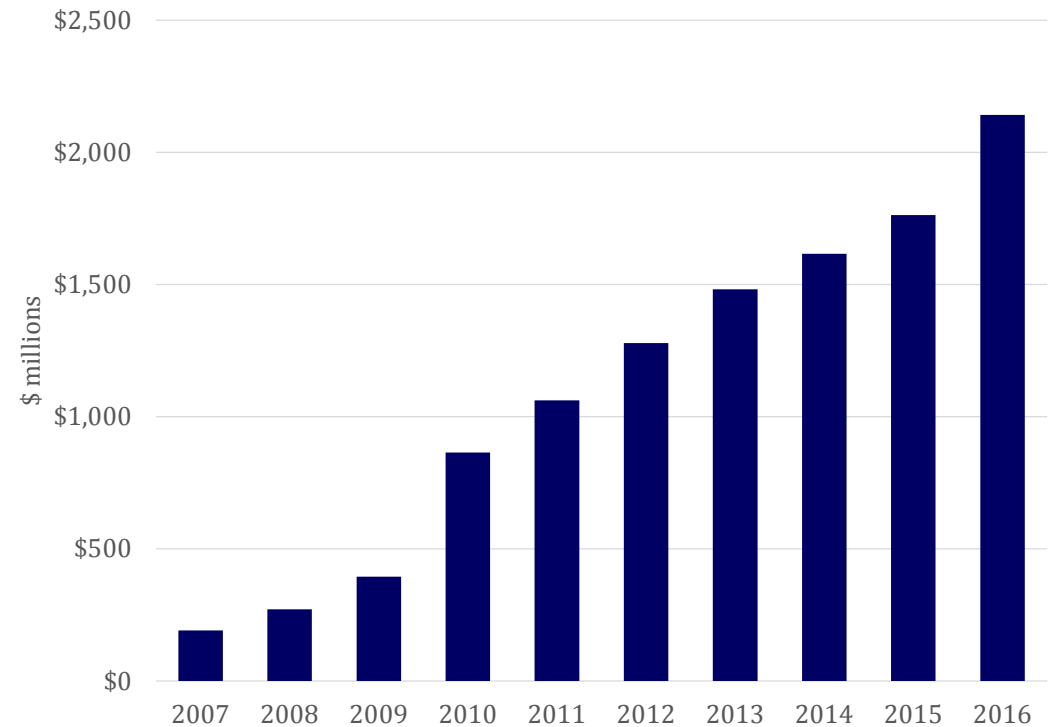
## Overview



### Business Description

- 139 Properties, 33 markets, 4 continents
- Largest Data Center Provider
- Products:
  - **Powered Base Building** – stand alone data center service
  - **Turn-Key Flex** – for companies without technical expertise
  - **Colocation** – Leasing space within data centers. Useful for customers with less need or applications where multiple customer need to communicate within a building – such as high frequency trading
  - **Interconnection** – Connecting two data centers

### Revenue



# Digital Realty Trust, Inc.

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Retain	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	80%	\$140.83	\$112.60
P/FFO	5%	\$118.89	\$5.94
EV/EBITDA	5%	\$111.59	\$5.58
P/BV	10%	\$113.32	\$11.33
<b>Intrinsic Value</b>			<b>\$135.52</b>
Price (as of April 18, 2017)			\$112.00
<b>Estimated Upside / (Downside)</b>			<b>21.0%</b>

### Investment Thesis

1. Digital Realty's position at the beginning of the value chain with options for forward integration (interconnection, colocation) can provide opportunities to increase revenue with minimal
2. Data Center clusters create network effects, thereby creating barriers to entry
3. Short run constraints in data center construction mean that data center operators have ability to profit from increases in internet traffic



# Security Analysis

## Equities & Focus of Analysis



### New Portfolio Candidates

Company & Industry



Discovery



Alternative Valuation



Fundamentals



Discovery



Alternative Valuation



# CVS Health Corporation

NYSE: CVS



Price (as of 4/18/17):	\$77.75
TTM Price-to-Earnings:	16.3x
Market Capitalization:	\$82.8 bn
Dividend Yield:	2.54%
TTM Earnings Per Share:	\$4.91

One-Year Price Chart



Focus

Company & Industry Overview

# CVS Health Corporation

## Company & Industry Overview



### Company Overview

- Integrated pharmacy health care services company offering both retail pharmacies and pharmacy benefits management (PBM)
- Operates 9,700 retail locations
- Largest pharmacy health care clinic provider in the US
- Serves over 2,000 health plans with 90M PBM plan members

### Competitors

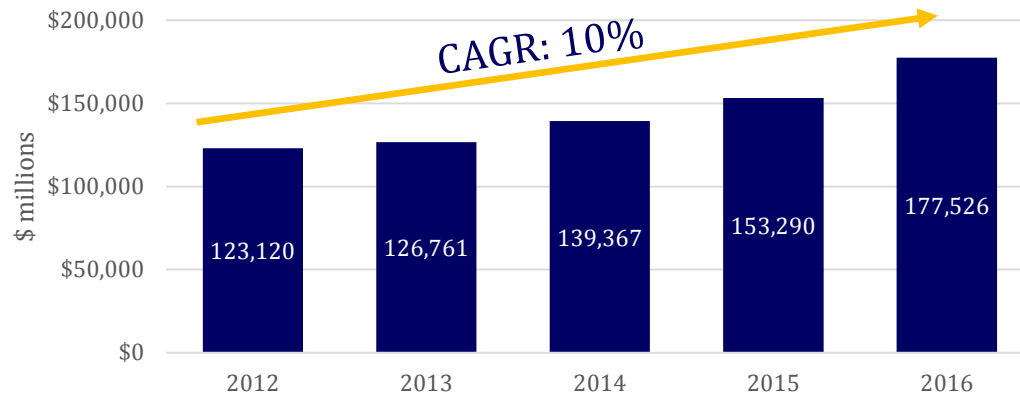


EXPRESS SCRIPTS®



UnitedHealthcare®

### Historical Revenue



### Role in the Healthcare Landscape

- PBMs are viewed as the solution, not the problem to rising drug prices for patients
- CVS negotiates drug benefits for health insurance plans in exchange for including drugs among those they cover with low co-payments to reach more members

# CVS Health Corporation

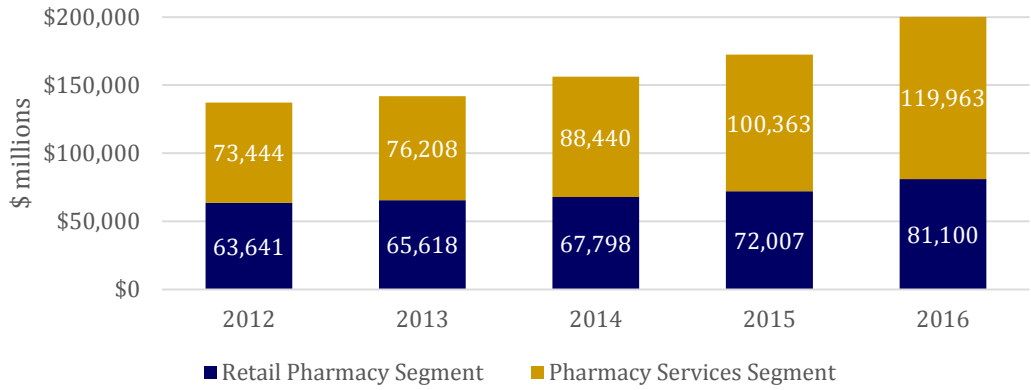
## Company & Industry Overview



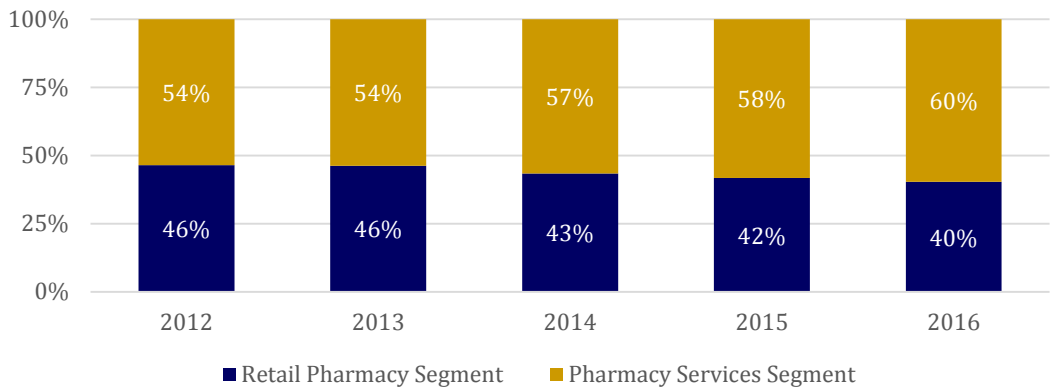
### Reporting Segments



### Revenue by Reporting Segments



### Sales by Operating Segment



# CVS Health Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Buy	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	80%	\$99.08	\$79.26
Forward EV/Sales	6.67%	\$105.69	\$7.05
Forward EV/EBITDA	6.67%	\$75.62	\$5.04
Forward P/E	6.67%	\$83.28	\$5.55
<b>Intrinsic Value</b>			<b>\$96.90</b>
Price (as of April 18, 2017)			\$77.75
<b>Estimated Upside / (Downside)</b>			<b>24.6%</b>

### Investment Thesis

1. Competitive advantage as an integrated provider of benefits management, pharmacy, and care solutions
2. Bringing new PBM products to market, particularly in partnership with other PBMs and health plans
3. Increasing efficiency from acquisition synergies
4. Demonstrated cash generation capabilities

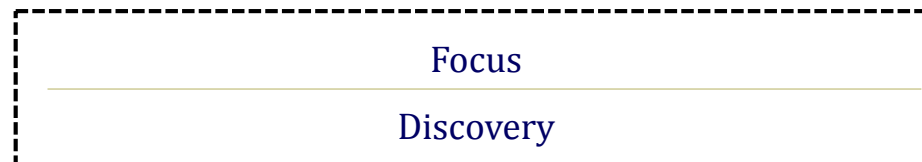
# MasTec, Inc.

NYSE: MTZ



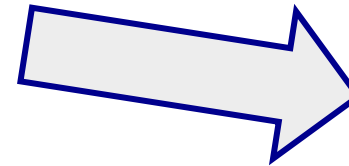
Price (as of 4/18/17):	\$42.35
LTM Price / Adjusted Earnings	22.2x
Market Capitalization	\$3.5 bn
Beta	1.36
TTM Earnings Per Share:	\$1.63

One-Year Price Chart

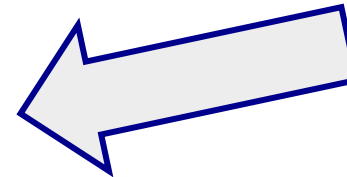




Analysts estimate the cost of upgrading LTE networks and building 5G infrastructure will total **\$104 billion** between 2017-2025<sup>1</sup>



AT&T currently holds **33%** of the U.S. wireless carrier market<sup>2</sup>



MasTec has captured **3.8-4.2%** of AT&T's capex and maintenance expenses over the past 3 years<sup>3</sup>, accounting for about **1/3** of their revenue



## If:

AT&T's share of 5G buildout is proportional to its market share

That spend is spread evenly across **8** years, and MTZ continues to capture around **4.5%** of it

EBITDA margins for MTZ's Communications segment remain at **10%** and their WACC is **8.17%**

## So:

A key customer creating the next generation of wireless infrastructure adds only **\$1.00 per share** to MTZ's investors!

## Then:

They will spend about **\$34 billion** investing in their 5G network

AT&T will spend **\$4.25 billion** annually, resulting in **\$191 million** in revenue for MTZ

AT&T's 5G buildout is worth about **\$82 million** to MTZ's shareholders today

## So What?

MasTec must continue to gain market share to add value in Communications segment



# MasTec, Inc.

## Valuation, Investment Thesis and Portfolio Decision



Recommendation: Sell		Portfolio Decision: Pass	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flows	80.0%	\$38.62	\$30.90
Forward P/E	2.5%	\$42.50	\$1.06
LTM P/E	2.5%	\$45.13	\$1.13
LTM EV/EBITDA	7.5%	\$46.70	\$3.50
Forward EV/EBITDA	7.5%	\$41.60	\$3.12
<b>Estimated Intrinsic Value</b>			<b>\$39.71</b>
Price (as of April 18, 2017)			\$42.35
<b>Estimated Upside / (Downside)</b>			<b>(6.23%)</b>

### Investment Thesis

1. The "Trump Effect" – significant upside priced into MTZ and industry peers
2. Growth tied to oil and gas prices and capex
3. MTZ does not add sufficient prospective returns to justify increased volatility

# Exelon Corporation

NASDAQ: EXC



Price (as of 4/18/17):	\$35.78
TTM Price-to-Earnings:	13.5x
Market Capitalization:	\$32.5 bn
Dividend Yield:	3.65%
TTM Earnings Per Share:	\$2.65

One-Year Price Chart



Focus  
Alternative Valuation

# Exelon Corporation

## Company Overview



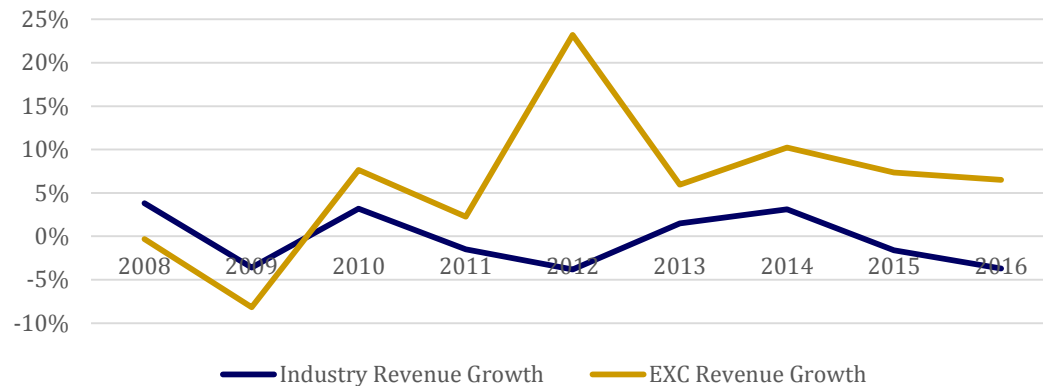
### Company Overview

- Business units include unregulated Power Generation and regulated Electric/Gas Retailing
- 32.6% of all US nuclear revenues
- 8.1% of all US electric power transmission revenues
- BGE acquired in mid-2012, PHI acquired in March 2016
  - Future cost savings and revenue growth

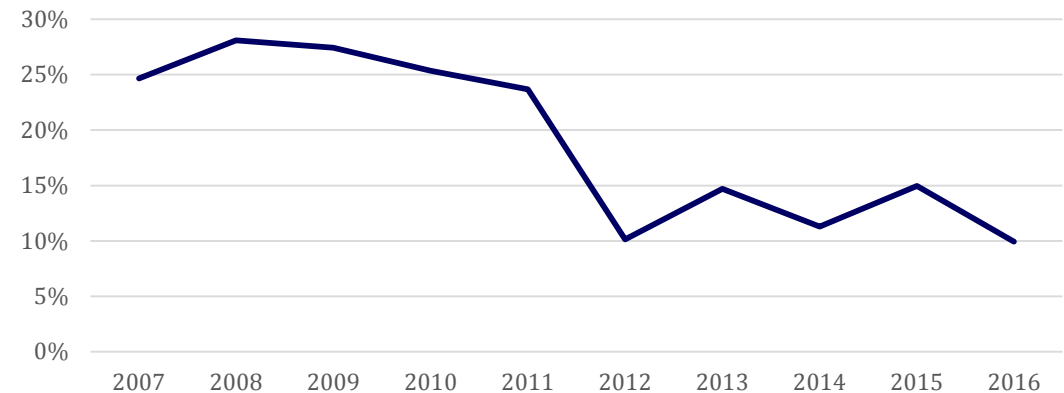
### Coverage

	Area Covered	Major Cities	Retail Customers (millions)
<b>ComEd</b>	Illinois	Chicago	4.00
<b>PECO</b>	Penn.	Philadelphia	2.10
<b>BGE</b>	Maryland	Baltimore	2.00
<b>Pepco</b>	Maryland & DC	Washington DC	0.90
<b>DPL</b>	Delaware	Wilmington	0.60
<b>ACE</b>	New Jersey	Atlantic City	0.50
	<b>Total</b>		<b>10.10</b>

### Revenue Growth



### Recent Margin Compression

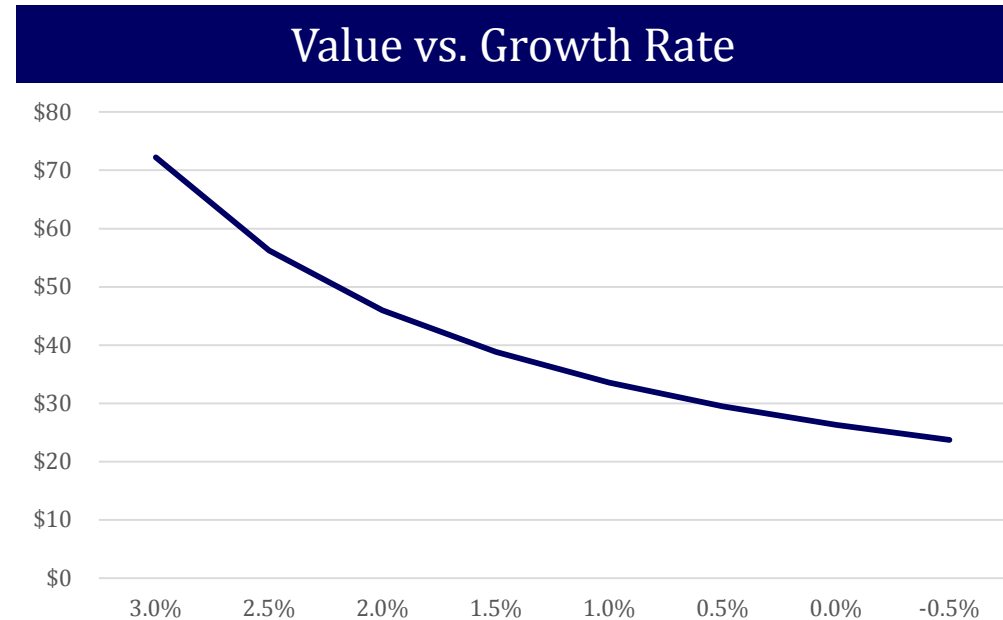


# Exelon Corporation

## Dividend Growth Model



Dividend Discount Model	
Current Earnings Per Share	\$2.65
Current Payout Ratio	47.53%
Beta	0.46
Risk-Free rate	2.50%
Risk Premium	5.00%
Expected Growth Rate	1.5%
<b>Current Dividend Data</b>	
Current Dividends Per Share	\$1.26
Cost of Equity	4.80%
Exp. Dividend Growth rate	1.50%
<b>Gordon Growth Model Value</b>	<b>\$38.81</b>



# Exelon Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Sell		Portfolio Decision: Buy	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	85%	\$39.14	\$33.27
Forward P/E	5%	\$42.79	\$2.14
Forward EV/EBITDA	5%	\$43.62	\$2.18
Dividend Discount Method	5%	\$39.00	\$1.95
<b>Intrinsic Value</b>			<b>\$39.54</b>
Price (as of April 18, 2017)			\$35.78
<b>Estimated Upside / (Downside)</b>			<b>11.5%</b>

### Investment Thesis

1. Exelon is trading at a discount versus comps in relative value multiples.
2. Low beta and high dividend security that provides the portfolio protection from systematic risks.
3. Recent acquisitions will provide revenue stabilization in the regulated portion of the business.
4. Future of the nuclear industry has a number of serious questions and EXC has significant exposure, 1/3 of revenues. In addition, there are a number of costly CapEx projects required in the coming years as margins have compressed.

# Francesca's Holding Corporation

NASDAQ: FRAN



# francesca's®

Price (as of 4/18/17):	\$14.80
TTM Price-to-Earnings:	13.5x
Market Capitalization:	\$553 mm
Dividend Yield:	n/a
TTM Earnings Per Share:	\$1.10

### One-Year Price Chart



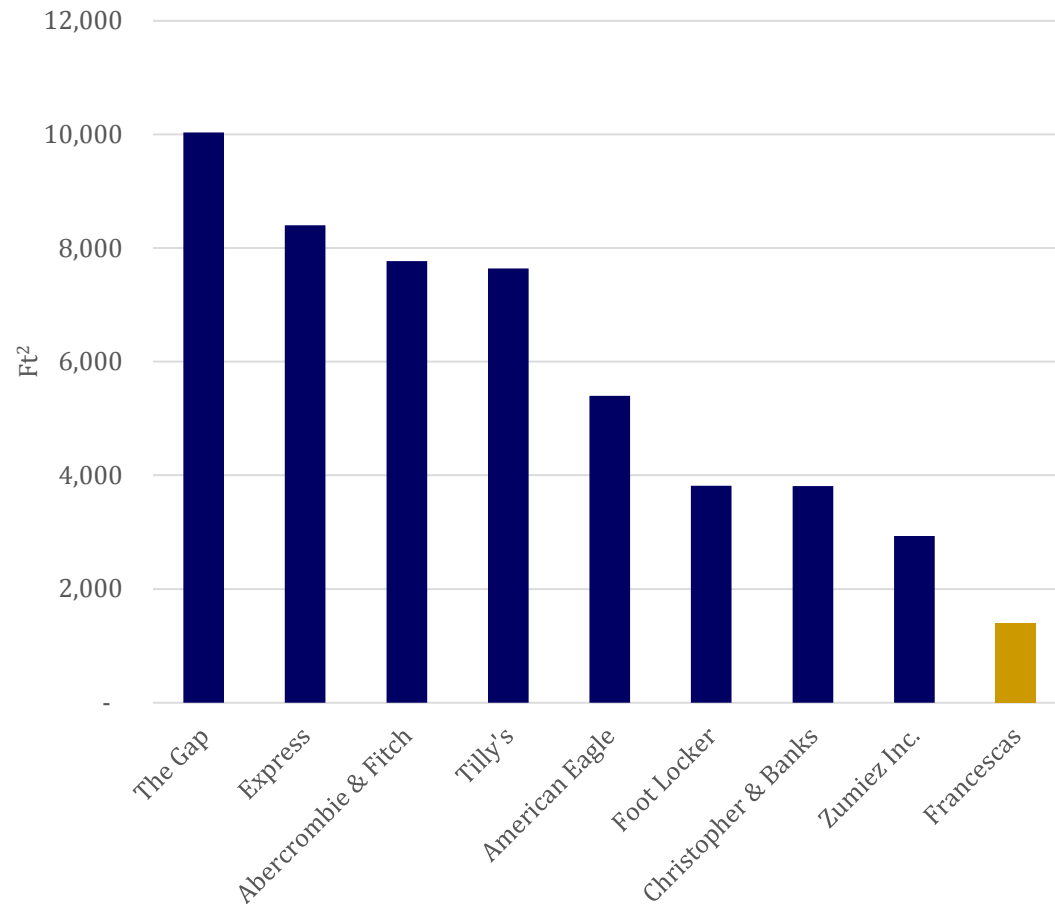
Focus  
Fundamental Analysis

# Francesca's Holding Corporation

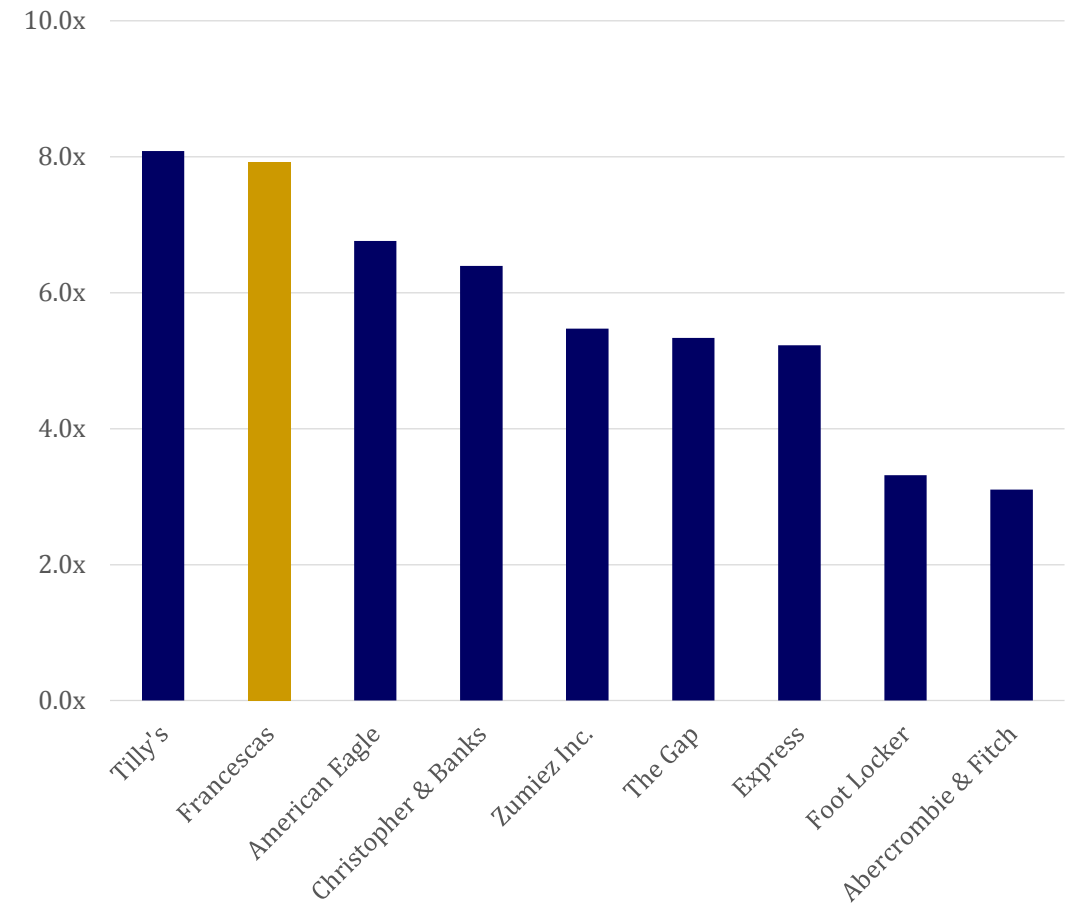
## Fundamental Analysis



### Average Store Size



### Inventory Turnover

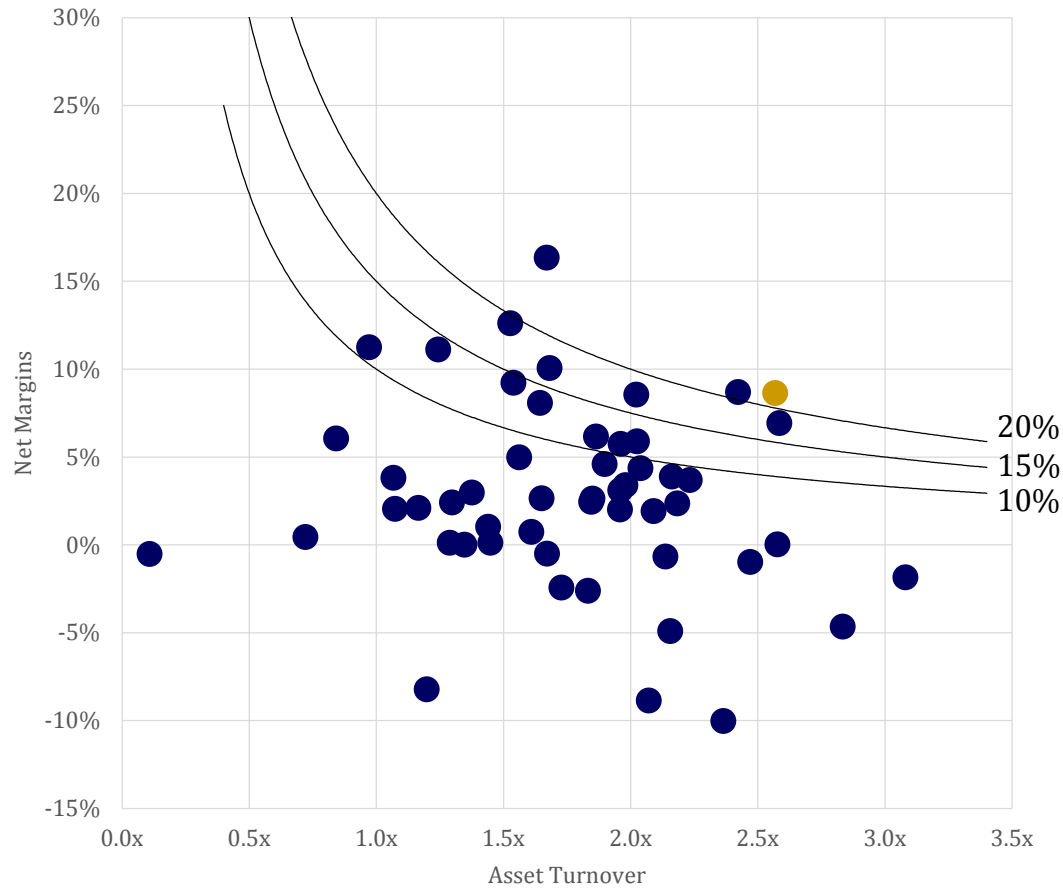


# Francesca's Holding Corporation

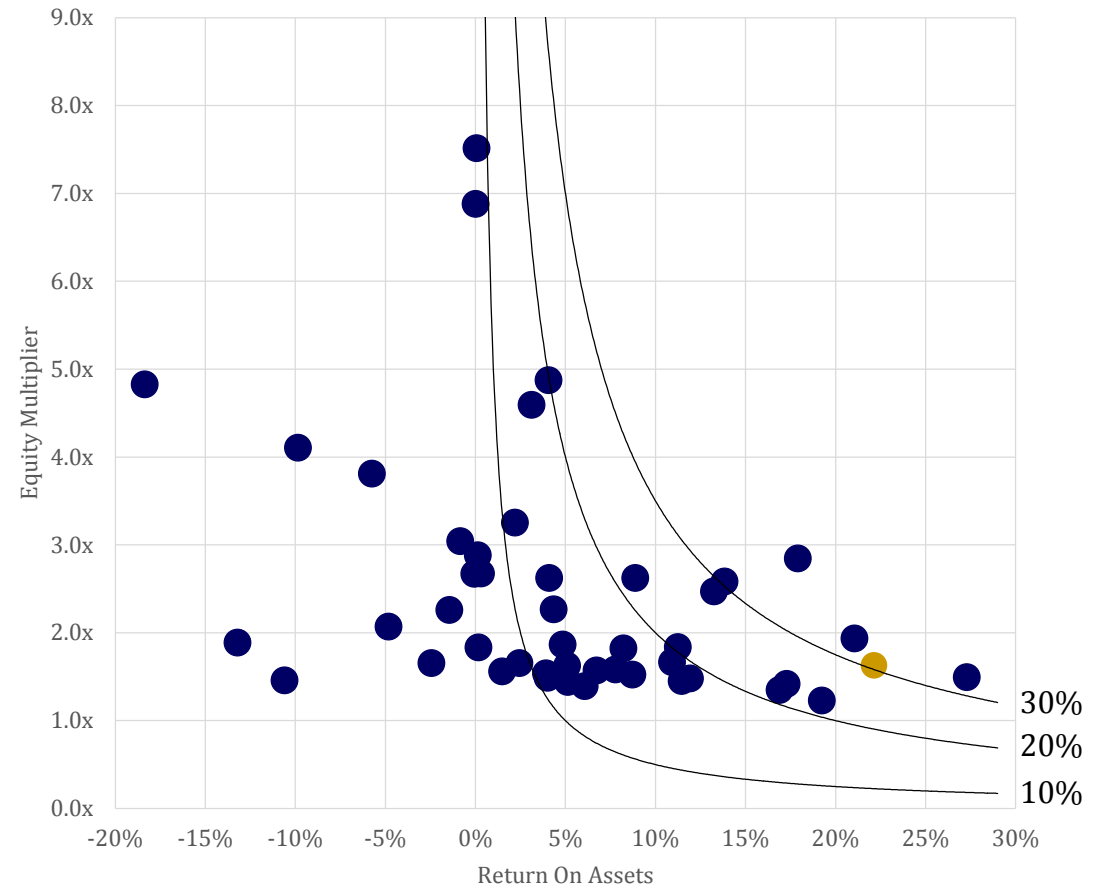
## Fundamental Analysis



### Return on Assets



### Return on Equity





# Francesca's Holding Corporation

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Buy	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	90%	\$22.40	\$20.04
Forward P/E	5%	\$14.59	\$0.73
EV/EBITDA	5%	\$11.37	\$0.57
P/Sales	0%	\$7.08	\$0.00
<b>Intrinsic Value</b>			<b>\$21.34</b>
Price (as of April 18, 2017)			\$14.80
<b>Estimated Upside / (Downside)</b>			<b>44.2%</b>

### Investment Thesis

1. Large variety of products per store drive foot traffic and repeat customers
2. Small store size and efficient distribution give Francesca's industry leading margins and turnover ratios
3. New store openings will drive Francesca's growth

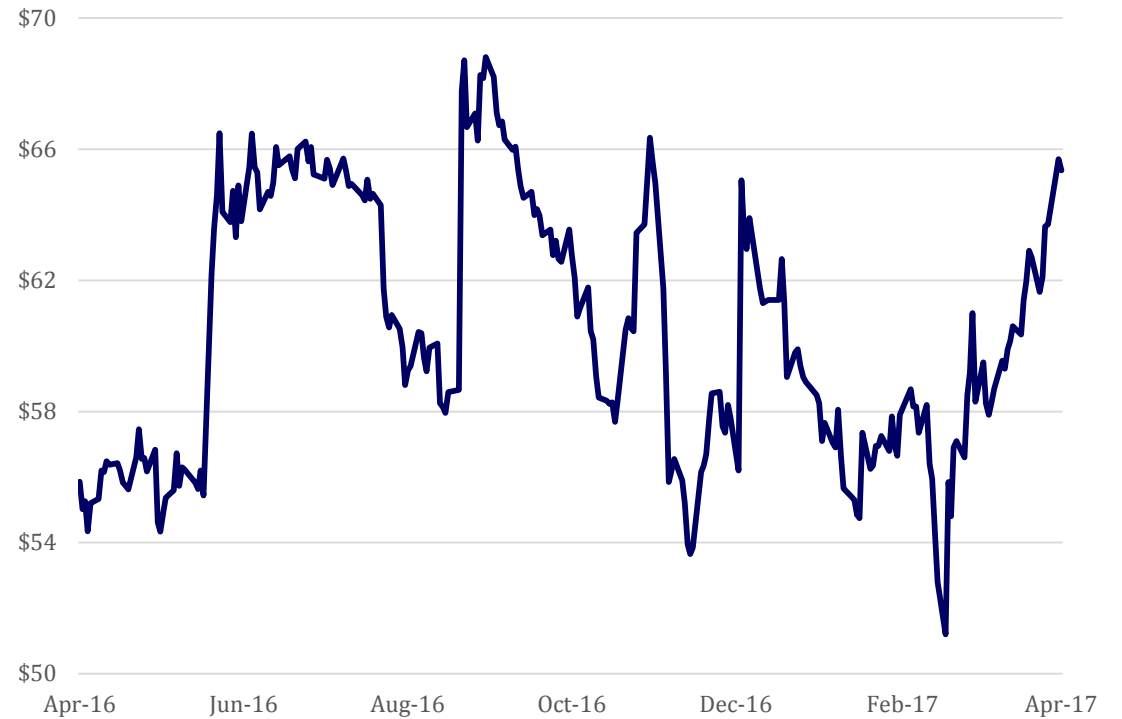
# Calavo Growers

NASDAQ: CVGW



Price (as of 4/18/17):	\$65.35
TTM Price-to-Earnings:	30.9x
Market Capitalization:	\$1.14bn
Dividend Yield:	1.4%
TTM Earnings Per Share:	\$2.11

### One-Year Price Chart



Focus  
Discovery

# Calavo Growers

## Discovery – Growth Drivers



### Demographics

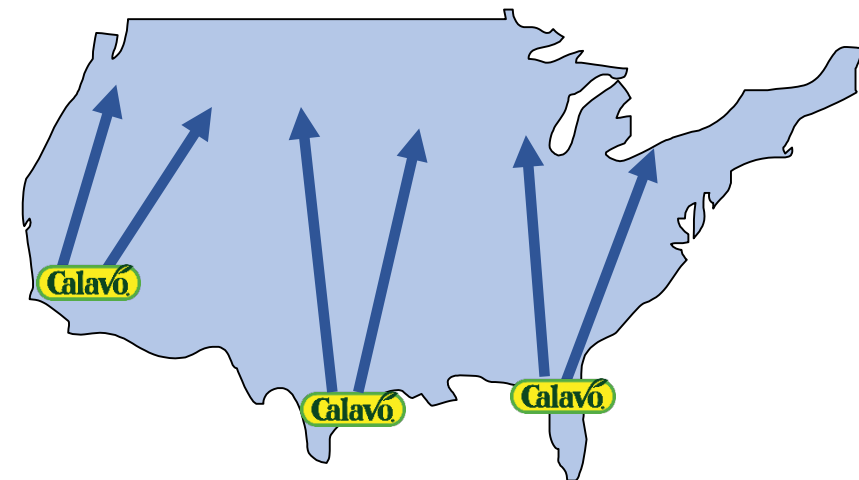
- Larger Hispanic and Millennial populations increase demand for avocados and healthier food options
  - Avocado consumption in the US has increased 4x since 2000
  - Hispanic population expected to double by 2050
  - Millennials consume healthy foods at a higher rate than their parents


### Operating Segment Synergies

- Calavo's operating segments are vertically integrated
  - Fresh Product segment acts as supplier for Calavo Foods and RFG segment<sup>1</sup>
  - Also acts as a supplier to companies in which Calavo has a minority stake, such as FreshRealm

### Investment in Operations

- Added 260,000 square feet of manufacturing space and new production capabilities in several strategic locations
  - Increased capacity in Jacksonville, FL and Houston, TX facilities
- Acquired 128,000 square foot “turnkey” production facility in Riverside, California



 - Represents newly acquired location or recently improved facilities

# Calavo Growers

## Valuation, Investment Thesis & Portfolio Decision



Recommendation: Buy		Portfolio Decision: Buy	
Valuation Method	Weight	Valuation	Contribution
Discounted Cash Flow	80%	\$81.13	\$64.90
EV/EBITDA	10%	\$68.72	\$6.87
EV/EBIT	5%	\$68.30	\$3.42
Forward P/E	5%	\$68.54	\$3.43
<b>Intrinsic Value</b>			<b>\$78.62</b>
Price (as of April 18, 2017)			\$65.35
<b>Estimated Upside / (Downside)</b>			<b>20.3%</b>

### Investment Thesis

1. Underlying growth driven by demographic forces – offers significant upside in revenue growth
2. Operates in two high growth sectors within the Consumer Staples sector – could be an attractive acquisition target
3. Management has focused on improving operational capacity and efficiency

# Synchrony Financial

NYSE: SYF



Price (as of 4/18/17):	\$32.85
TTM Price-to-Earnings:	12.1x
Market Capitalization:	\$26.6 bn
Dividend Yield:	1.58%
TTM Earnings Per Share:	\$2.71

## One-Year Price Chart



Focus  
Alternative Valuation

# Synchrony Financial

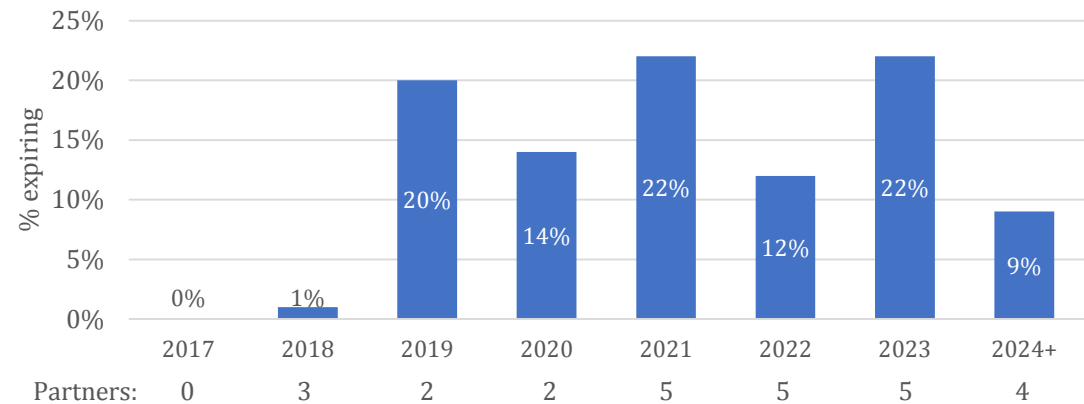
## Overview



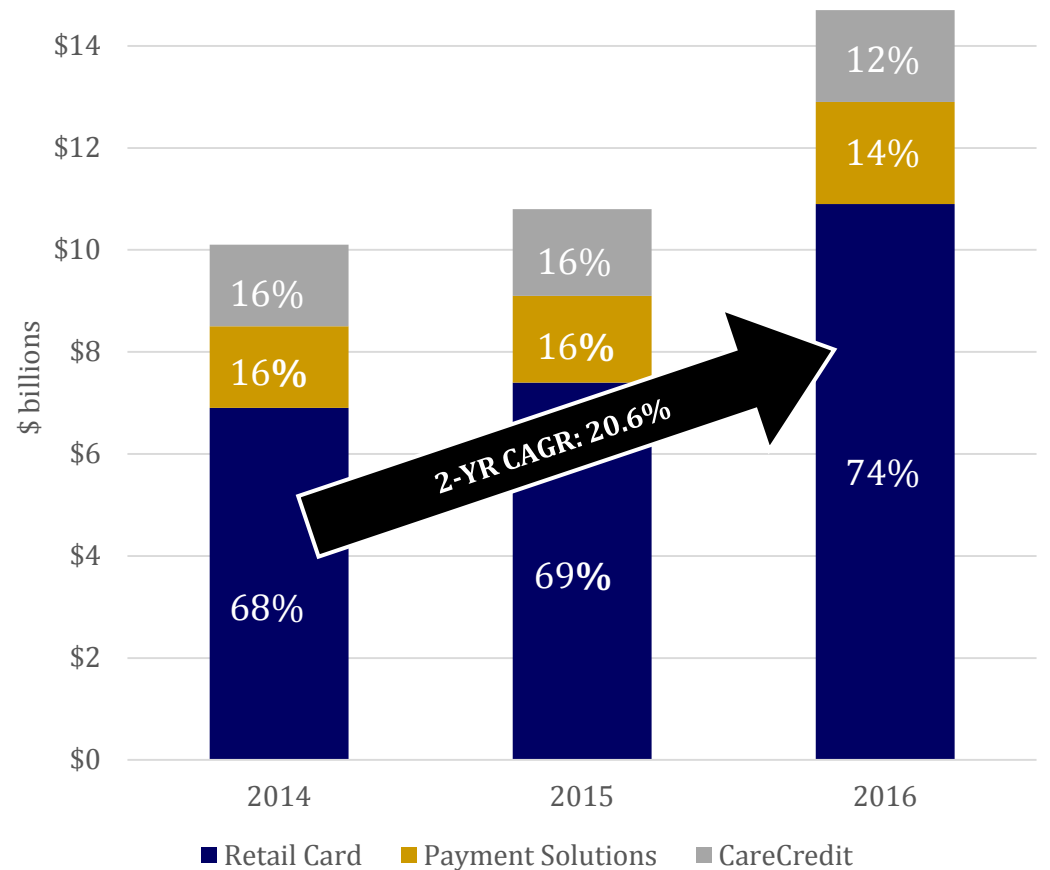
### Investment Highlights

- Market leader in Private Label Credit Cards with long average partner lifetimes
- Resistant to rewards-program competition; 300-400 bps Net Income Margin advantage
- Growth areas include integration of data analytics and online banking

### Partner Program Expirations



### Total Interest & Fees by Market

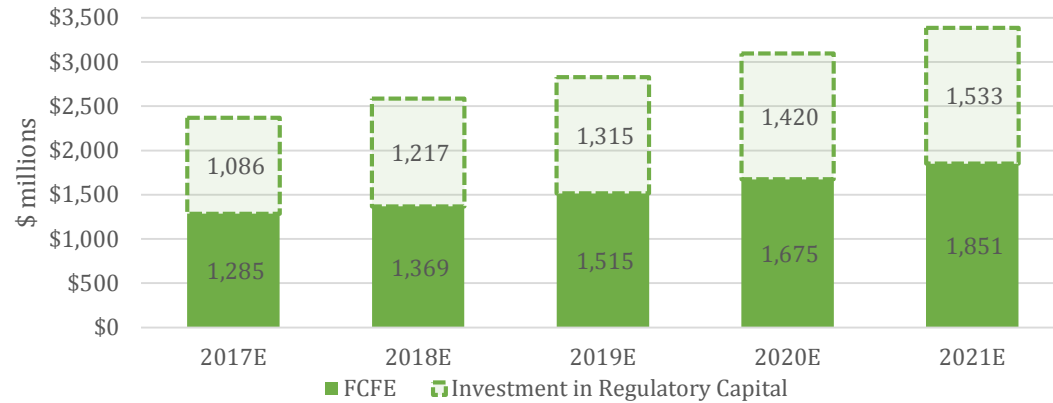


# Synchrony Financial

## Free Cash Flow to Equity



### Regulatory Capital



### Cost of Equity

Risk-Free Rate	2.5%
Market Risk Premium	5.0%
Levered Beta	1.30
<b>Cost of Equity</b>	<b>9.0%</b>

### Free Cash Flow to Equity (FCFE)

(\$ millions)	Upside	Base	Downside
PV of FCFE	\$7,240	\$6,149	\$4,824
PV of Terminal Value	\$26,578	\$24,313	\$17,512
Equity Value	\$33,819	\$30,462	\$22,336
Probability	25%	50%	25%
Weighted Equity Value of Firm			\$29,270
Shares Outstanding			811
<b>Per Share Value</b>			<b>\$36.10</b>

# Synchrony Financial

## Valuation, Investment Thesis & Portfolio Decision

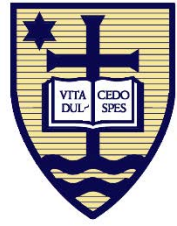


Recommendation: Buy		Portfolio Decision: Buy	
Valuation Method	Weight	Valuation	Contribution
Free Cash Flow to Equity	80%	\$36.10	\$28.88
Forward P/E	10%	\$32.16	\$3.22
P/BV	10%	\$42.02	\$4.20
LTM P/E	0%	\$34.15	\$0.00
<b>Intrinsic Value</b>			<b>\$36.30</b>
Price (as of April 18, 2017)			\$32.85
<b>Estimated Upside / (Downside)</b>			<b>10.5%</b>

### Investment Thesis

1. Strong market position, margins, and capital ratios compared to peers
2. Consistent management outperformance on guidance targets and loan growth
3. Well-positioned for pro-growth environment and potential tailwinds from tax reform and deregulation





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## AIM XLIV Review

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Acknowledgements

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## Chicago Trip



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Kelly Cornelis  
Partner



Mat Klody  
Portfolio Manager



Mike Melby  
Founder & Portfolio Manager



Brendan Barrett  
Vice President



MADISON DEARBORN PARTNERS, LLC

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## Chicago Trip



Richard Si  
Associate



MADISON DEARBORN PARTNERS, LLC

Michael Thomas  
Associate



MADISON DEARBORN PARTNERS, LLC

Tyler Bliha  
Associate



MADISON DEARBORN PARTNERS, LLC

Michael Nettesheim  
Associate



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# AIM XLIV Review

## Website and Newsletter



### Website: aim.nd.edu

- AIM course description and history
- Current portfolio
- Current analysts and coverage
- Recruiting and networking tools
- Advisory board presentation
- Alumni newsletters



### Newsletter

- State of the economy
- Portfolio performance
- Company developments
- AIM alumni update
- Portfolio composition
- Alumni articles
- AIM analyst profiles
- Sector updates



# AIM XLIV Review

## Acknowledgements



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**Our Sincerest Thank You**

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