



NORTHERN TRUST

ASSET MANAGEMENT

# STRATEGIC CONSIDERATIONS & TACTICAL OPPORTUNITIES

FIVE-YEAR  
OUTLOOK

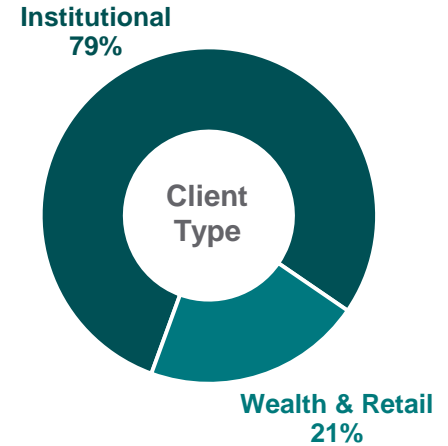
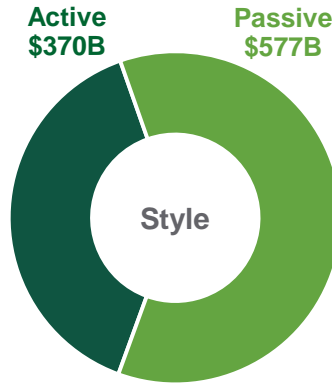
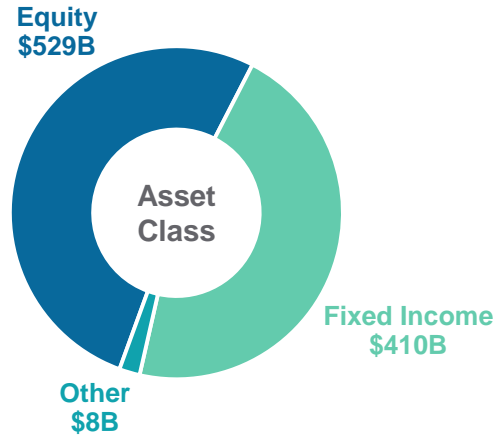
**Jim McDonald**

*Chief Investment Strategist*

# Northern Trust Asset Management

A leading global investment manager with a client-centric culture rooted in a fiduciary heritage.

## TOTAL ASSETS UNDER MANAGEMENT



**\$946 billion** | World's **16th largest** asset manager  
TOTAL AUM\*

\*Assets under management as of June 30, 2018. For the Northern Trust Asset Management entities included in AUM total, please see disclosure at end of this document. The above rankings are not indicative of future performance. Unless otherwise noted, rankings are based on total worldwide assets under management of \$961 billion as of December 31, 2017 by *Pensions & Investments* magazine's 2018 Special Report on the Largest Money Managers.

# SESSION GOALS

1

Strategic themes  
and tactical  
opportunities

2

Asset class  
outlooks

3

The  
results

# CMA: A Review of the Process

## TOP-DOWN/ BOTTOM-UP INPUT

- Top-down investment strategists
- Bottom-up research analysts
- Client-facing investment professionals

## FORWARD LOOKING

- Themes affecting markets in the coming years
- Evolution of relationships between asset classes



## GLOBAL OUTLOOK

- North America
- EMEA
- Asia-Pacific

## HISTORICALLY AWARE

- Historical relationships between asset classes
- Drivers of asset class returns

# A Modern Approach to Implementing a Strategic Outlook



# What to Watch in the Years Ahead

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Mild Growth  
Myopia

Stuckflation

Pass/Fail  
Monetarism

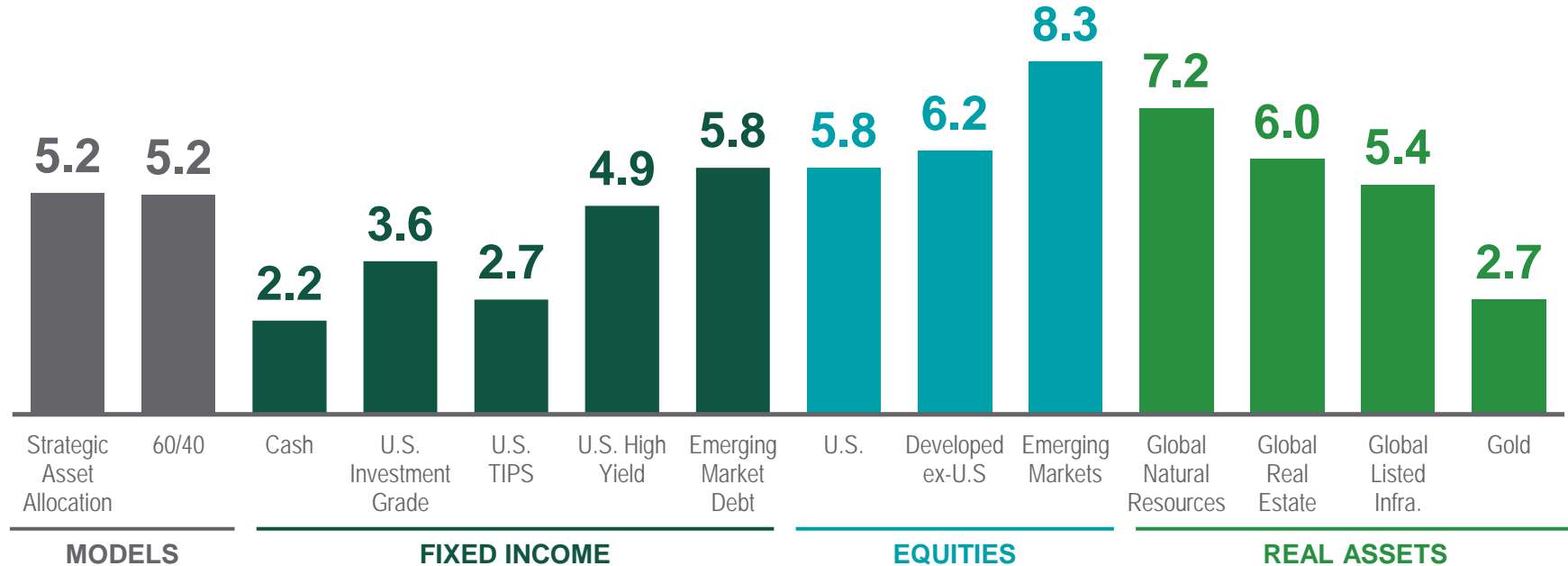
Technology  
Slowzone

Global (Re)  
Positioning System

Executive  
Power Drive







# Current Forecasts

## 2018 FIVE-YEAR ASSET CLASS TOTAL RETURN FORECASTS (%)



Source: Northern Trust. Pre-tax strategic, growth and income accredited investor portfolio model. All figures in percentage terms. Forward-looking statements could differ from actual results. For illustrative purposes only. CMA model expected returns do not show actual performance.

# Tactically Adding to U.S., Fixed Income

		ASSET CLASS	STRATEGIC (%)	TACTICAL OVER/UNDERWEIGHT (%)	TACTICAL (%)	
<b>RISK CONTROL</b>	Fixed Income	Cash	2	-2 	0	
		U.S. Investment Grade	34	-2 	32	
		U.S. TIPS	4	-4 	0	
		U.S. High Yield	3		8 	11
<b>RISK ASSETS</b>	Equities	U.S. Equity	23		2 	25
		Dev. Ex-U.S. Equity	16		0	16
		EM Equity	9	-2 		7
	Real Assets	Global Listed Infrastructure	2		0	2
		Global REIT	2		0	2
		Global Natural Resources	5		0	5
	Gold	Gold	0		0	0

Source: Northern Trust Investment Strategy. Allocations above reflect Northern Trust's Global Policy Model; the proxy account for the Investment Policy Committee. Allocations as of 9/7/2018. SAA = Strategic Asset Allocation. TAA = Tactical Asset Allocation.



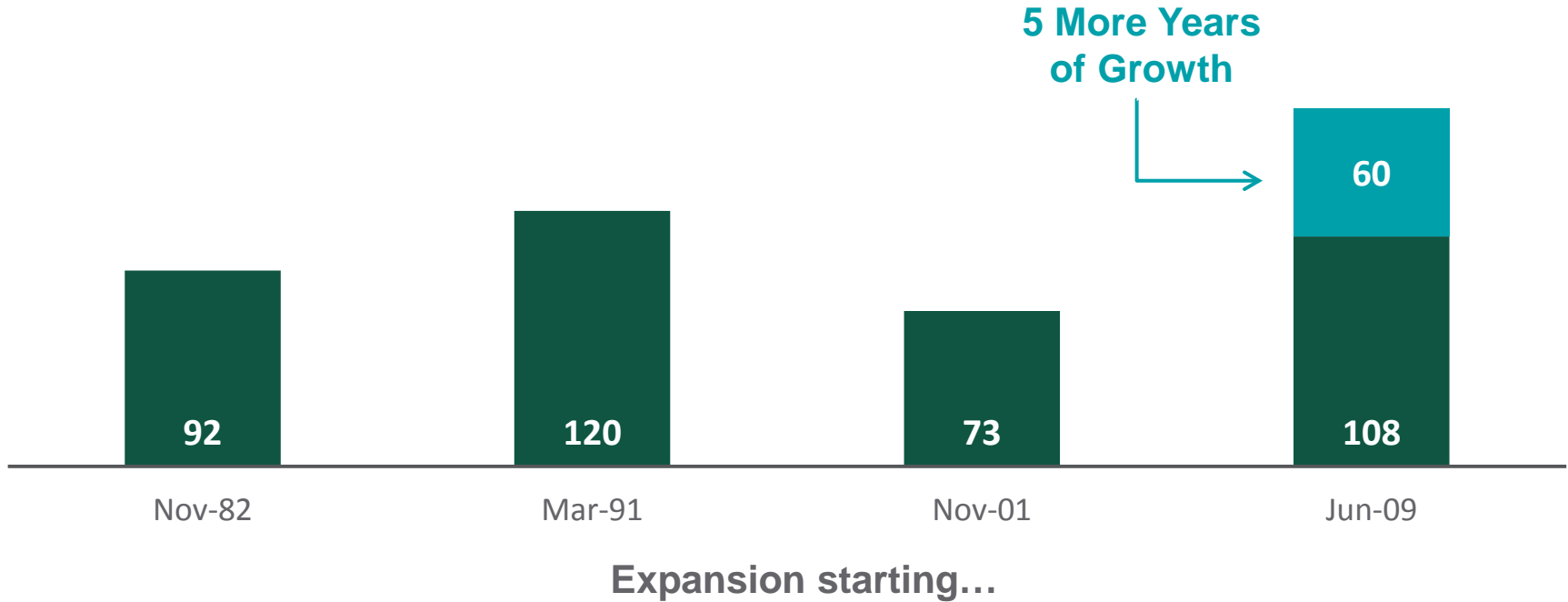
# MILD GROWTH MYOPIA



**5-Year  
Outlook**

# Record Length...

## EXPANSIONS BY LENGTH (MONTHS)

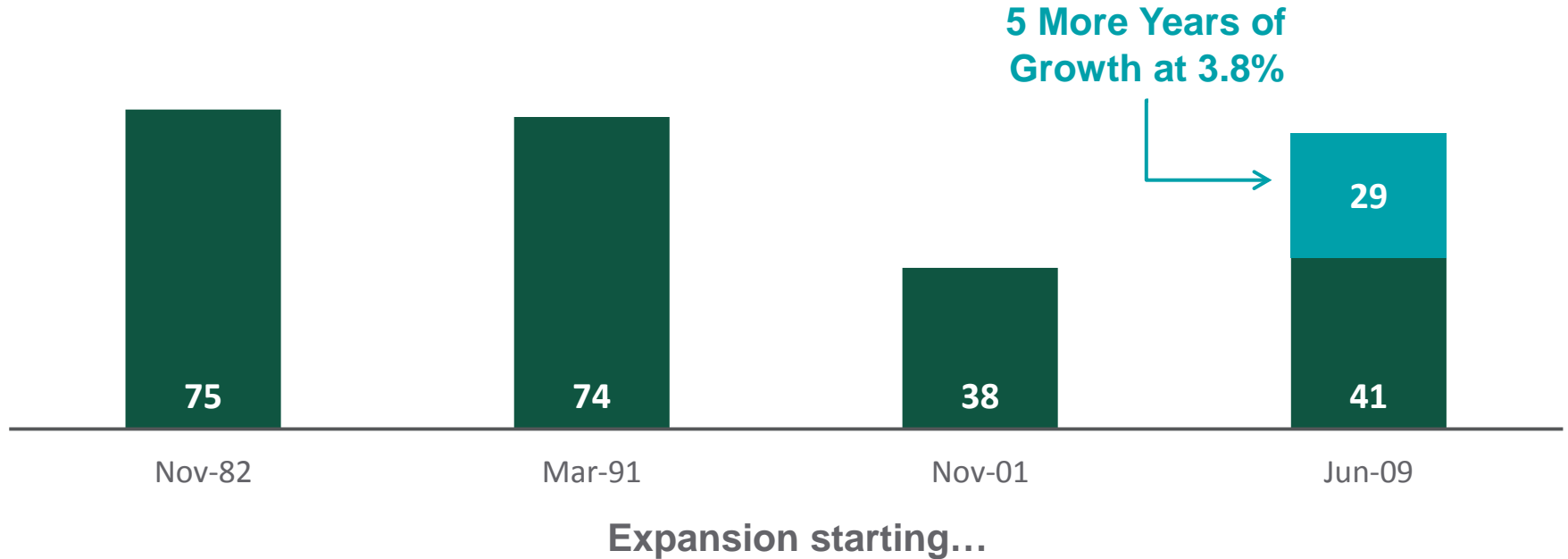


Source: NT Global Asset Allocation, Bloomberg.

# ...But Not Record Magnitude

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TOTAL OUTPUT (CUMULATIVE GROWTH %)



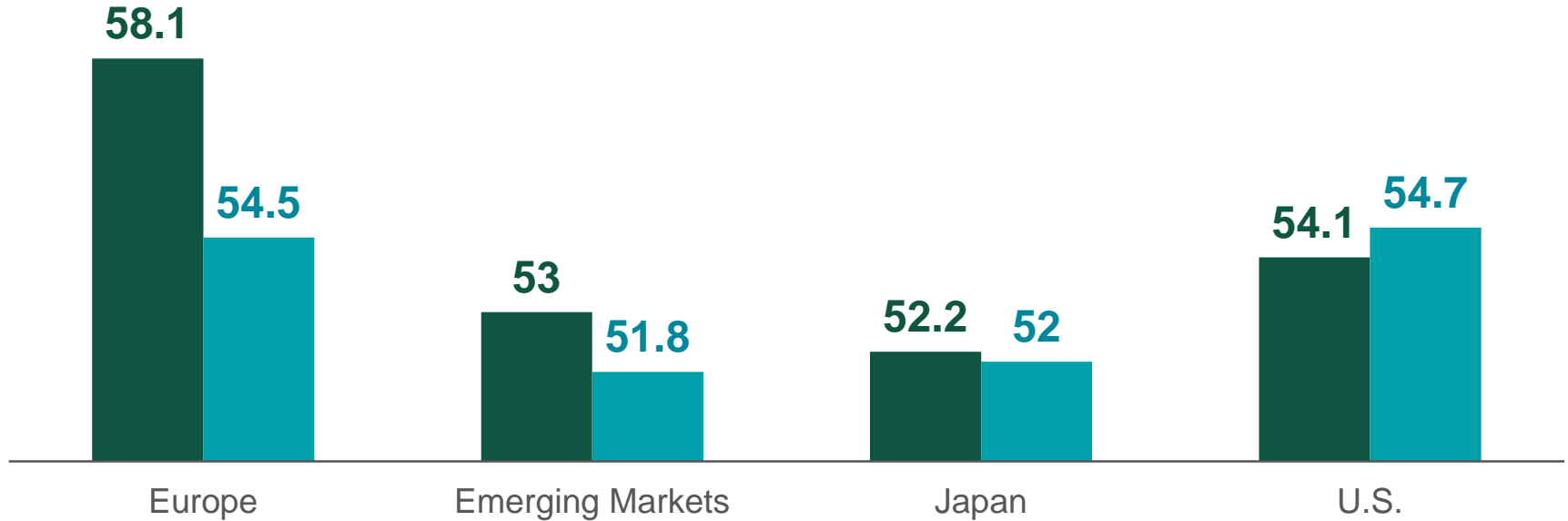
Source: NT Global Asset Allocation, Bloomberg.

# Shifting Global Momentum Toward the U.S.

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## COMPOSITE PMI

■ 12/31/2017 ■ 8/31/2018



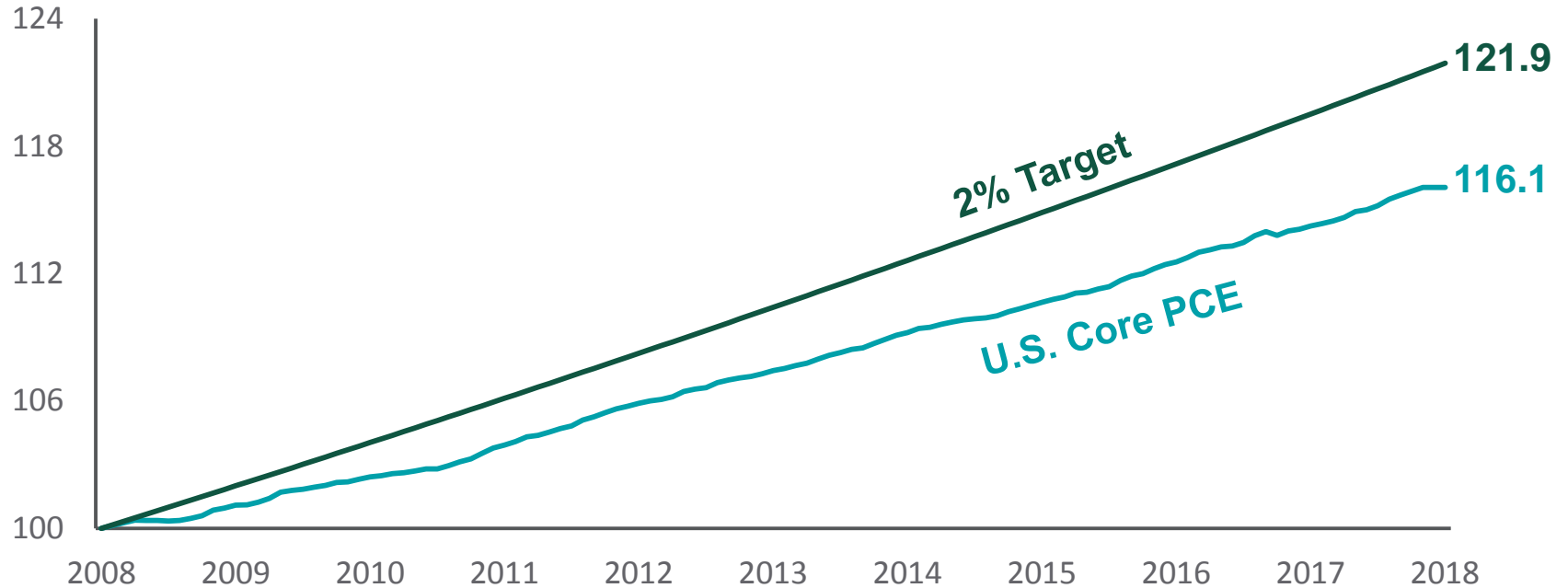
Source: NT Global Asset Allocation, Bloomberg.

# STUCKFLATION

**5-Year  
Outlook**

# Falling Behind

## CUMULATIVE INFLATION OVER TIME (%)



Source: NT Global Asset Allocation, Bloomberg. Data from 6/30/2008 to 6/30/2018. Green bars represents the core inflation measures.

# Underachievers

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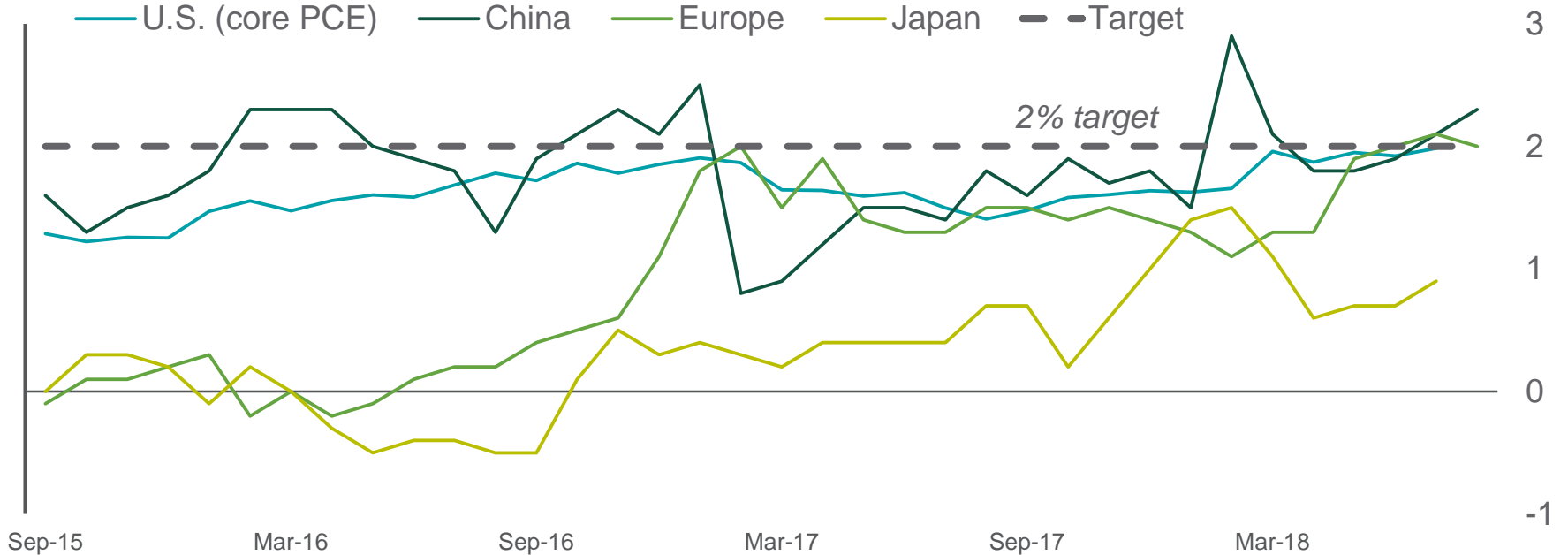
## CUMULATIVE INFLATION SHORTFALLS VS. TARGET OVER PAST DECADE



Source: NT Global Asset Allocation, Bloomberg. Data from 6/30/2008 to 6/30/2018. Green bars represents the core inflation measures.

# Inflation Finally Nearing Target

## YEAR-OVER-YEAR INFLATION (%)



Source: NT Global Asset Allocation, Bloomberg. , Inflation data through 8/31/2018. Headline CPI used unless otherwise noted.



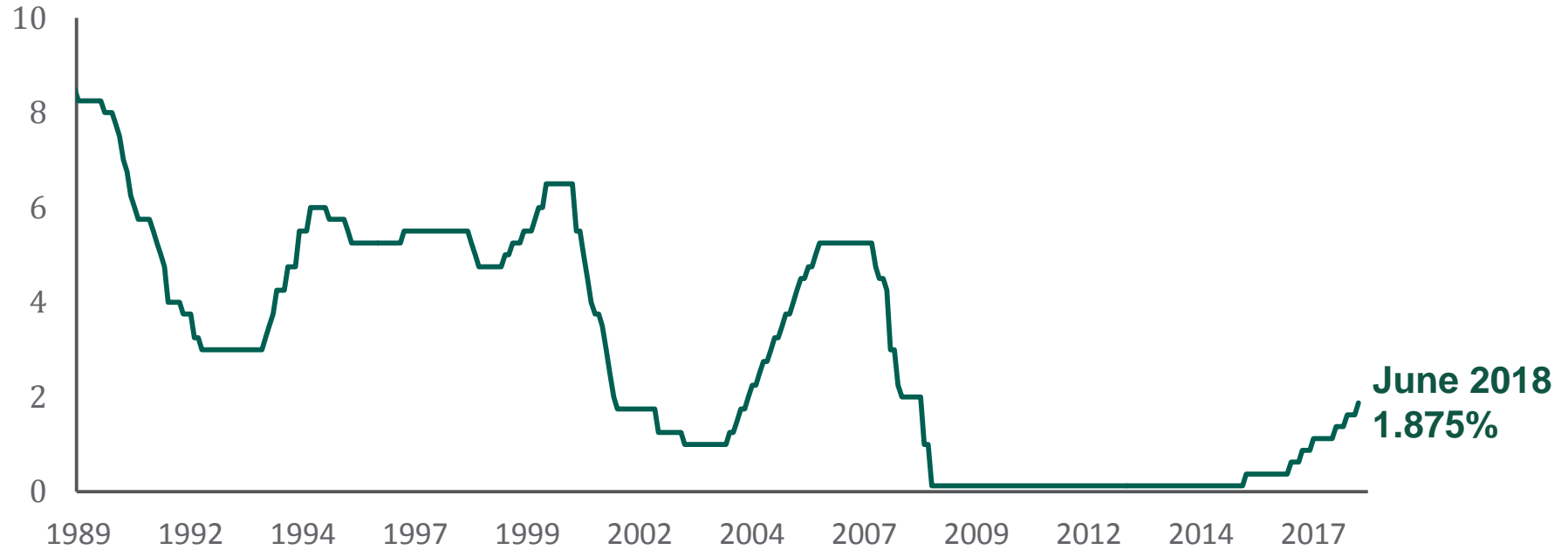
# PASS/FAIL MONETARISM



**5-Year  
Outlook**

# Lower Lows, Lower Highs

## FED FUND RATE (%) FROM 1989-2018



Source: NT Global Asset Allocation, Bloomberg. Data from 12/31/1989 to 8/31/2018.

# Less Room for Maneuvering

## CUMULATIVE FED RATE CUTS IN PAST CYCLES (%)



Source: NT Global Asset Allocation, Bloomberg. Data from 12/31/1989 to 6/30/2018. Light blue bar represents maximum possible Fed funds reduction from current rate.

# Inversions Have Preceded The Last 5 Recessions

## YIELD CURVE SPREAD AND ECONOMIC RECESSIONS



Source: NT Global Asset Allocation, Bloomberg, NBER. Monthly data: 12/31/1977 through 8/31/2018.

# TECHNOLOGY SLOWZONE

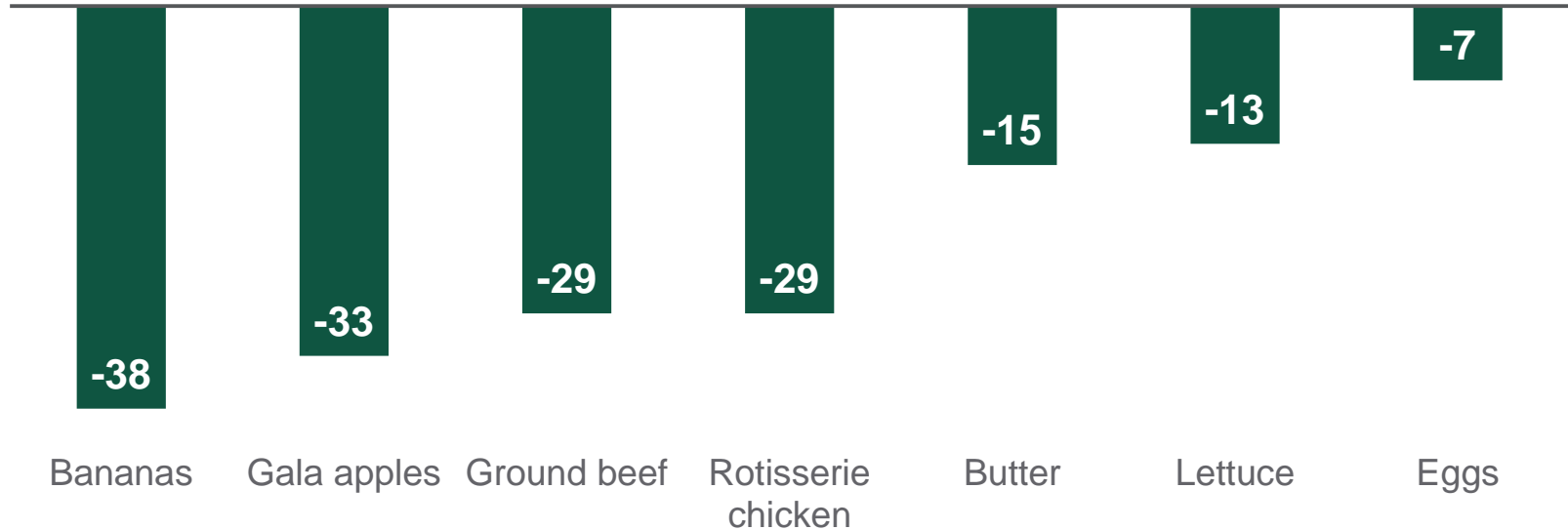


**5-Year  
Outlook**

# Lower Prices: Groceries

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PRICE CHANGE PER UNIT FOLLOWING AMAZON PURCHASE OF WHOLE FOODS (%)

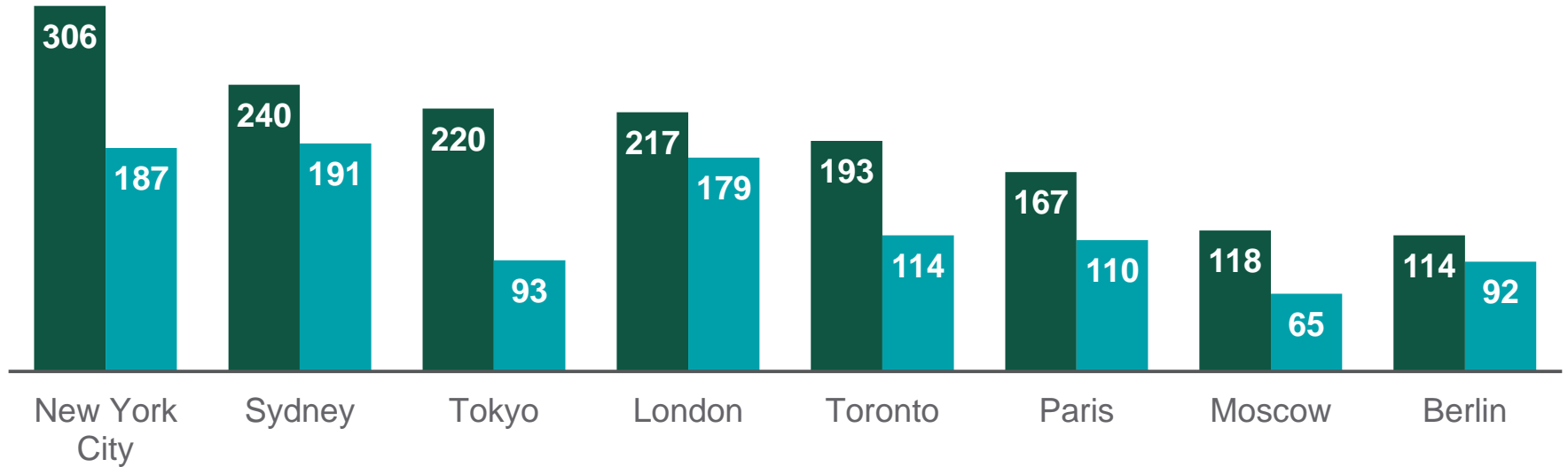


Source: NT Global Asset Allocation, Bloomberg. Price change shown represents change from 8/24/2017 to 8/28/2017. Kleiner Perkins 2018 Internet Trends. AirDNA, HRS, Statista. Prices as of January 2018.

# Lower Prices: Lodging

## HOTEL VS. AIRBNB LODGING COST PER NIGHT (\$)

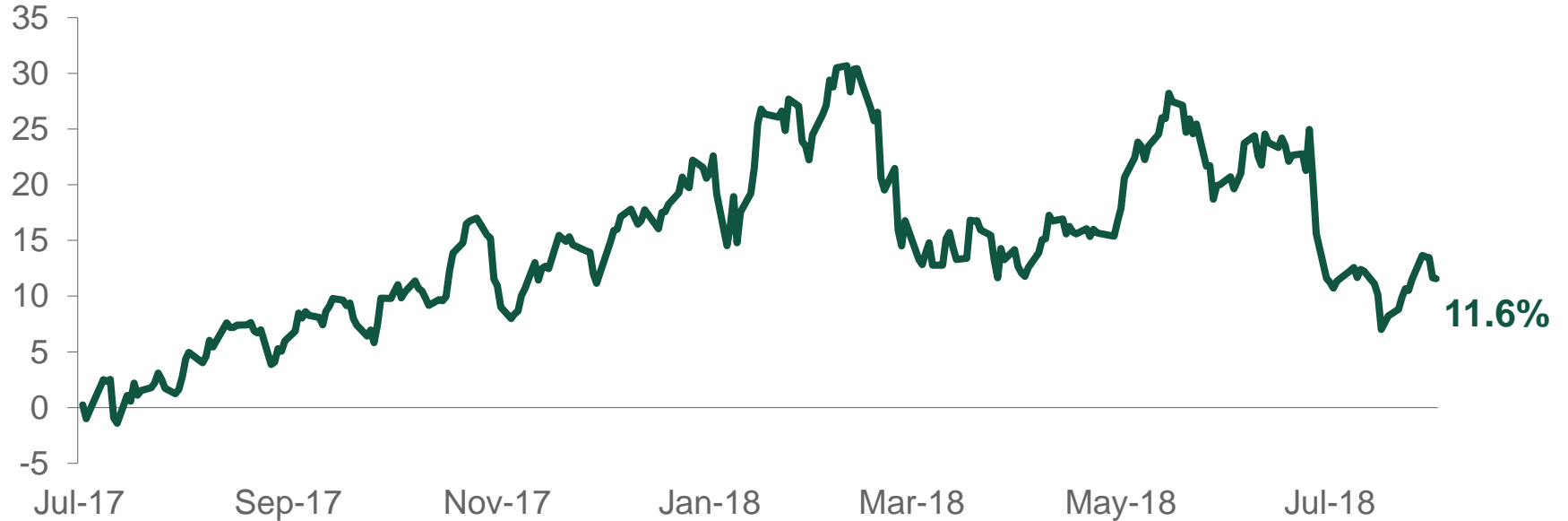
■ Hotel ■ Airbnb



Source: NT Global Asset Allocation, Bloomberg. Price change shown represents change from 8/24/2017 to 8/28/2017. Kleiner Perkins 2018 Internet Trends. AirDNA, HRS, Statista. Prices as of January 2018.

# Social Media Stocks Struggle

## CUMULATIVE RETURN (%) OF SOCIAL MEDIA STOCKS<sup>1</sup>



Source: NT Global Asset Allocation, Bloomberg.

<sup>1</sup>Cumulative return of Global X Funds Global X Social Media ETF from 7/31/2017 to 8/31/2018.



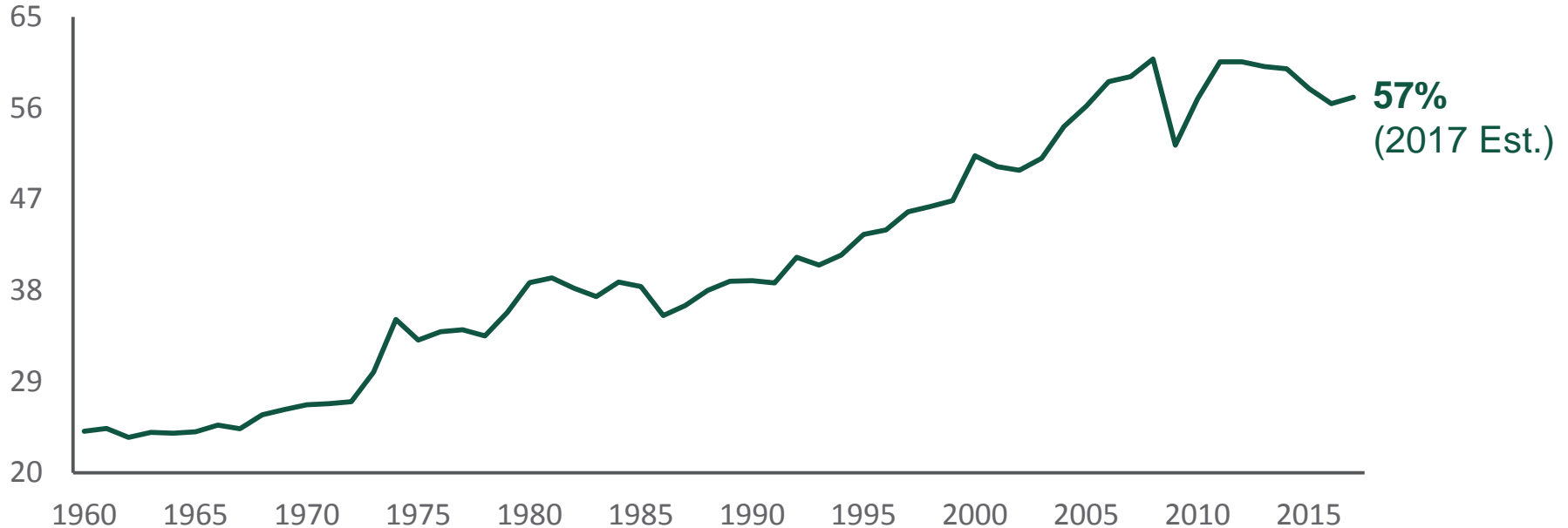
# GLOBAL (RE)POSITIONING SYSTEM



**5-Year  
Outlook**

# Globally Integrated Economies

## GLOBAL TRADE AS A PERCENTAGE OF GDP (%)

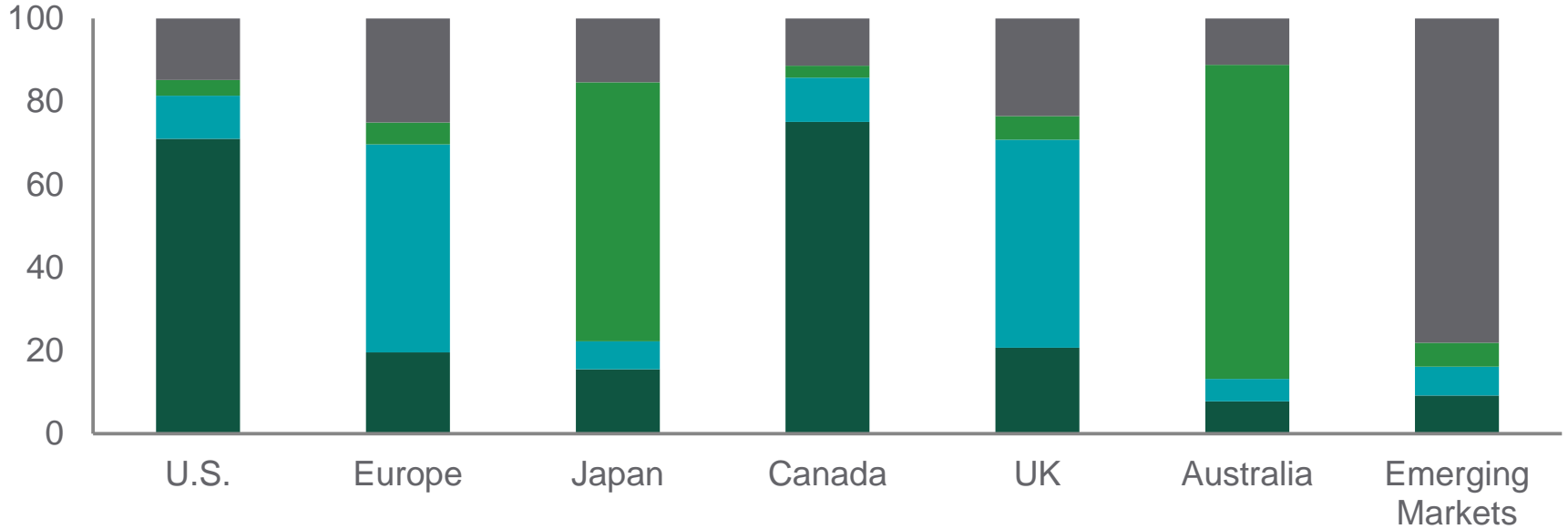


Source: NT Global Asset Allocation, World Bank. Yearly data from 12/31/1990 to 12/31/2016. NT estimate as of 2017. Factset. Data as of 4/30/2018.

# Globally Integrated Corporations

## REVENUE COMPOSITION OF SELECT EQUITY MARKETS (%)

■ Emerging Markets ■ Asia ■ Europe ■ North America

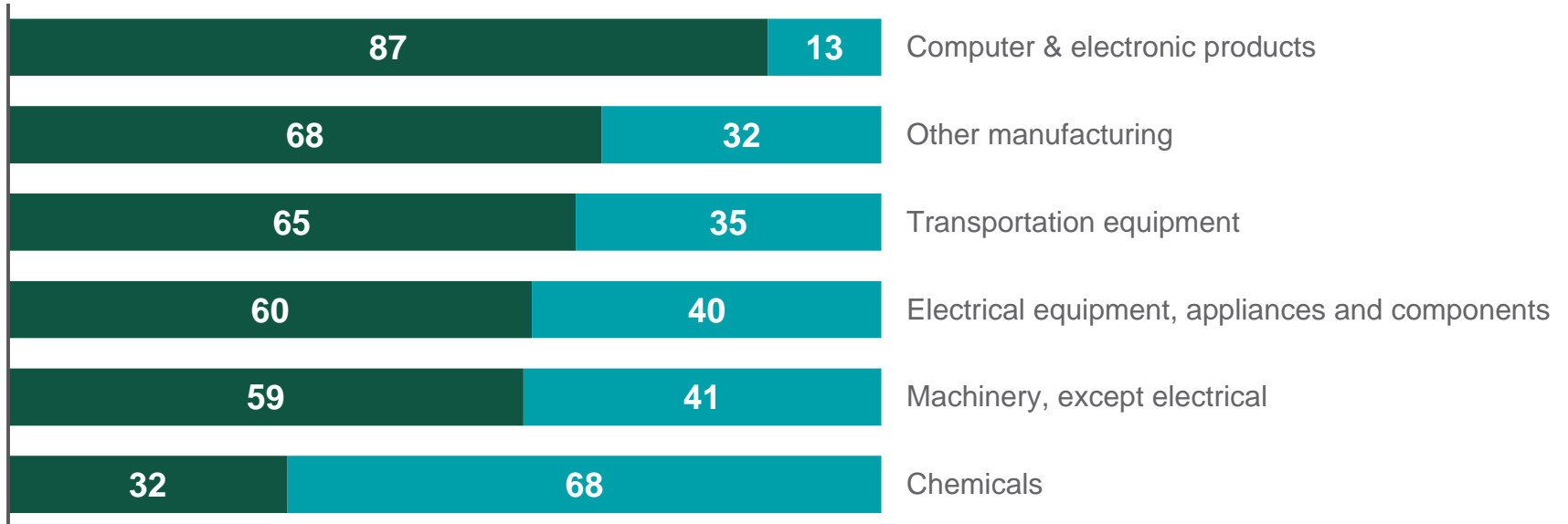


Source: NT Global Asset Allocation, World Bank. Yearly data from 12/31/1990 to 12/31/2016. NT estimate as of 2017. Factset. Data as of 4/30/2018.

# Hitting The Wrong Target

## % OF TOTAL CHINESE EXPORTS (BY INDUSTRY) THAT COMES FROM...

■ Non-Chinese Multinational Corporations ■ Domestic Chinese Firms



Source: NT Global Asset Allocation, Peterson Institute for International Economics. Calculations as of 6/18/2018.

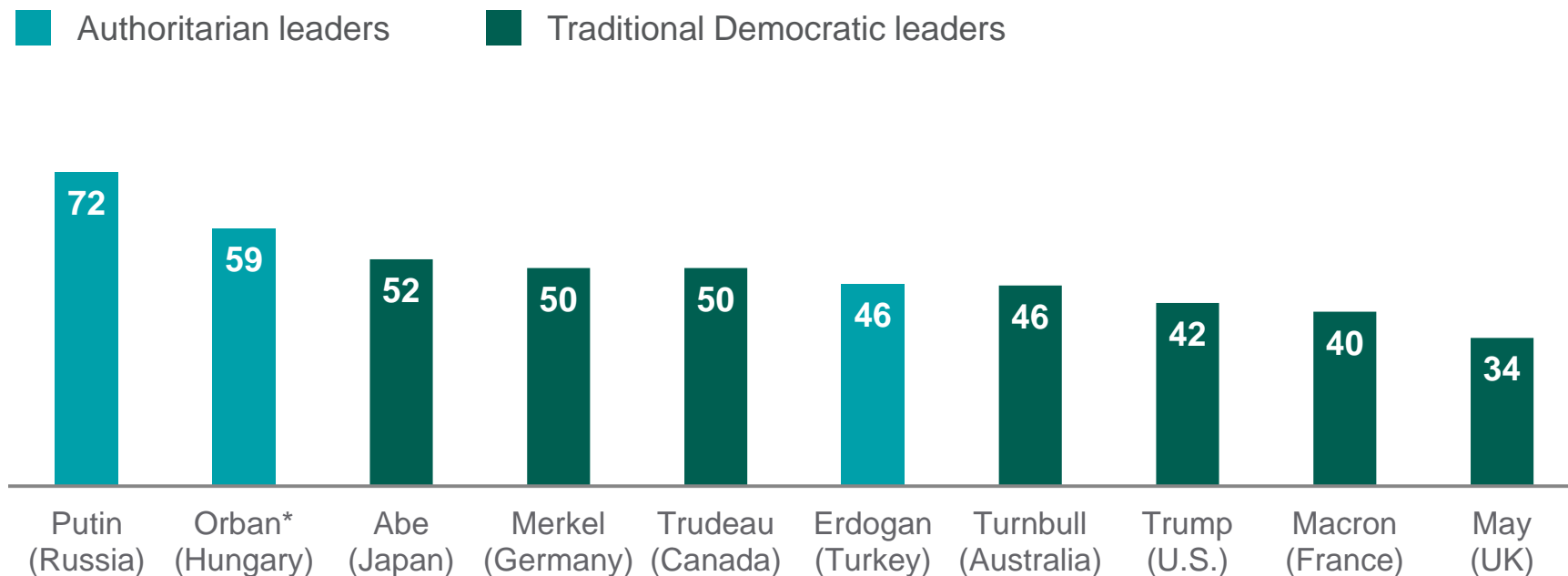
# EXECUTIVE POWER DRIVE



**5-Year  
Outlook**

# Hard To Please

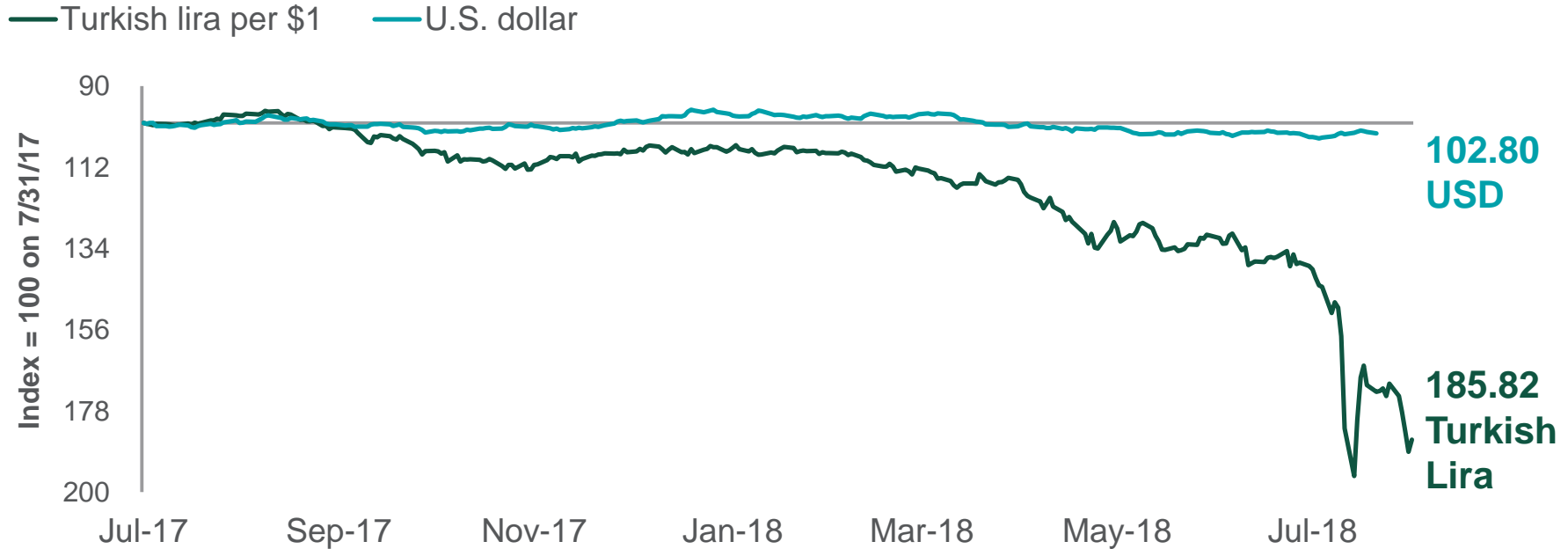
## LEADER APPROVAL RATING (%)



Source: NT Global Asset Allocation, various government websites. Top chart shows the percentage of lower parliament seats held by the ruling party (and coalition partners if applicable). 538.com, Opinium, ARD-DeutschlandTrend, Ifop, Nikkei, Ipsos, Median, MetroPoll (May 2018), VTsIOM, The Australian (May 2018). Poll data as of June 2018 unless noted otherwise. \*Denotes approval of leader's political party.

# Executive Power Drive Can Work Either Way

## TURKISH LIRA WEAKENS AGAINST THE DOLLAR



Source: NT Global Asset Allocation, Bloomberg. Spot price of Turkish lira per 1 U.S. dollar from 7/31/2017 to 8/31/2018. Lower value = lira weakness. U.S. dollar measured by the trade-weighted dollar. Trade-weighted dollar data through 8/20/2018.

# FIXED INCOME

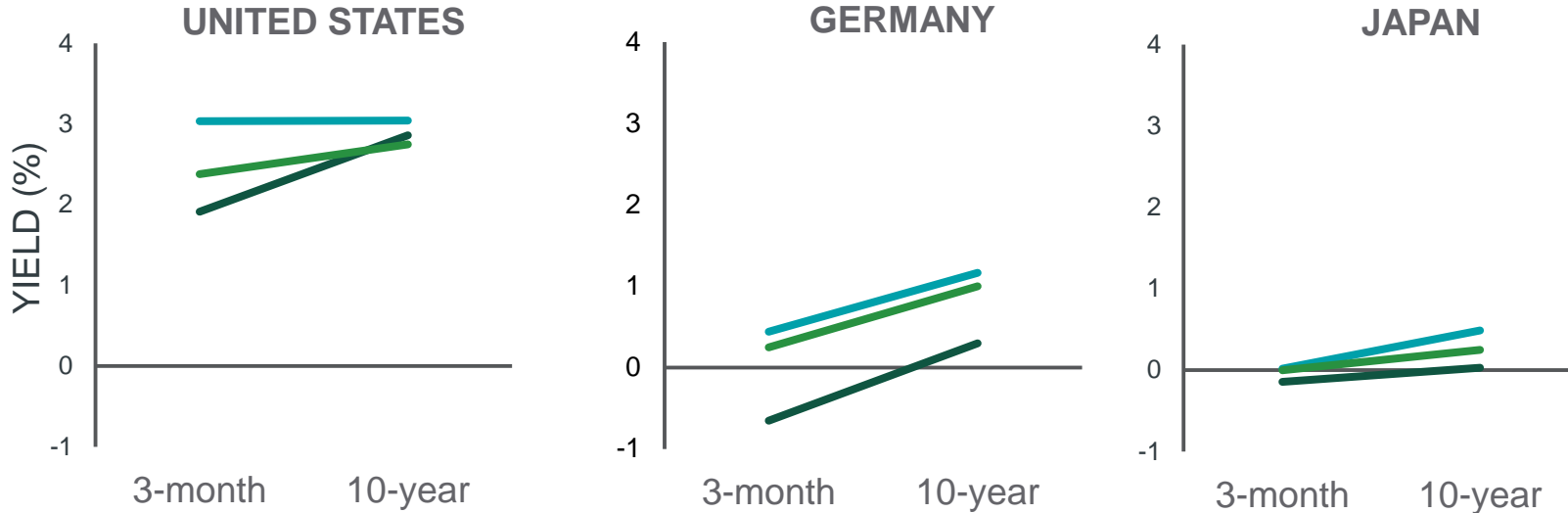


## Asset Class Forecasts



# Low Rates, Flat Curves

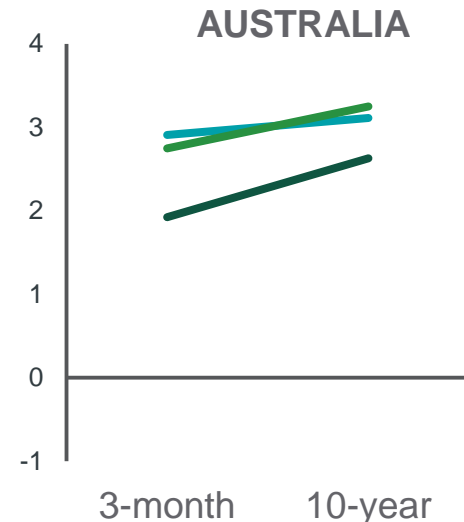
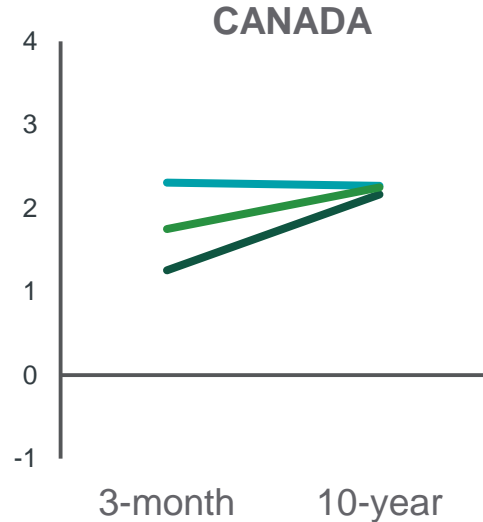
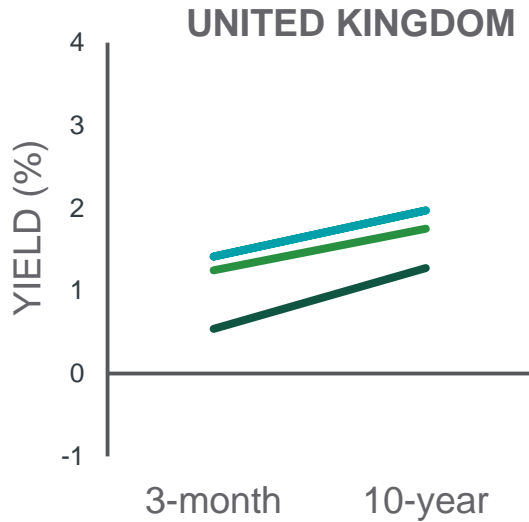
— Current    — 5-Year Forward    — 2018 NT CMA Forecast



Source: Northern Trust Global Asset Allocation, Bloomberg. Current and five-year forward data as of 6/30/2018

# Low Rates, Flat Curves

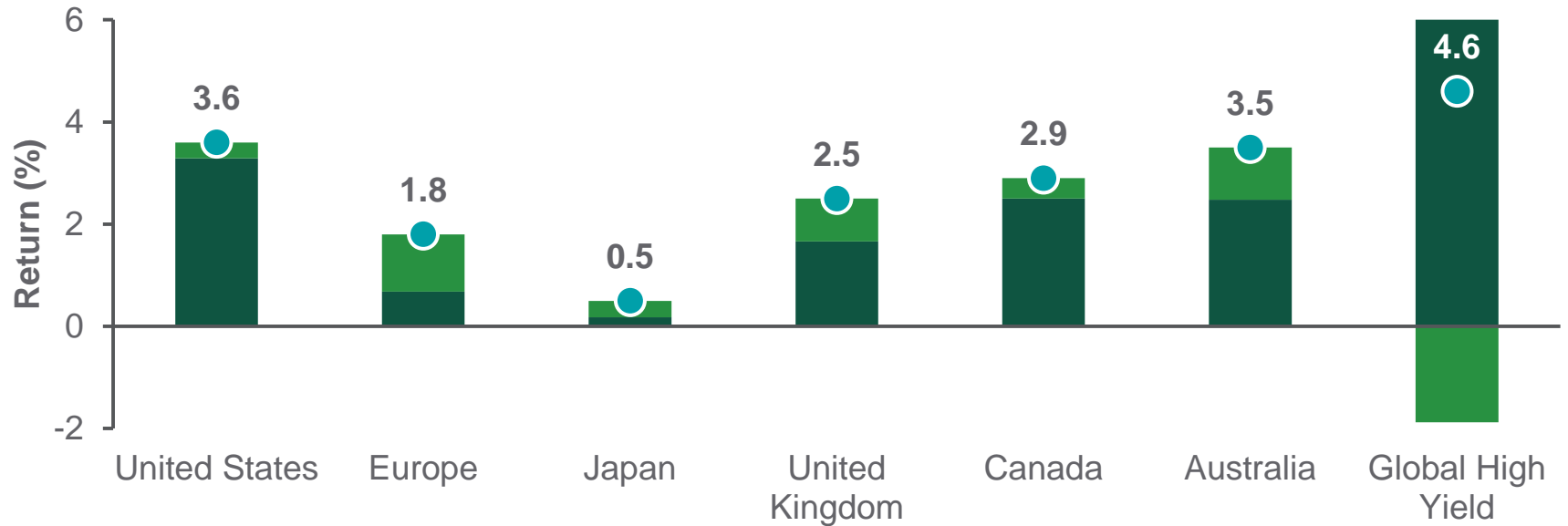
— Current    — 5-Year Forward    — 2018 NT CMA Forecast



Source: Northern Trust Global Asset Allocation, Bloomberg. Current and five-year forward data as of 6/30/2018

# Fixed Income Building Blocks

■ Coupon return ■ Price/reinvestment return ● Total return

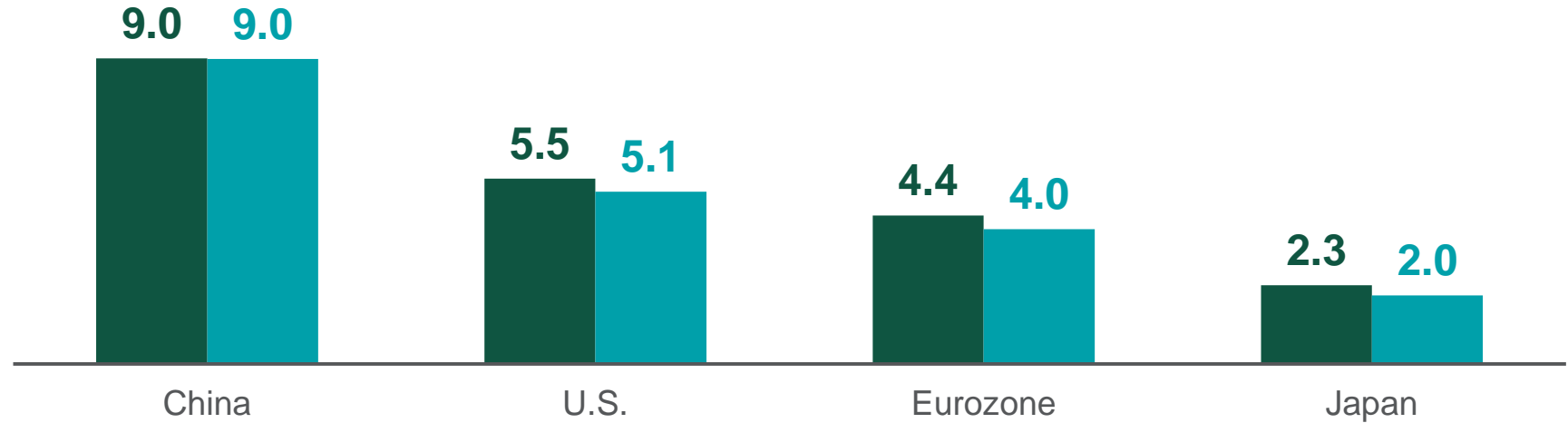


Source: NT Global Asset Allocation, Bloomberg. Coupon return calculated as yield to worst on 6/30/2018.

# Slowing Growth Should Cap Interest Rate Upside

## NOMINAL GDP (%)

■ 2018 ■ 2019



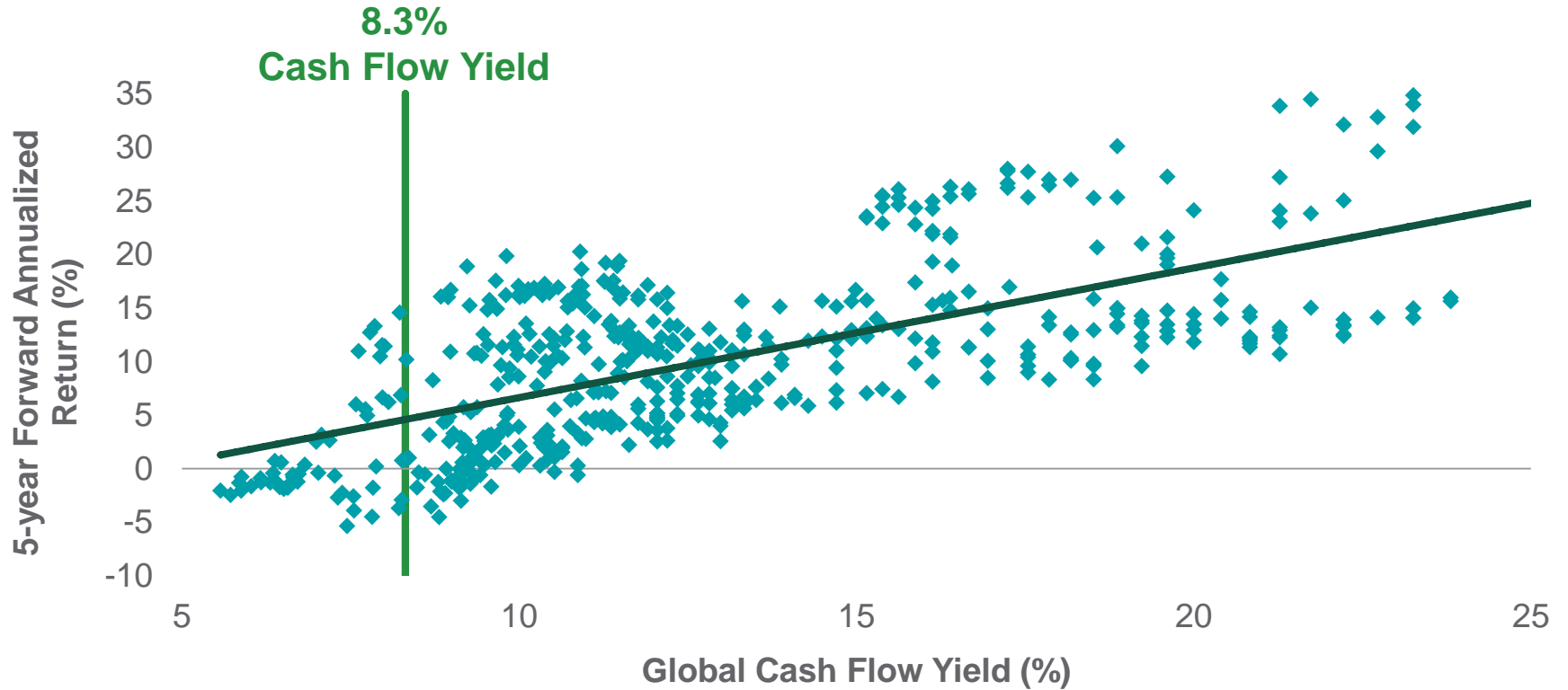
Source: NT Global Asset Allocation, IMF April Economic Outlook 2018.

# EQUITIES



## Asset Class Forecasts

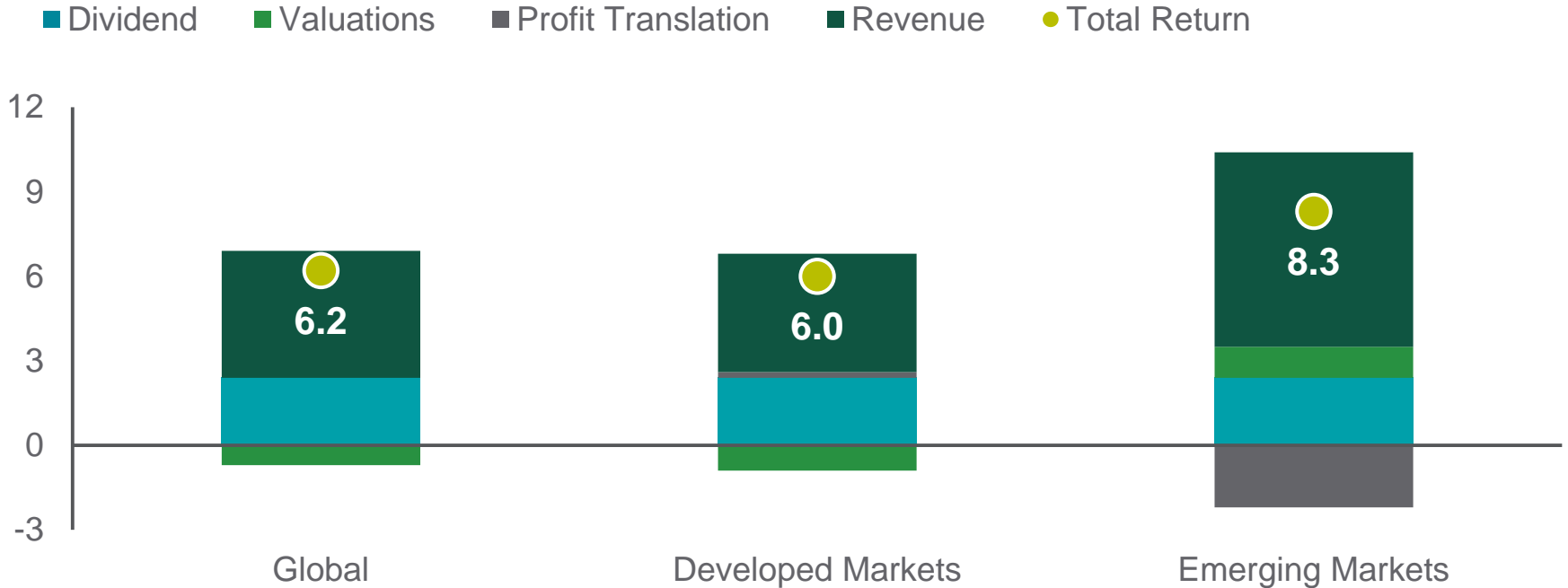
# Valuation Headwinds...



Source: NT Global Asset Allocation, Bloomberg. MSCI World cash flow yields are the inverse of price to cash earnings ratio. "Current Cash Flow Yield" as of 6/30/2018.

# Building Blocks to Total Returns

## EQUITY RETURN FORECAST COMPONENT BY REGION (%)

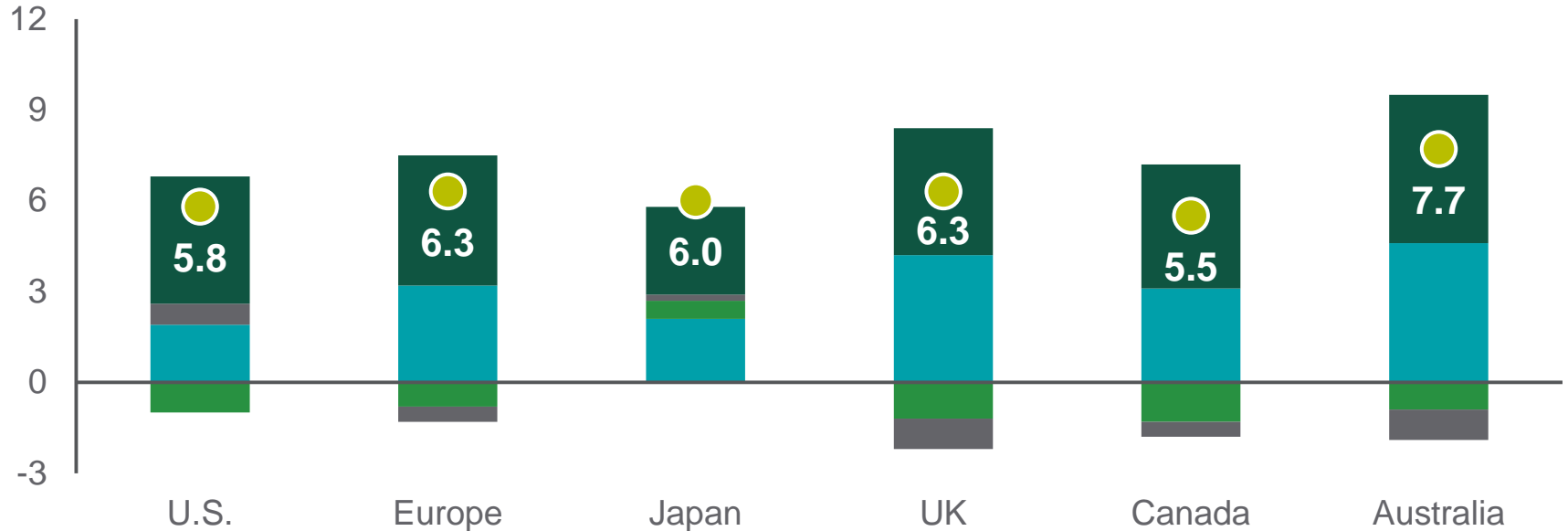


Source: Northern Trust Global Asset Allocation

# Building Blocks to Total Returns

## EQUITY RETURN FORECAST COMPONENT BY COUNTRY (%)

■ Dividend ■ Valuations ■ Profit Translation ■ Revenue ● Total Return

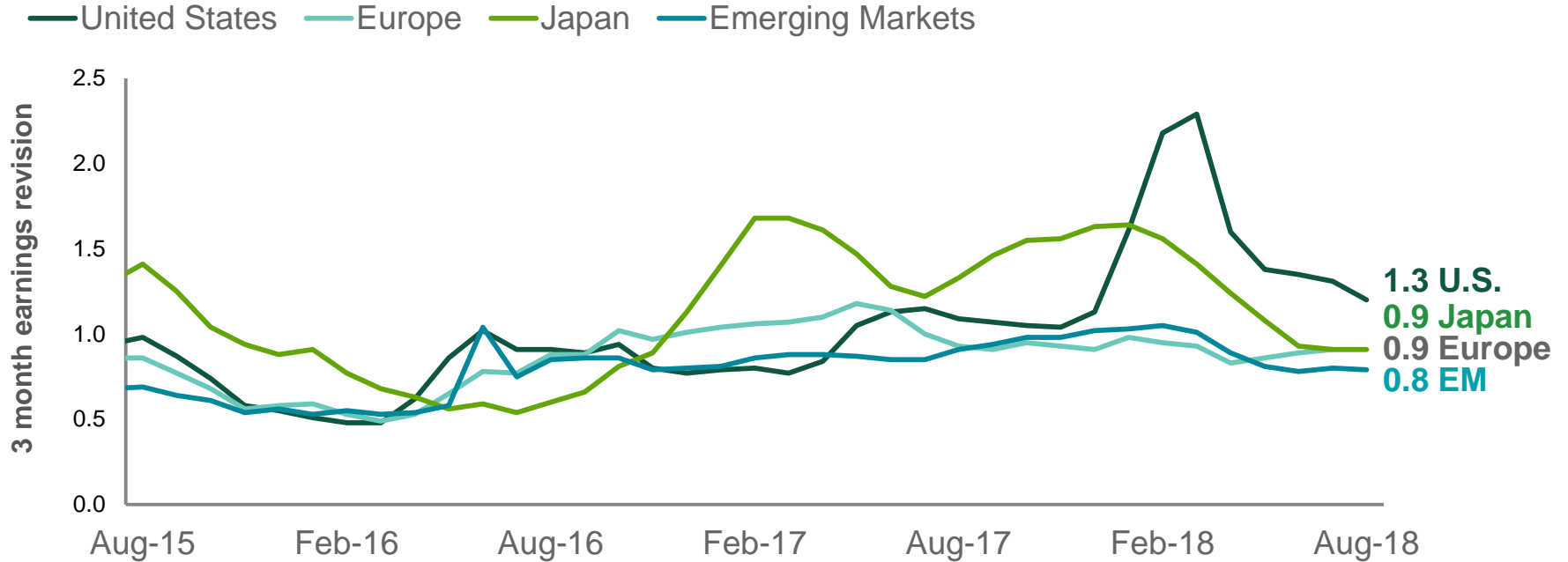


Source: Northern Trust Global Asset Allocation



# Equities: Revision Ratios Decreasing Globally

## EQUITY REVISION RATIOS



Source: Northern Trust Global Asset Allocation, Bank of America Merrill Lynch. Earnings revision ratio is measured by stock upgrades / stock downgrades. Data through 8/31/2018.

# Stocks Have Become Less Expensive



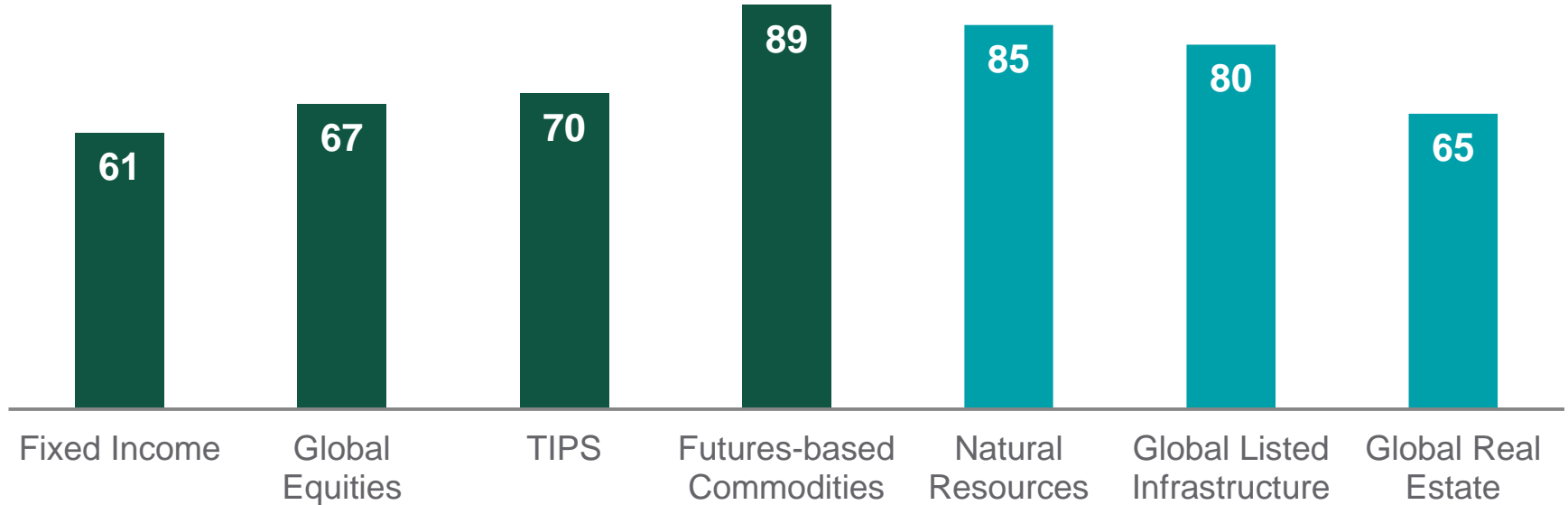
Source: Northern Trust Global Asset Allocation, MSCI. Monthly data through 8/31/2018. Indices are MSCI US, MSCI Europe, MSCI Japan and MSCI Emerging Markets; All data begins in 1970 except EM data beginning in 1995. Normal Range: +/- 1 standard deviation from the median.

# REAL ASSETS

## Asset Class Forecasts

# Which Assets Beat Inflation – and How Often?

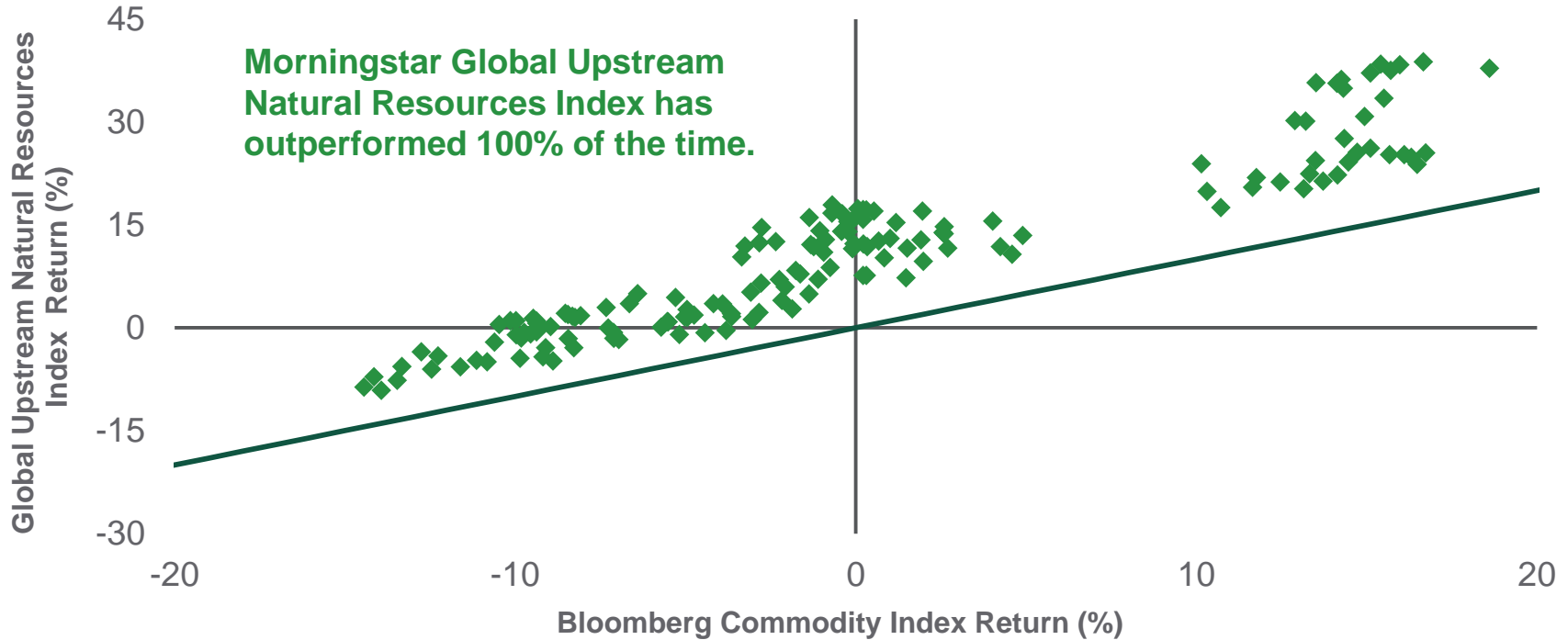
% OF TIME ASSET CLASS COVERS INFLATION DURING HIGH INFLATION PERIODS



Source: Northern Trust Global Asset Allocation, Bloomberg. Data from 12/31/2001 to 3/31/2018. High inflation (above 2.98%) is the 75<sup>th</sup> percentile of data during the data range. Normal Inflation is below 2.98.

# Natural Resource Equities Beat Futures Soundly

## 5-YEAR ROLLING RETURNS



# ALTERNATIVES

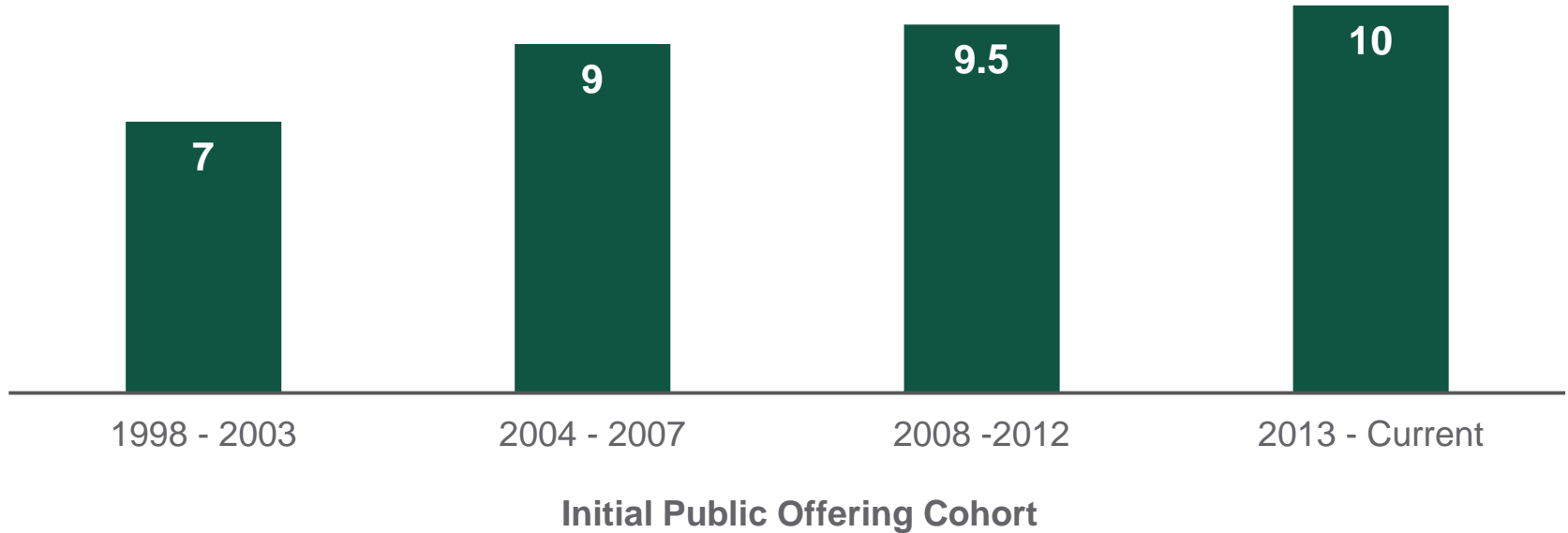


**Asset  
Class  
Forecasts**

# More Private Opportunities as IPOs are Delayed

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## MEDIAN YEARS COMPANIES ARE STAYING PRIVATE

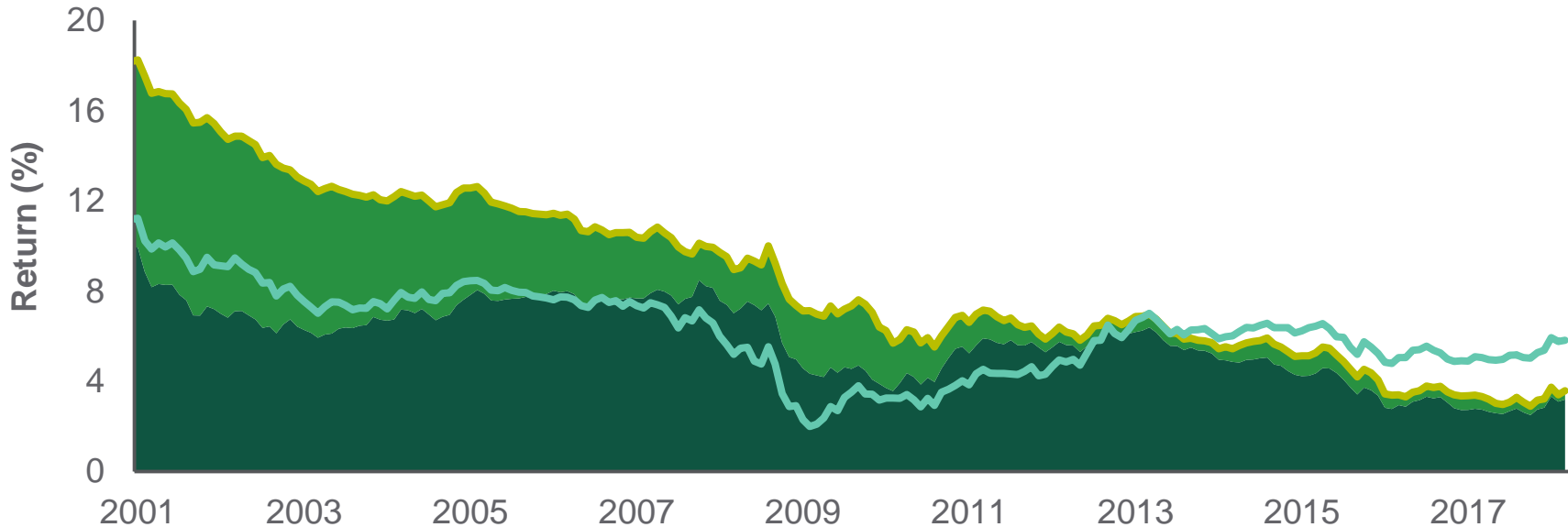


Source: NT Global Asset Allocation, Venture Capital Journal. Data as of June 2018.

# INCREASING RISK RELIANCE

## HEDGE FUND VS. BALANCED PORTFOLIO – 10 YEAR ROLLING RETURNS

■ Hedge fund risk contribution      ■ Hedge fund alpha contribution  
— Hedge fund total return      — Balanced portfolio total return



Source: NT Global Asset Allocation, NT Portfolio Construction Desk, Bloomberg. Data from 12/31/2000 to 3/31/2018. Balanced portfolio is 50% MSCI ACWI / 50% Bloomberg Barclays Global Aggregate Index.



# HOW DID WE DO?



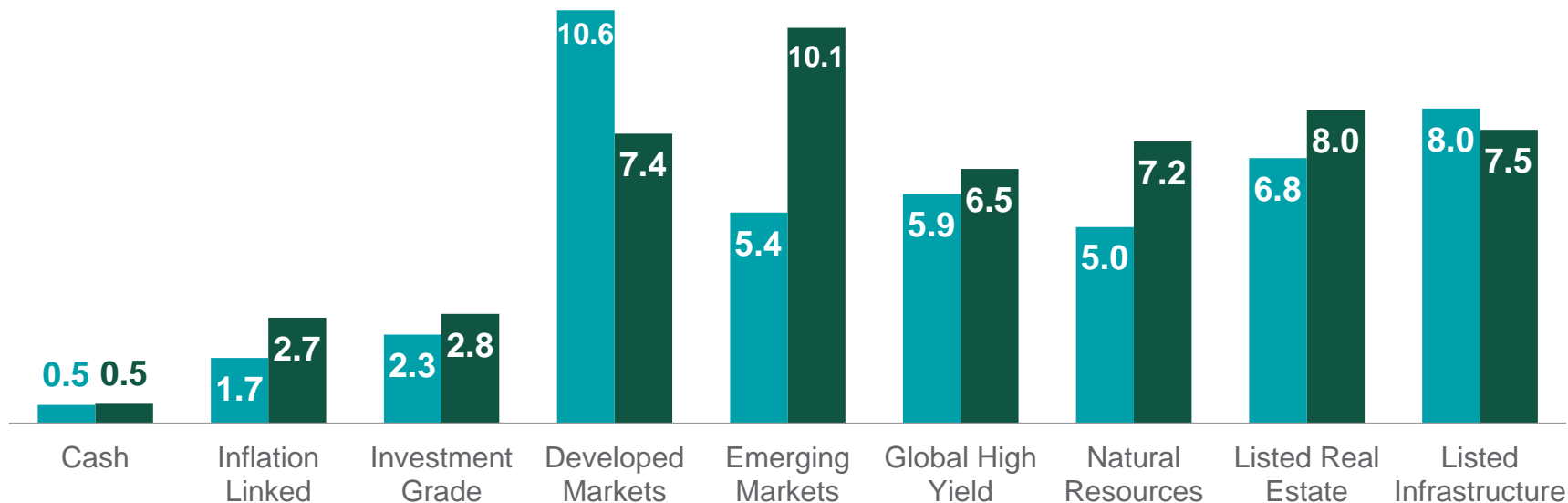
**Asset  
Class  
Forecasts**

# How Have We Done?

## 2013 CMA RESULTS

■ Actual

■ 2013 Prediction



Source: Northern Trust Investment Strategy Bloomberg, NT Portfolio Construction Desk, Bloomberg. Actual data from 6/30/2013 to 6/30/2018. Past performance is no guarantee of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. Indexes are gross of fees.

# Forecast Results: The Portfolio Perspective

## ANNUALIZED FIVE YEAR RETURNS (%)

■ Actual

■ 2013 Predicted



Source: Northern Trust Investment Strategy Bloomberg, NT Portfolio Construction Desk, Bloomberg. Actual data from 6/30/2013 to 6/30/2018. Past performance is no guarantee of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. Indexes are gross of fees.

# QUESTIONS

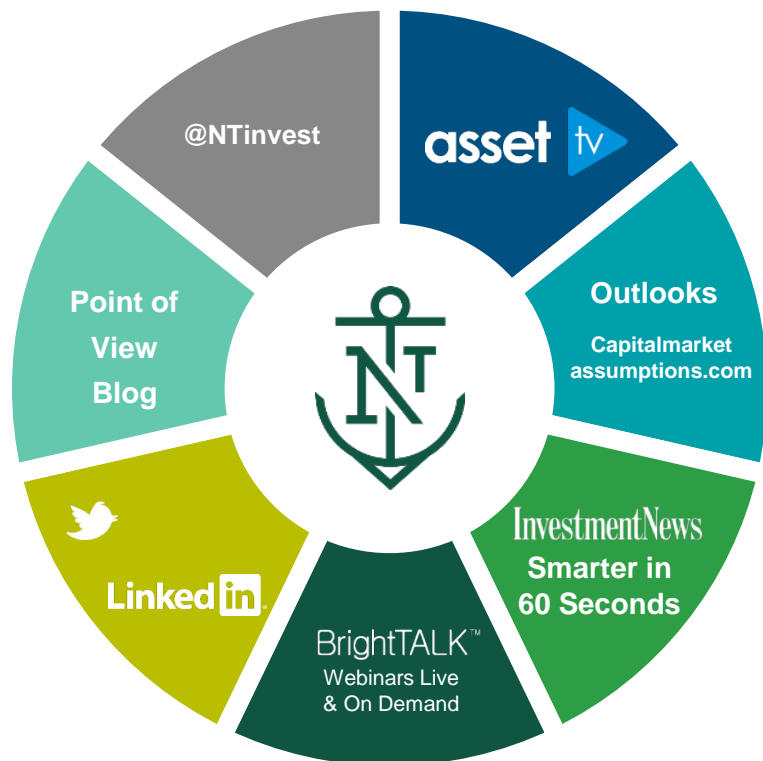


FOR MORE INFORMATION:

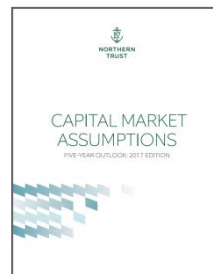
[CAPITALMARKETASSUMPTIONS.COM](https://capitalmarketassumptions.com)



# Accessing Our Global Investment Insights

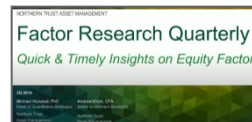


## FIVE-YEAR OUTLOOK



## QUANTITATIVE RESEARCH

Articles, Webinars, Videos



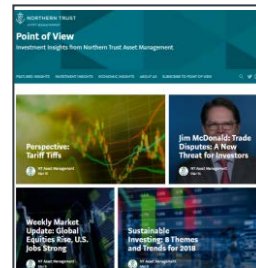
## MARKETSCAPE

Meaningful Insights in Less Than 3 minutes



## BLOG

Timely market perspectives



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# Important Information

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