

## REWRITING FINANCIAL POLICIES IN AN UNCERTAIN ENVIRONMENT

**Marc Zenner, Global Co-Head of Corporate Finance Advisory**

Houston Financial Executive International University

**June 2016**

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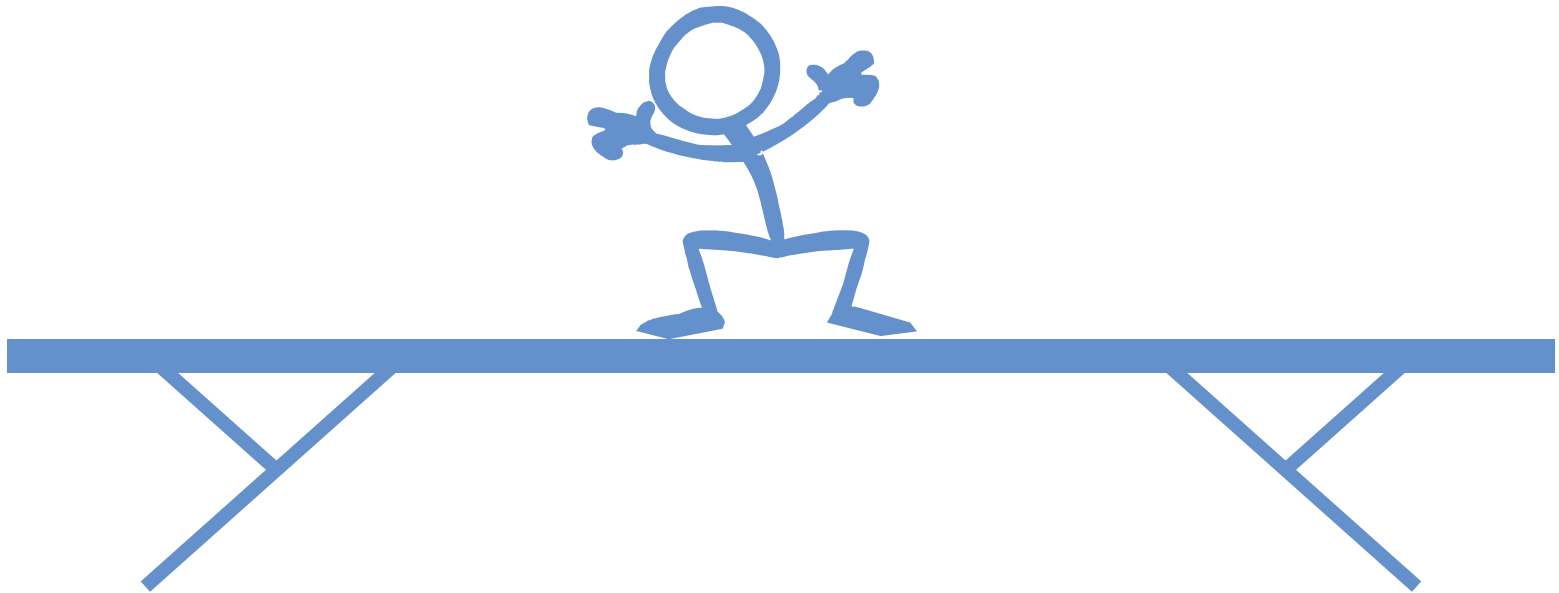
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Gotta find the right balance...



... cause there's a lot to keep us up at night

Brazil

Zika

U.S. Elections

Brexit

Regulations

Oil



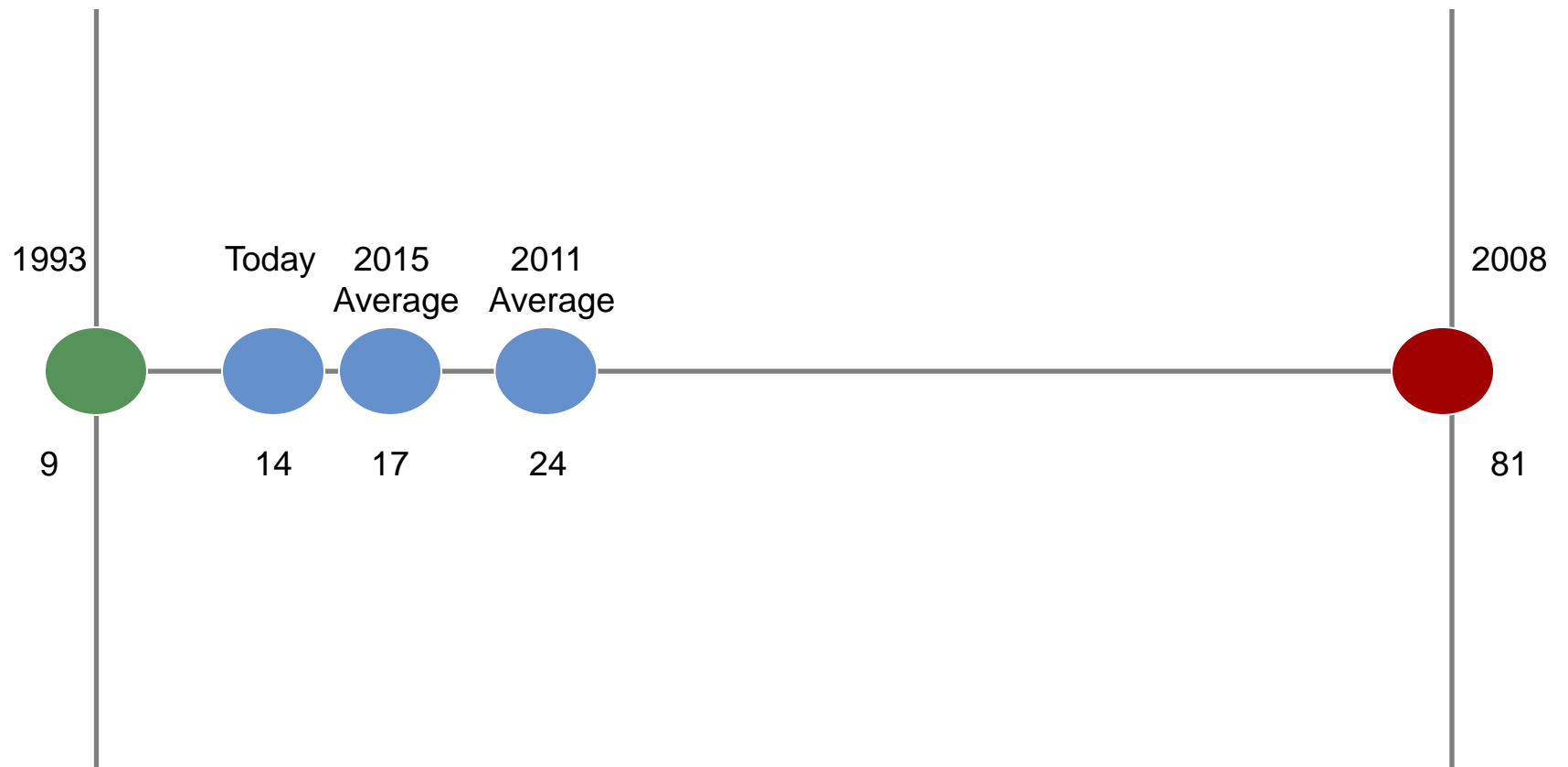
Terrorism

Section 385

Russia




China

Volatility seems surprisingly low...



Source: Bloomberg  
Note: Today is as of 06/01/16 and Volatility is defined by the VIX Index

... but it's been impossible to predict the future...

	2015 Forecast <sup>1</sup> (Low–High)		2015 Actual <sup>2</sup>		Today <sup>3</sup>
 USD / EUR	\$1.10 – \$1.48	▶	\$1.09	▶	\$1.12
 WTI Crude Oil	\$80 – \$120	▶	\$38	▶	\$49
 10yr Treasury	3.38% – 3.47%	▶	2.27%	▶	1.84%

Source: Bloomberg, FactSet, Morgan Markets

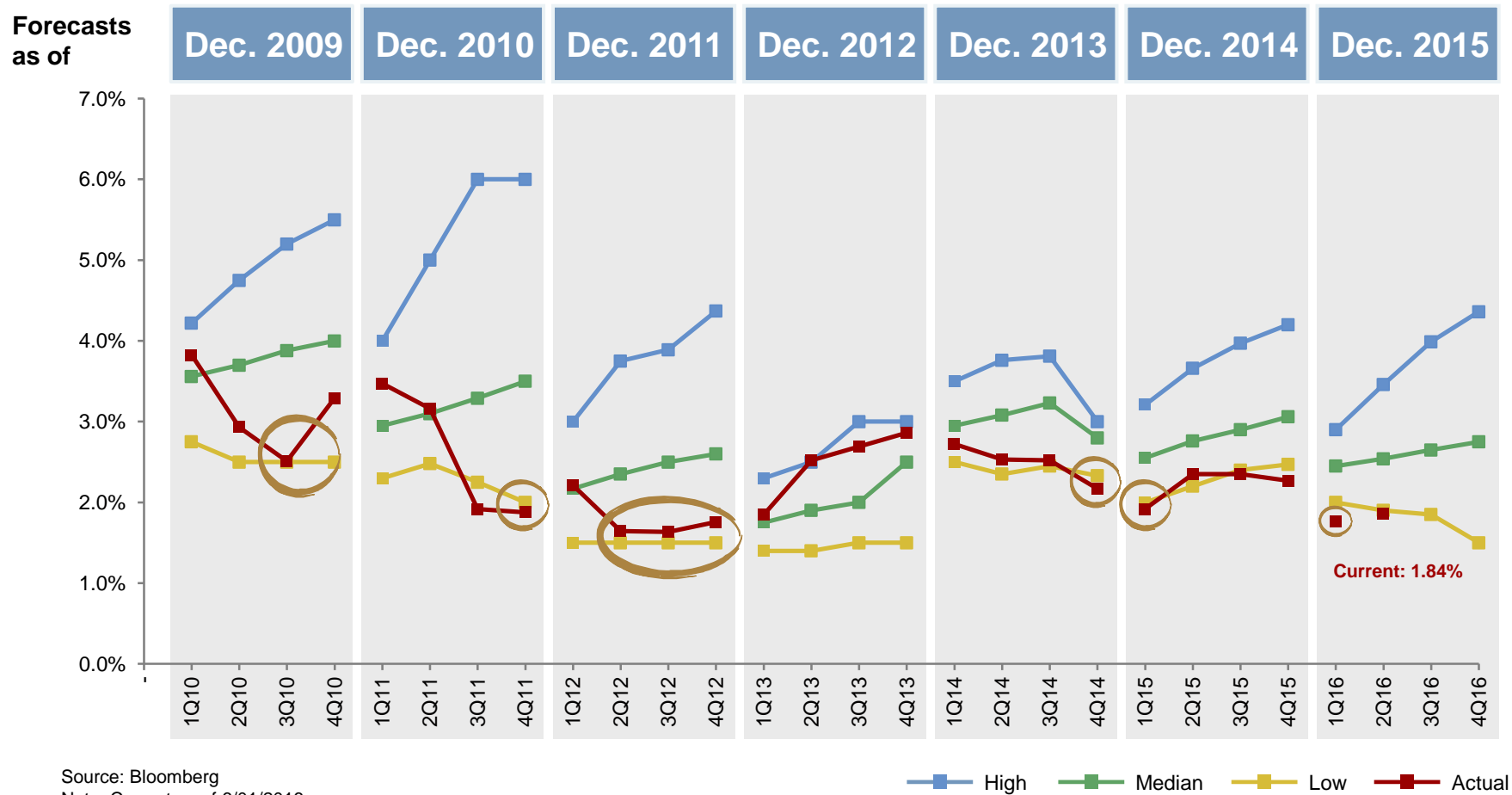
<sup>1</sup> As of 12/31/2013

<sup>2</sup> As of 12/31/2015

<sup>3</sup> As of 6/1/2016

... and rates are a prime example

## 10 yr U.S. Treasury rates – forecast vs. actual



## A tale of two worlds

	Energy Firms <sup>5</sup>	Everyone Else
2 Year Returns	(47%)	13%
Ratings Downgrades to Upgrades <sup>1</sup>	50x <sup>1</sup>	1x
Dividend Cuts <sup>2</sup>	36%	6%
Stock Price Volatility <sup>3</sup>	50%	34%
ROIC <sup>4</sup>	0%	9%

Source: J.P. Morgan, Bloomberg, Moody's, FactSet

Note: S&P 1500 firms excluding financials

<sup>1</sup> There were 50x as many downgrades-to-upgrades in the energy sector in Q1 2016, downgrades to upgrades in 2016

<sup>2</sup> % of firms cutting dividend in last 2 years

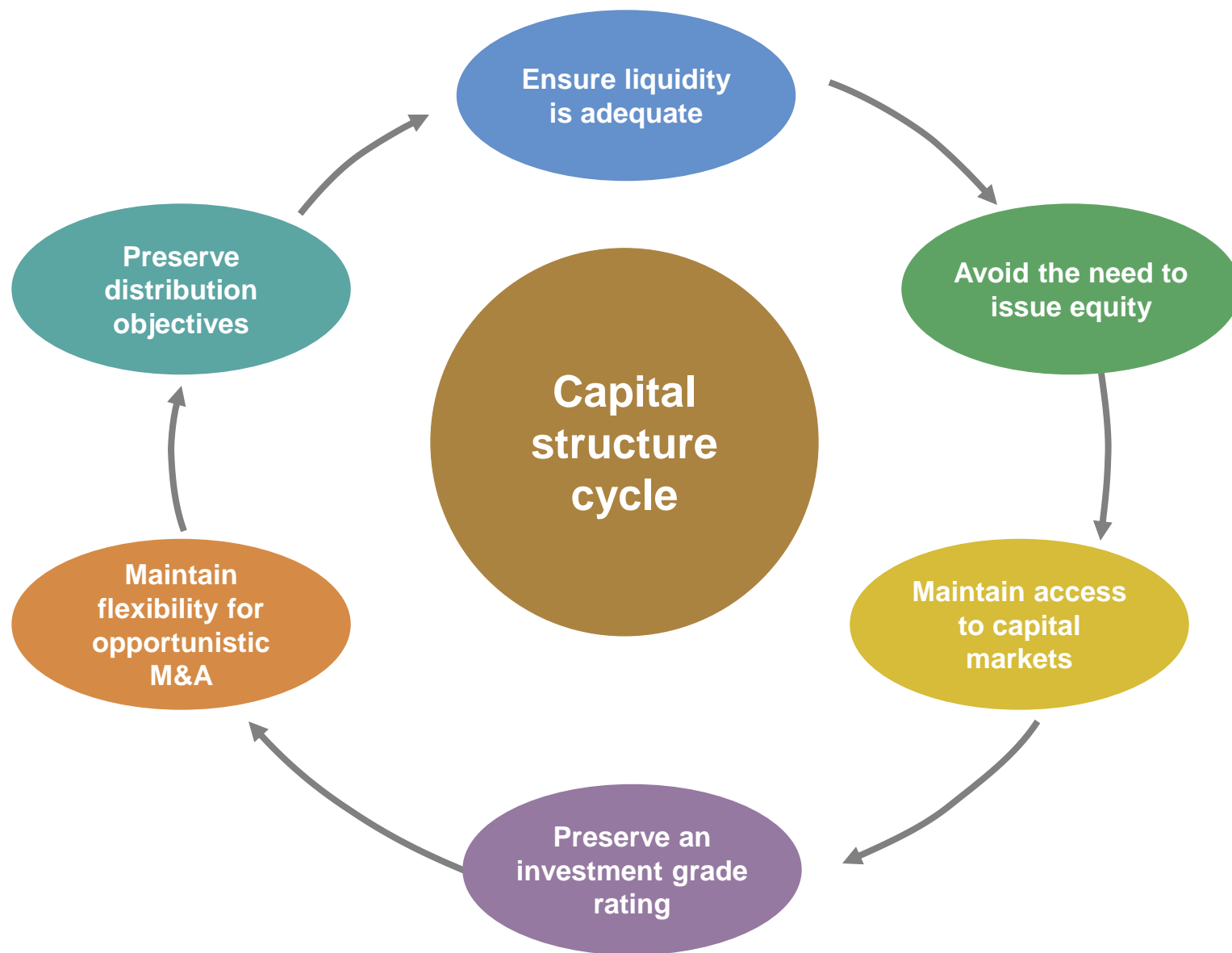
<sup>3</sup> 180 day historical volatility

<sup>4</sup> ROIC as of 3/31/2016

<sup>5</sup> Energy firms consists of 88 firms in the S&P 1500

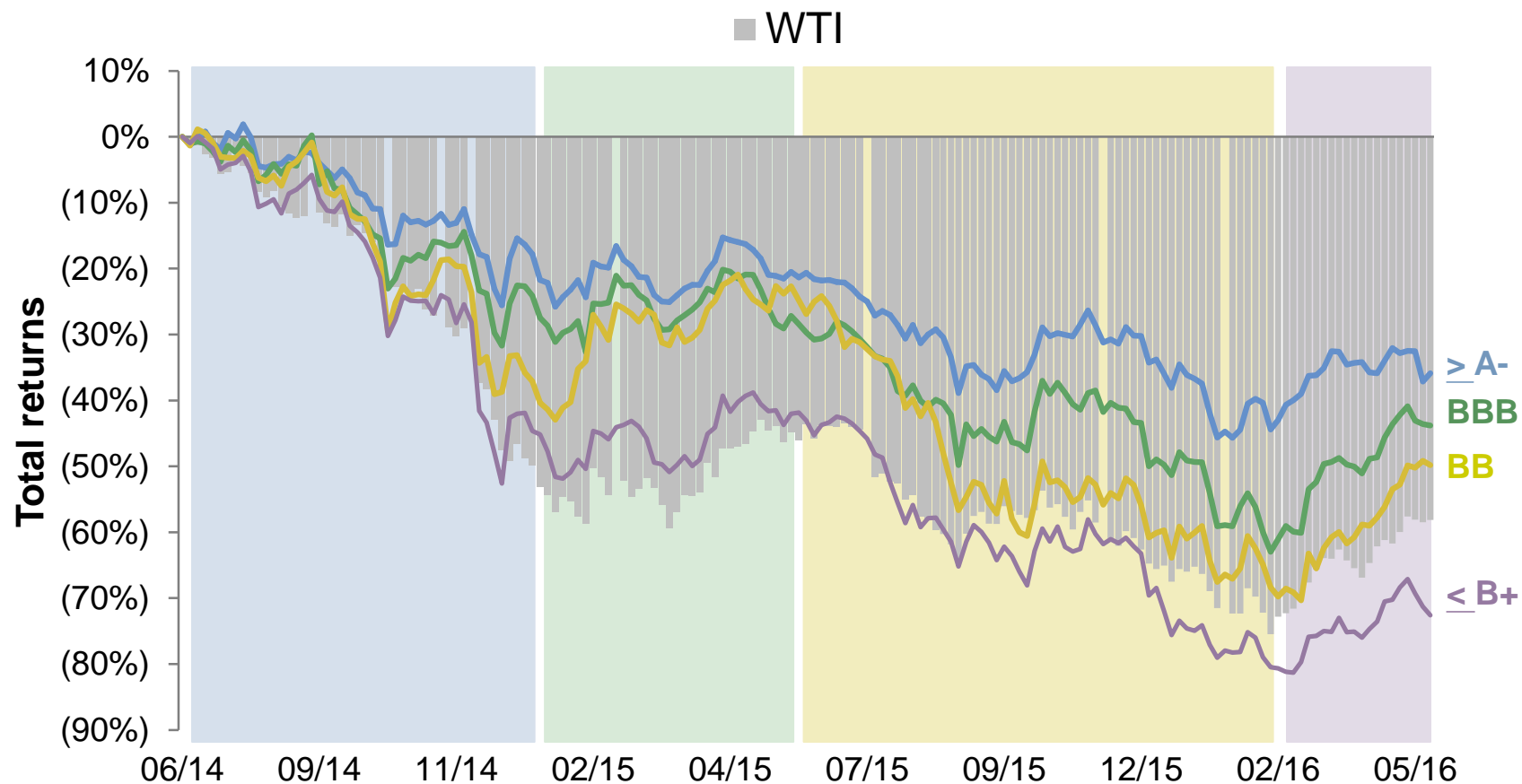


## The virtuous capital structure



## Credit ratings matter in energy...

### Total USD returns for rated North American Energy<sup>1</sup> firms with market cap > \$100mm



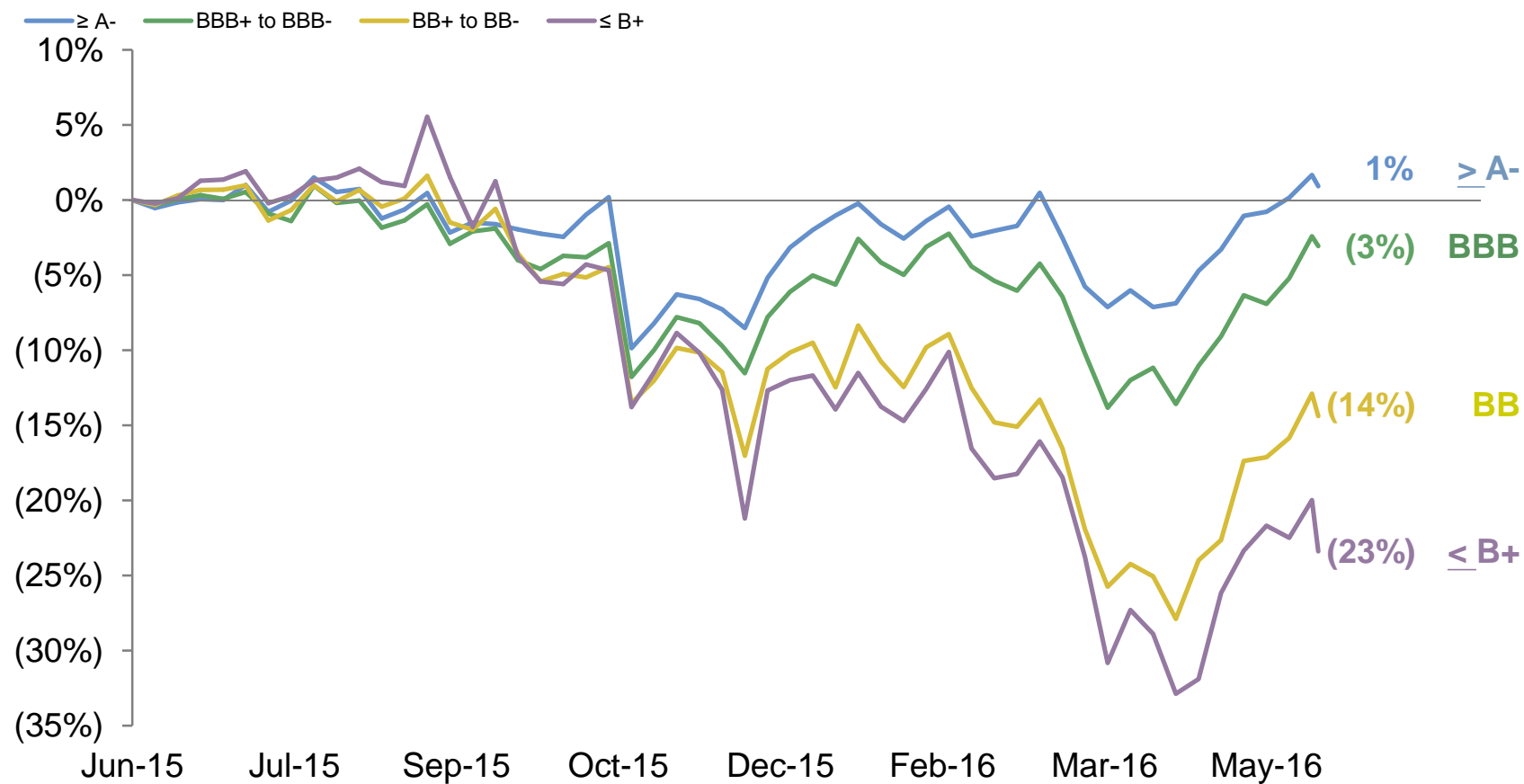
Source: Bloomberg, FactSet, S&P as of 05/20/2016

Note: All in USD; Period 1 ranges from 06/20/2014 to 01/28/2015, Period 2 ranges from 01/29/2015 to 06/10/2015, Period 3 ranges from 06/11/2015 to 02/11/2016, Period 4 ranges from 02/12/2016 to 05/20/2016

<sup>1</sup> Includes all firms in the GICS Energy Sector

... and everywhere else

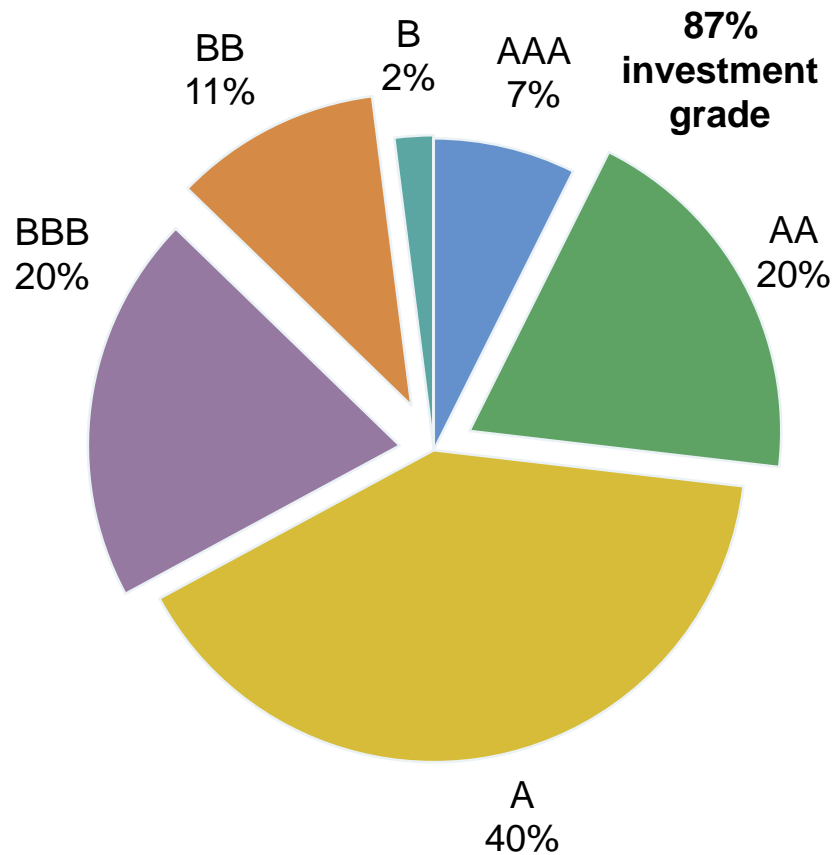
### Total returns for rated S&P 1500 non-financial firms



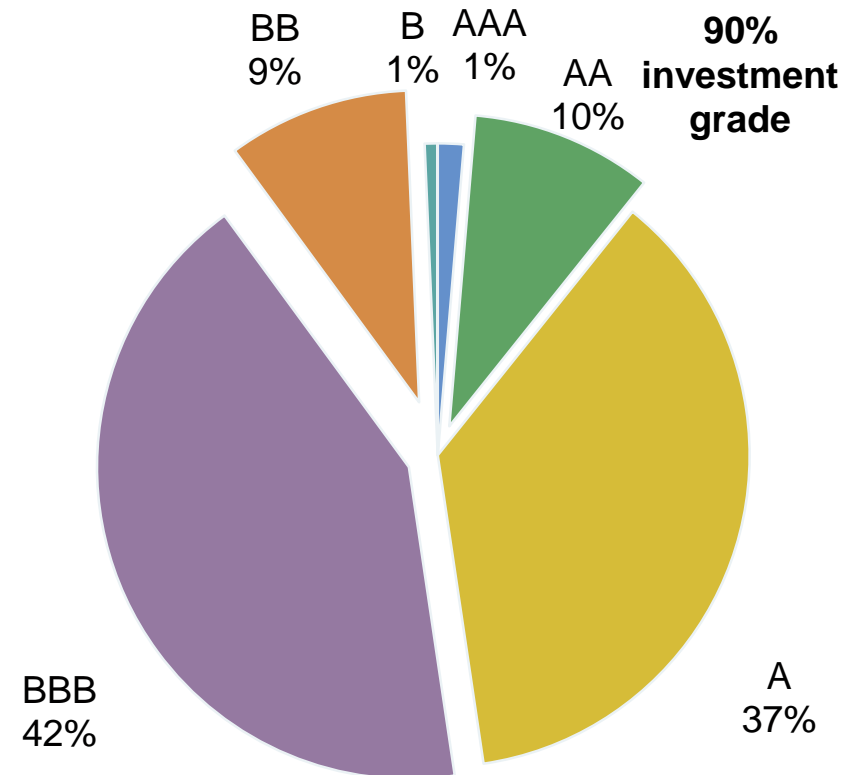
Source: Bloomberg, FactSet, S&P as of 5/24/16  
Note: Excludes financial firms and firms under \$500mm

AA or BB No! ..... BBB Yes!

1993 rating distribution<sup>1</sup>



Current rating distribution<sup>1</sup>



Source: CapIQ, S&P as of Q4 2015

<sup>1</sup> Universe includes currently rated S&P 500 nonfinancials that also maintained a rating at S&P in 1993

Is there a corporate finance Rubicon?

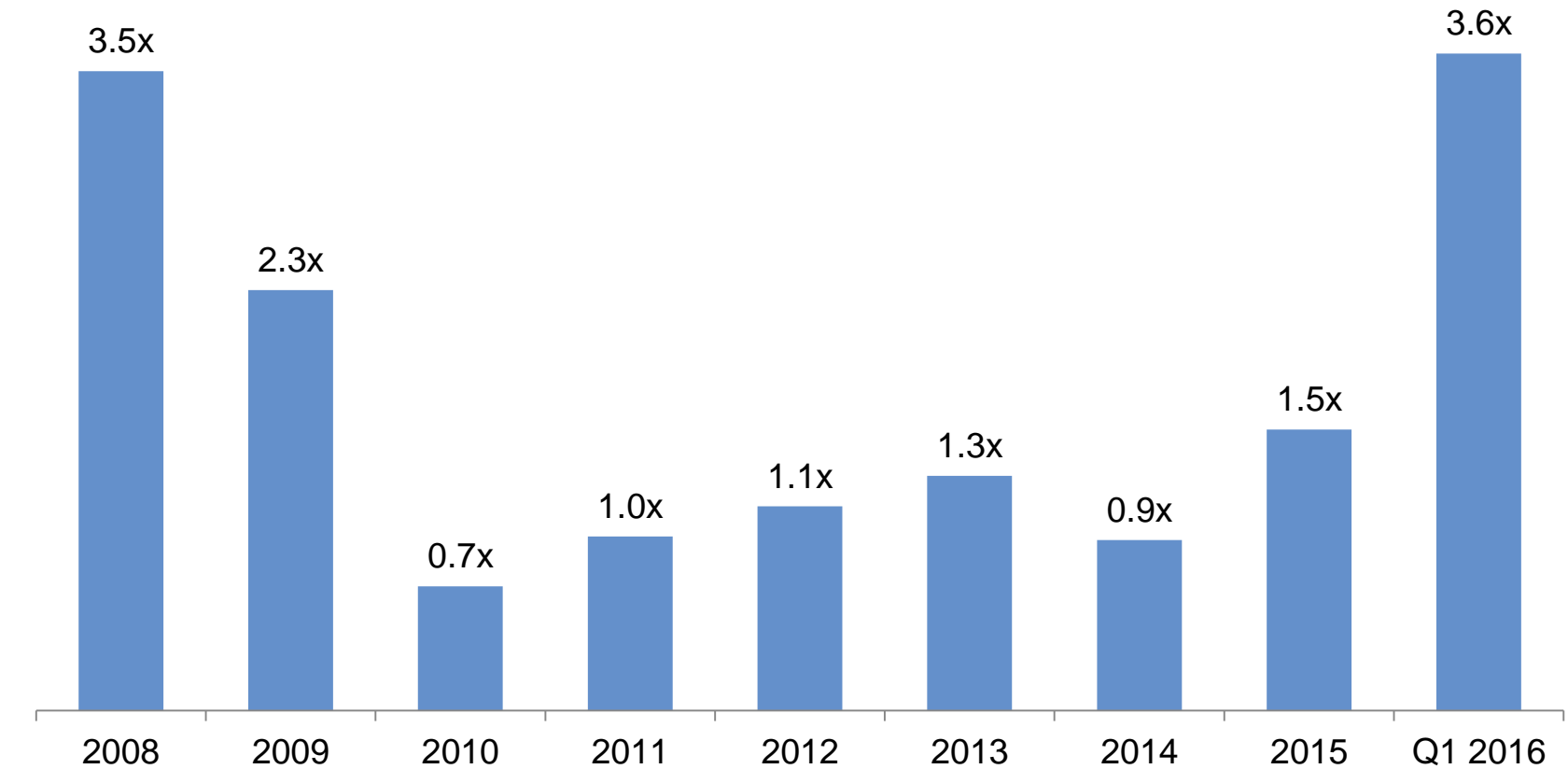
Voluntary moves from Investment Grade to Non-IG since 2008

For M&A: 8

For Capital Return: 4

Downgrade-to-upgrade ratios are at the highest point since the financial crisis...

### Moody's downgrades-to-upgrades (U.S. non-financials)



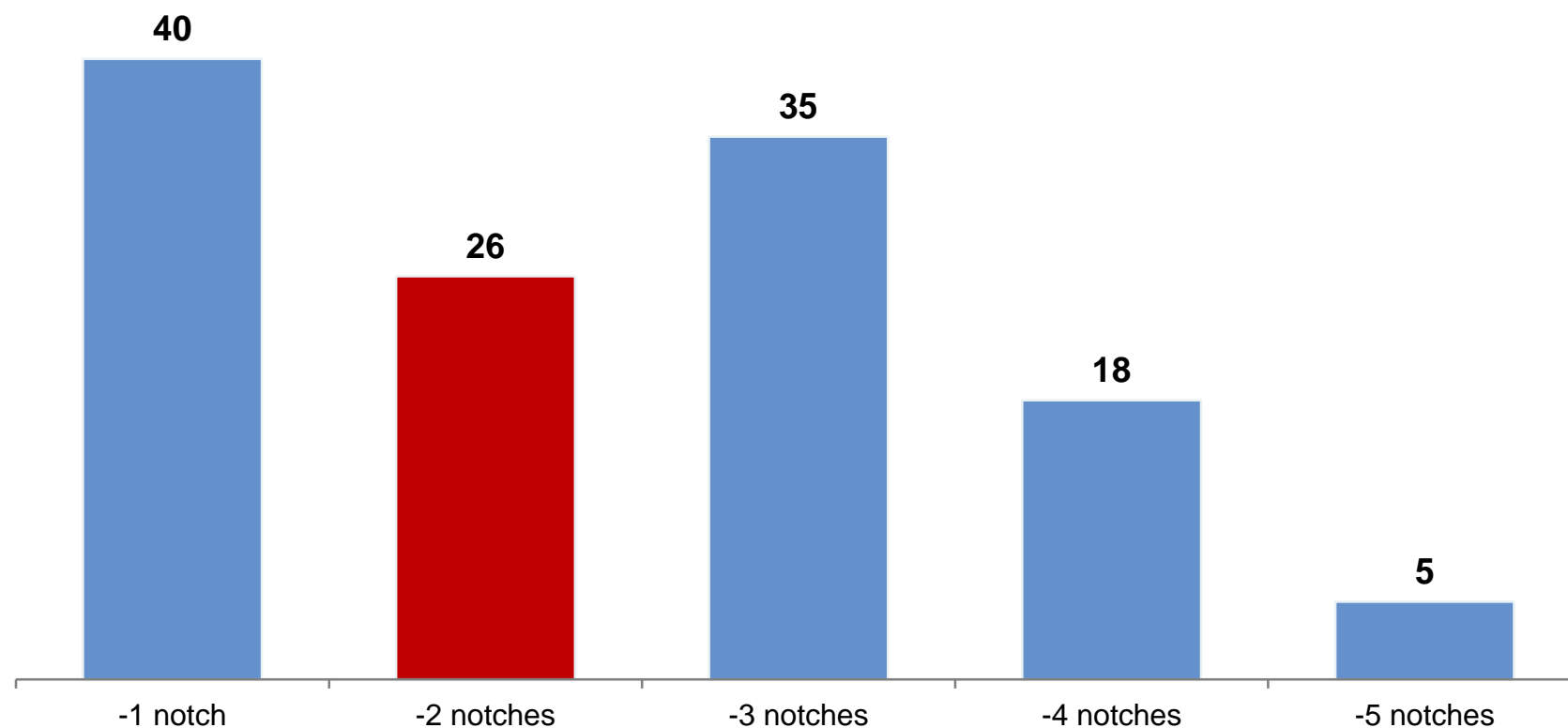
Source: Moody's

...driven by energy

## Moody's global energy downgrades

**124 total downgrades**

■ Median

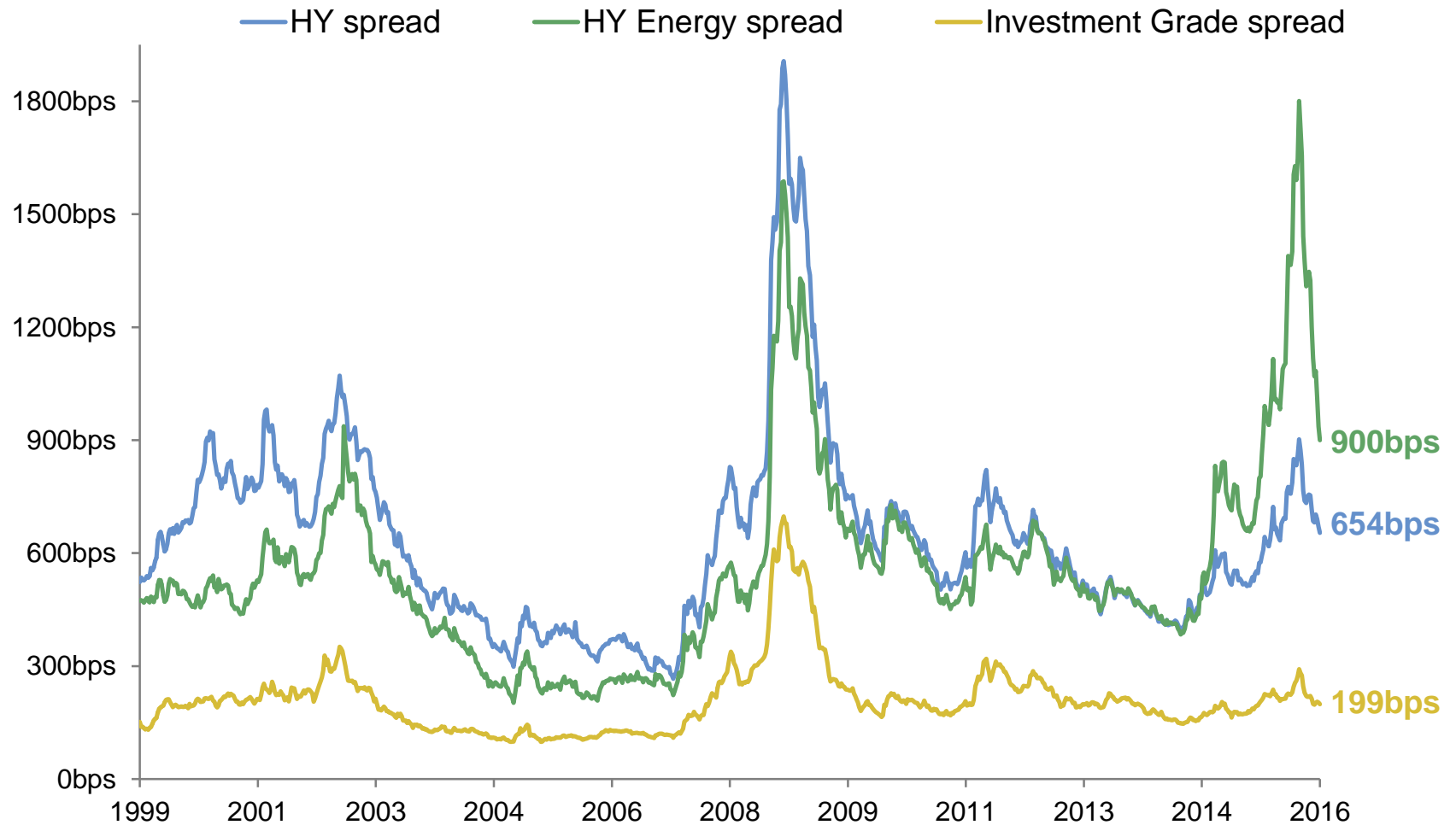


Source: Moody's

Note: Ratings downgrades taken for global energy companies placed on review of downgrade during December 2015 through Q1 2016

The new reality...

### J.P. Morgan IG and HY indexes



Source: J.P. Morgan as of 06/01/2016

Note: IG spread is from the BBB (J.P. Morgan U.S. liquid index (JULI))



... is a higher cost of capital

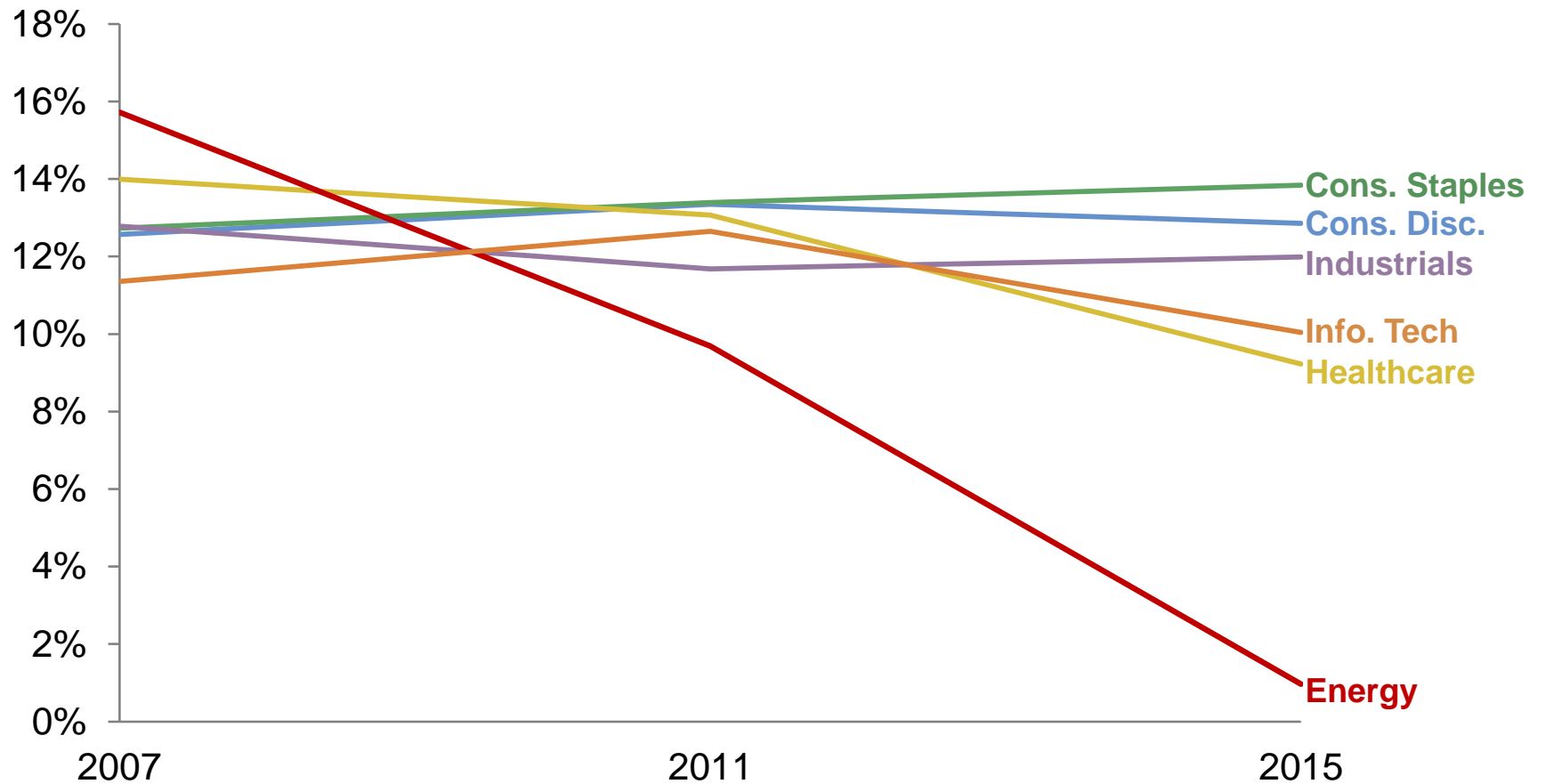
	Investment Grade		High Yield	
Then	Cost of equity <sup>1</sup>	9.8%	Cost of equity <sup>1</sup>	11.1%
	After-tax cost of debt	2.0%	After-tax cost of debt	3.3%
	WACC	7.4%	WACC	8.3%
	Hurdle Rate	9% - 11%	Hurdle Rate	10% - 12%
Now	Cost of equity	11.5%	Cost of equity	15.7%
	After-tax cost of debt	3.9%	After-tax cost of debt	6.5%
	WACC	10.0%	WACC	13.4%
	Hurdle Rate	12% - 14%	Hurdle Rate	16% - 18%

Source: Bloomberg

Note: 35% tax rate assumed; <sup>1</sup> 10 year Treasury (2.61%), as of June 2014; Now as of June 2016

## Energy ROICs plunged...

ROIC by selected industry

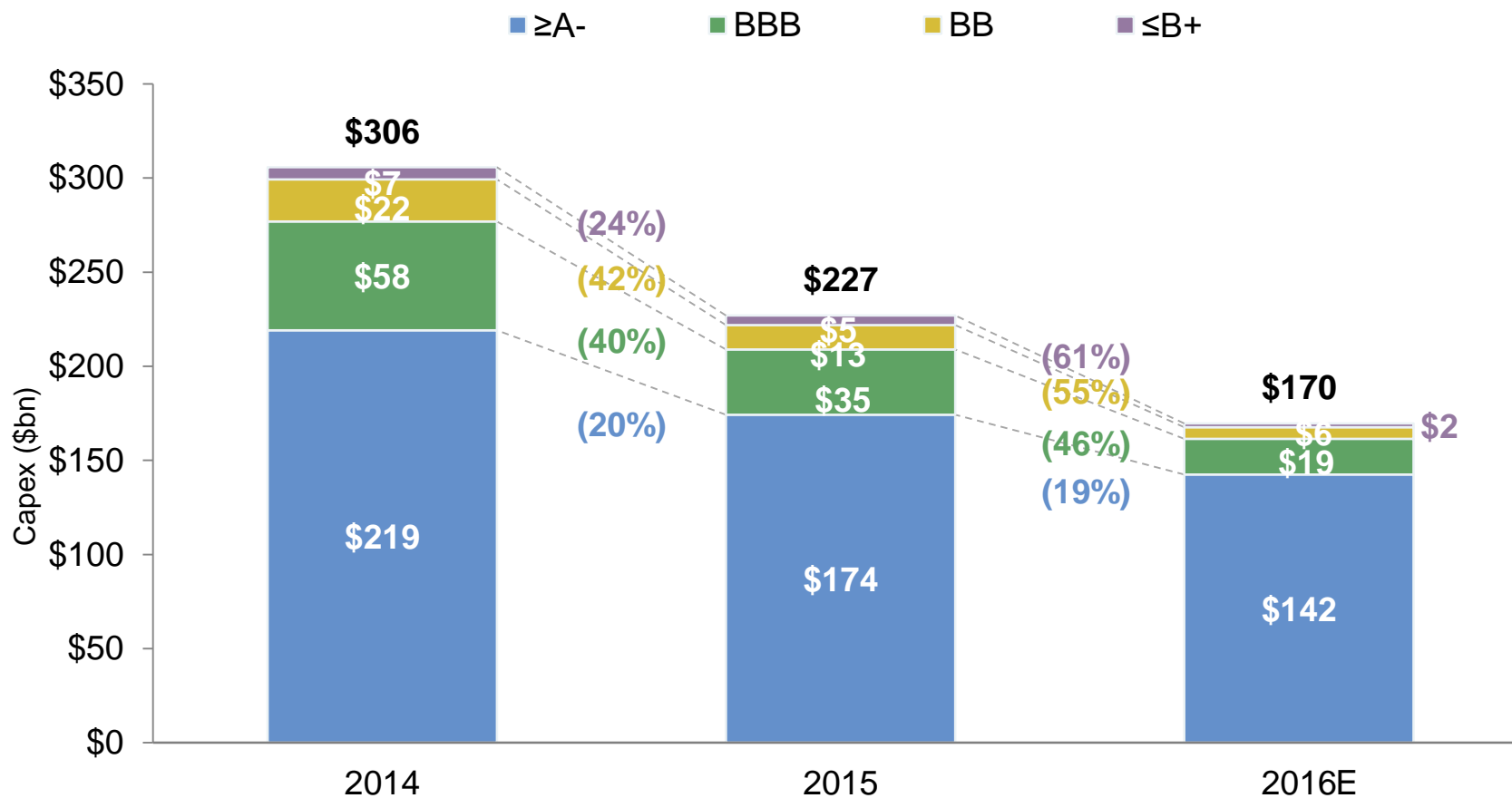


Source: J.P. Morgan, FactSet

Note: ROIC defined as NOPAT divided by book equity plus balance sheet debt

...so capex cuts by E&P firms are not surprising

### E&P capex reductions (\$bn) by rating<sup>1</sup>

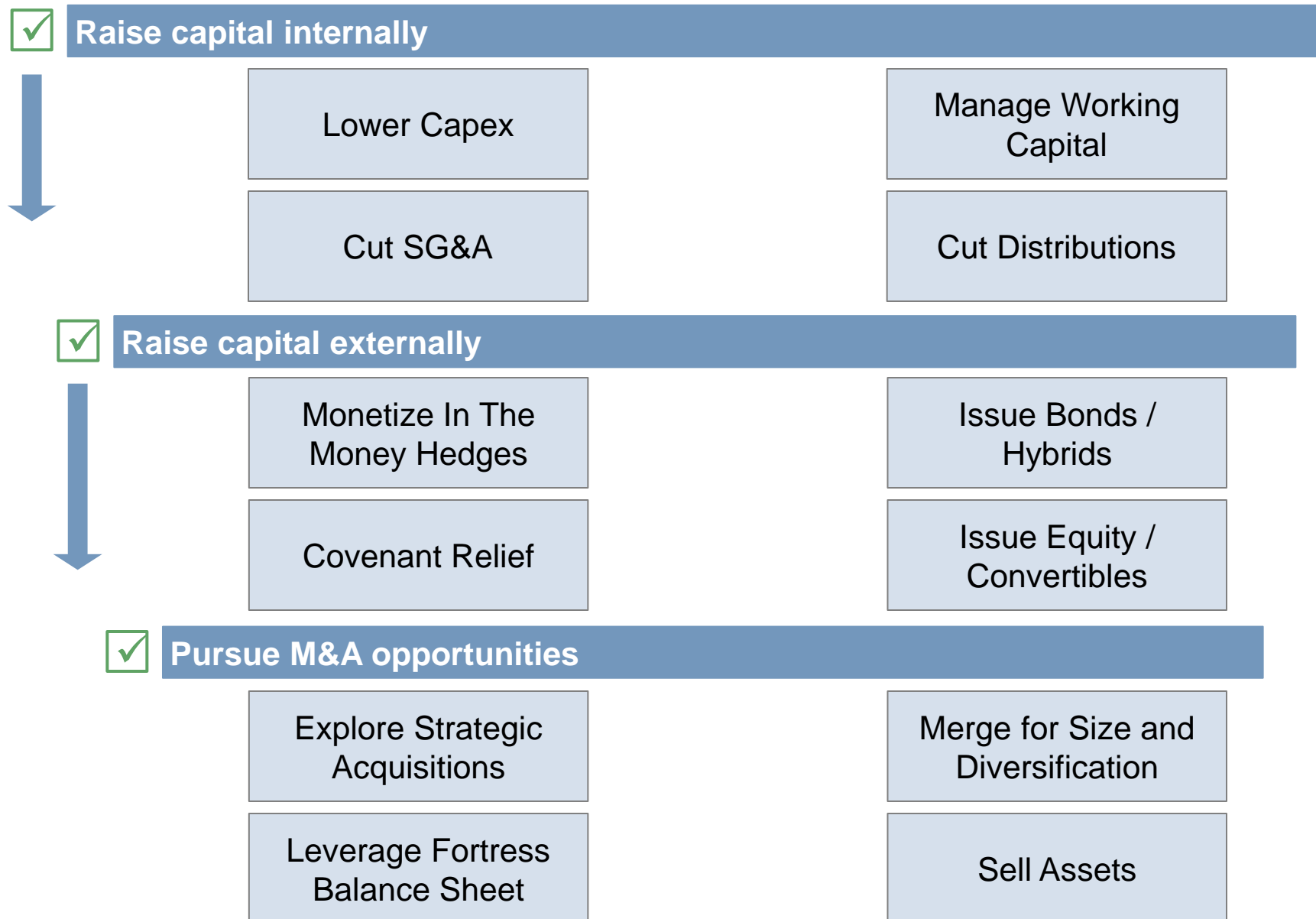


Source: FactSet as of 05/13/2016

≥A- firms: OXY, EOG, APA, XOM, CVX, RDSB, FP, BP, ENI, STL, SU; BBB firms: APC, REP, VLO, DVN, PXD, MRO, NBL, EQT, NFX, SWN, MUR; BB firms: TSO, XEC, RRC, QEP, CHK, EGN, WPX, SM, DNR, CRC; ≤B+ firms: WNR, PDCE, GPOR, CRZO, NOG, BBG, SGY, BCEI, REXX

<sup>1</sup> S&P rating as of 12/31/2015

In this volatile environment, firms prioritize capital preservation...



...But it can change quickly

## Last February in Brasserie 19

**Supply  
Glut**

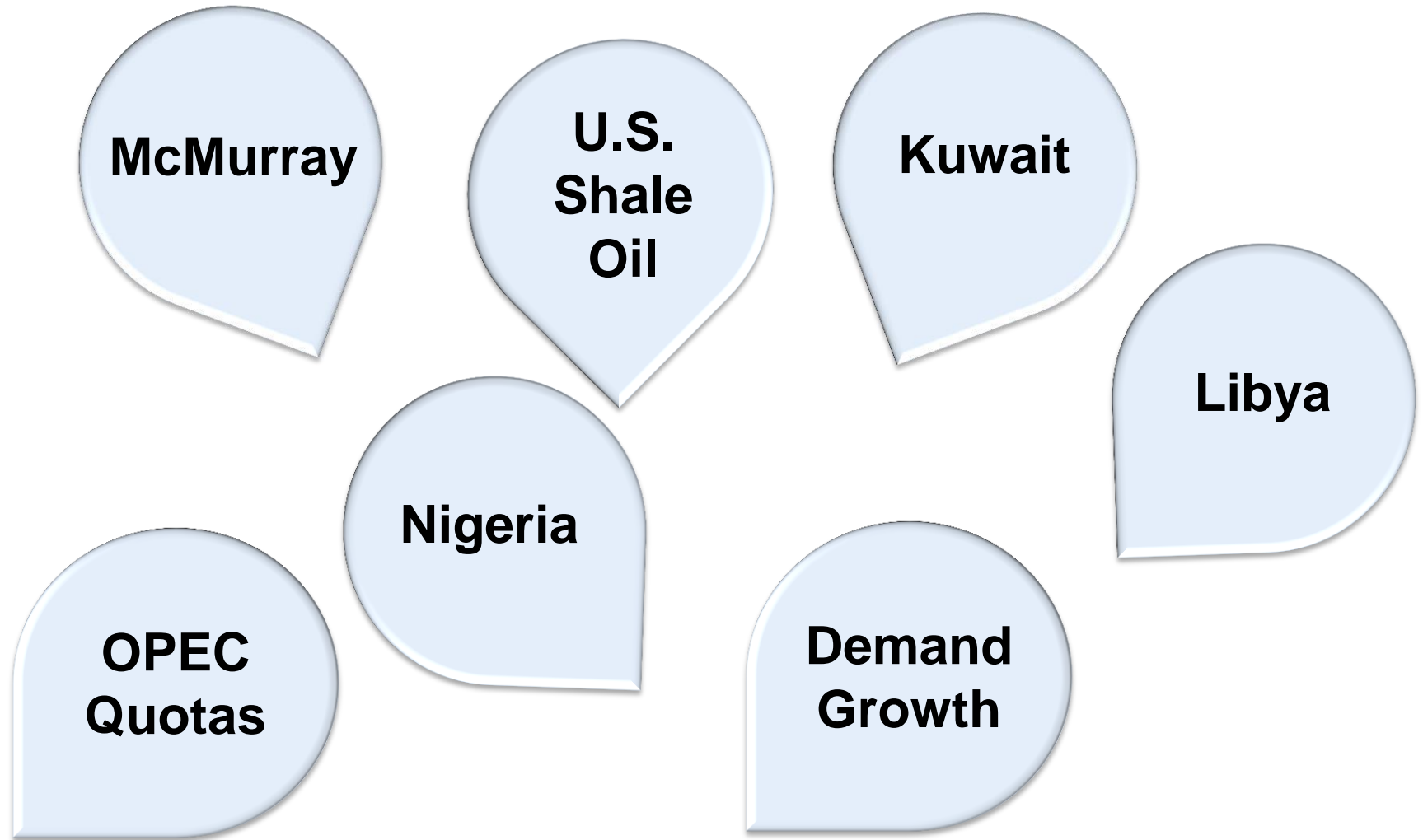
**Low for  
Long**

**Secular  
Decline**

**Bankruptcy**

**This time  
is different**

## Yesterday in Reef



In the mean time, conventional wisdom says:

“A dollar today is worth  
more than a dollar tomorrow”



Is it time to change conventions?



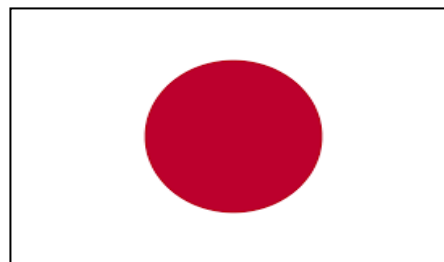
CHF



DKK



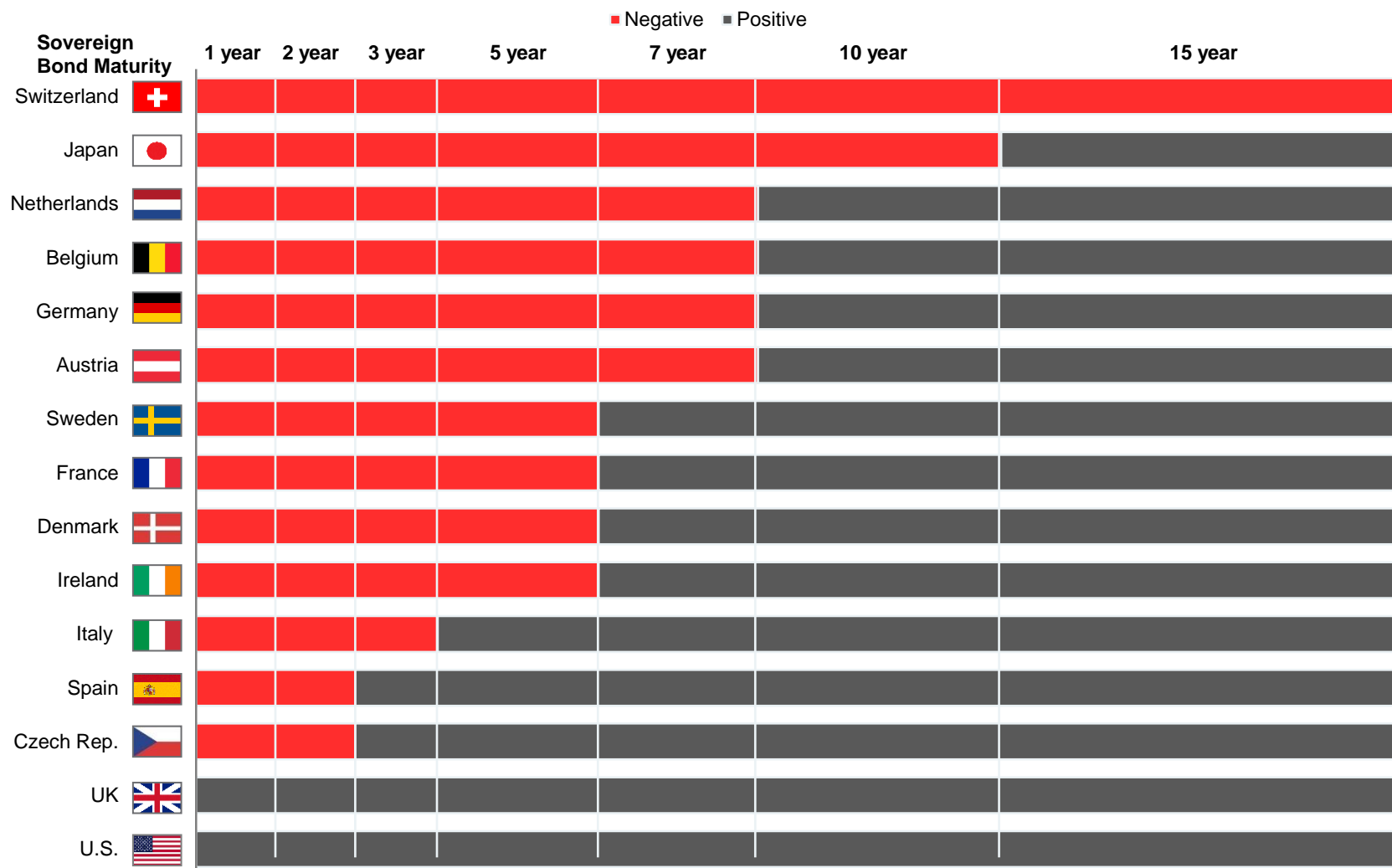
EUR



JPY

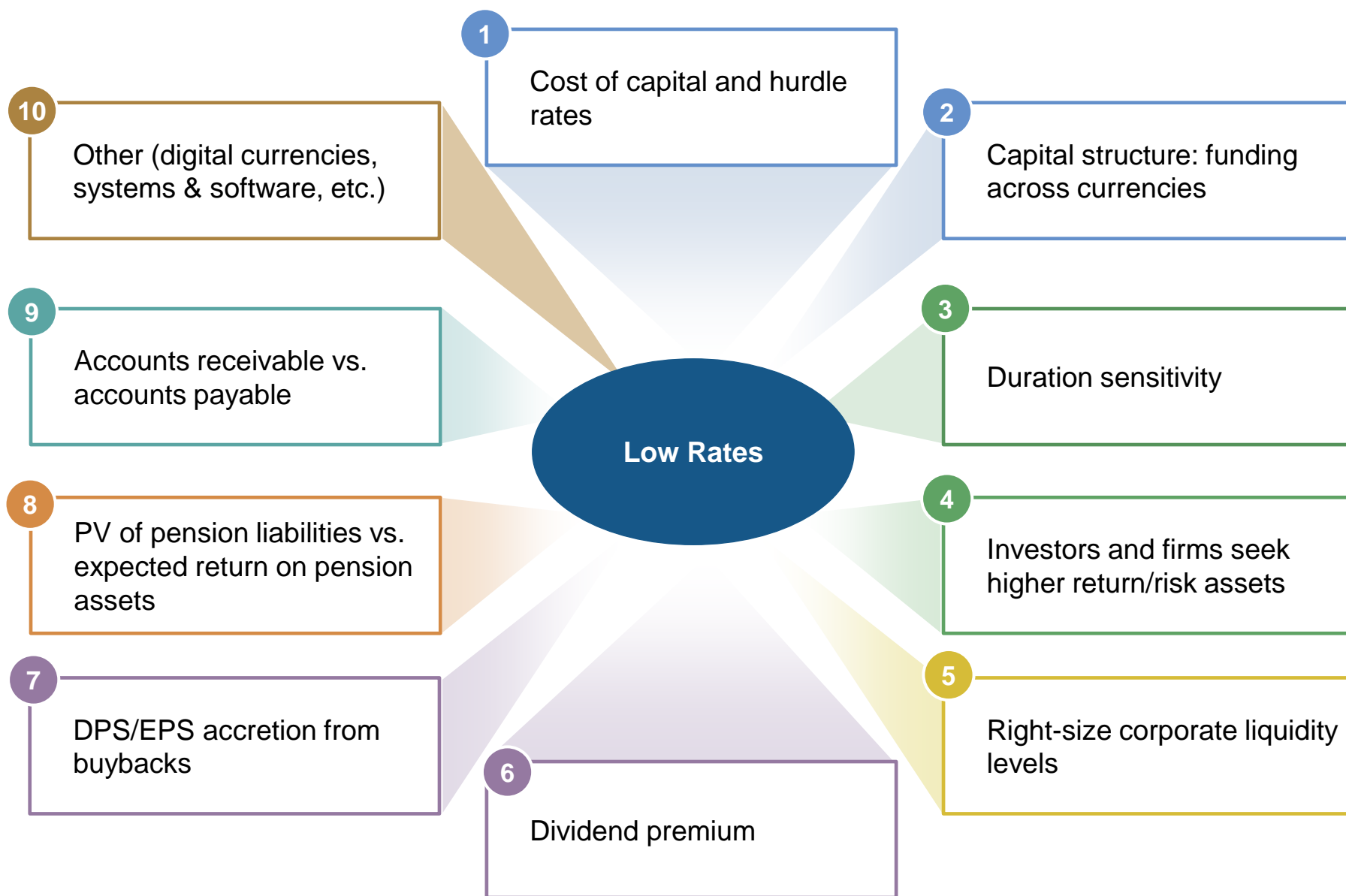
Red is negative rates

## Interest rates by country



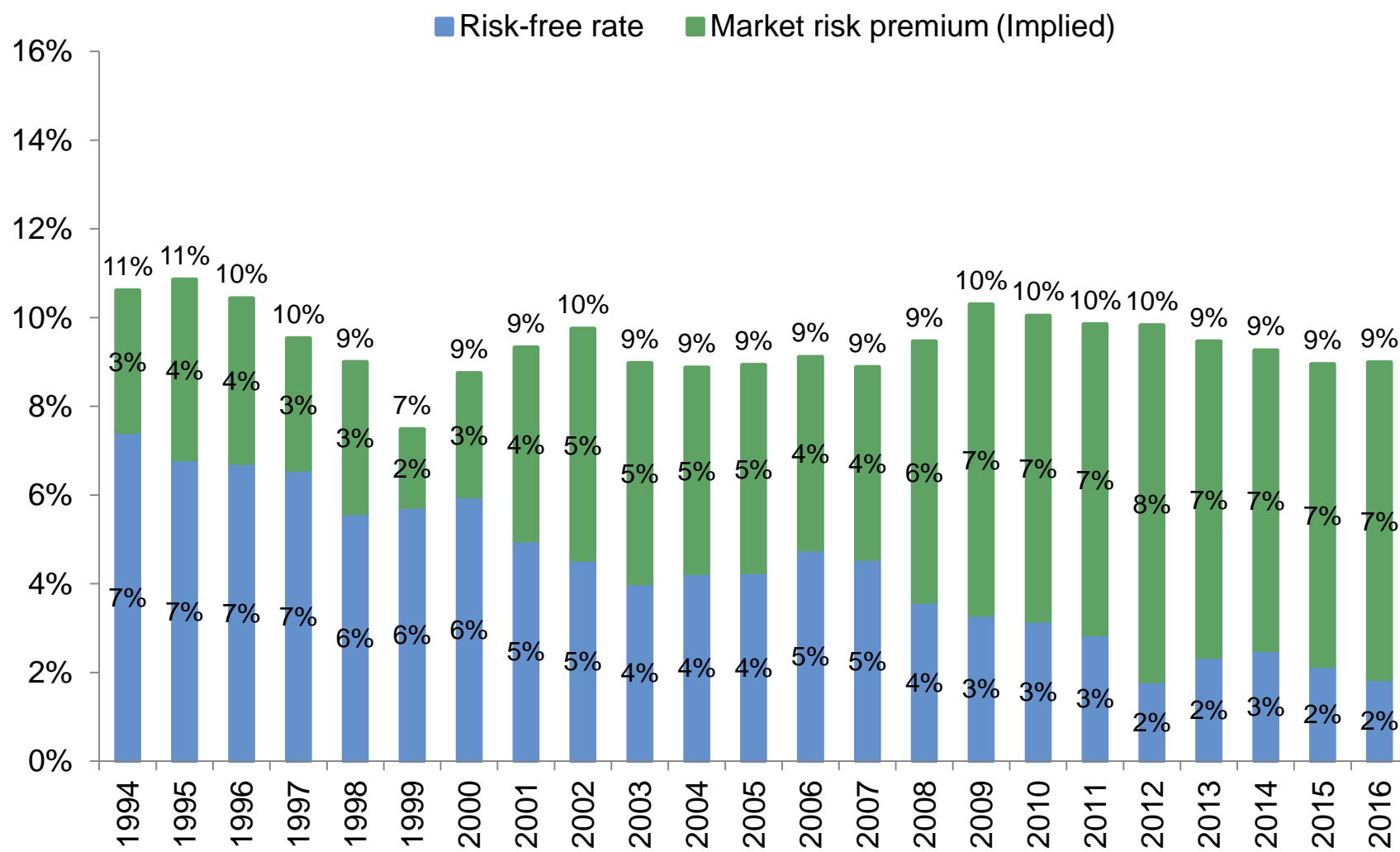
Source: J.P. Morgan, Bloomberg  
Note: Market date as of 5/24/2016

## Do we need to re-write corporate finance textbooks with negative rates?



Is the cost of equity always 9 to 10%?

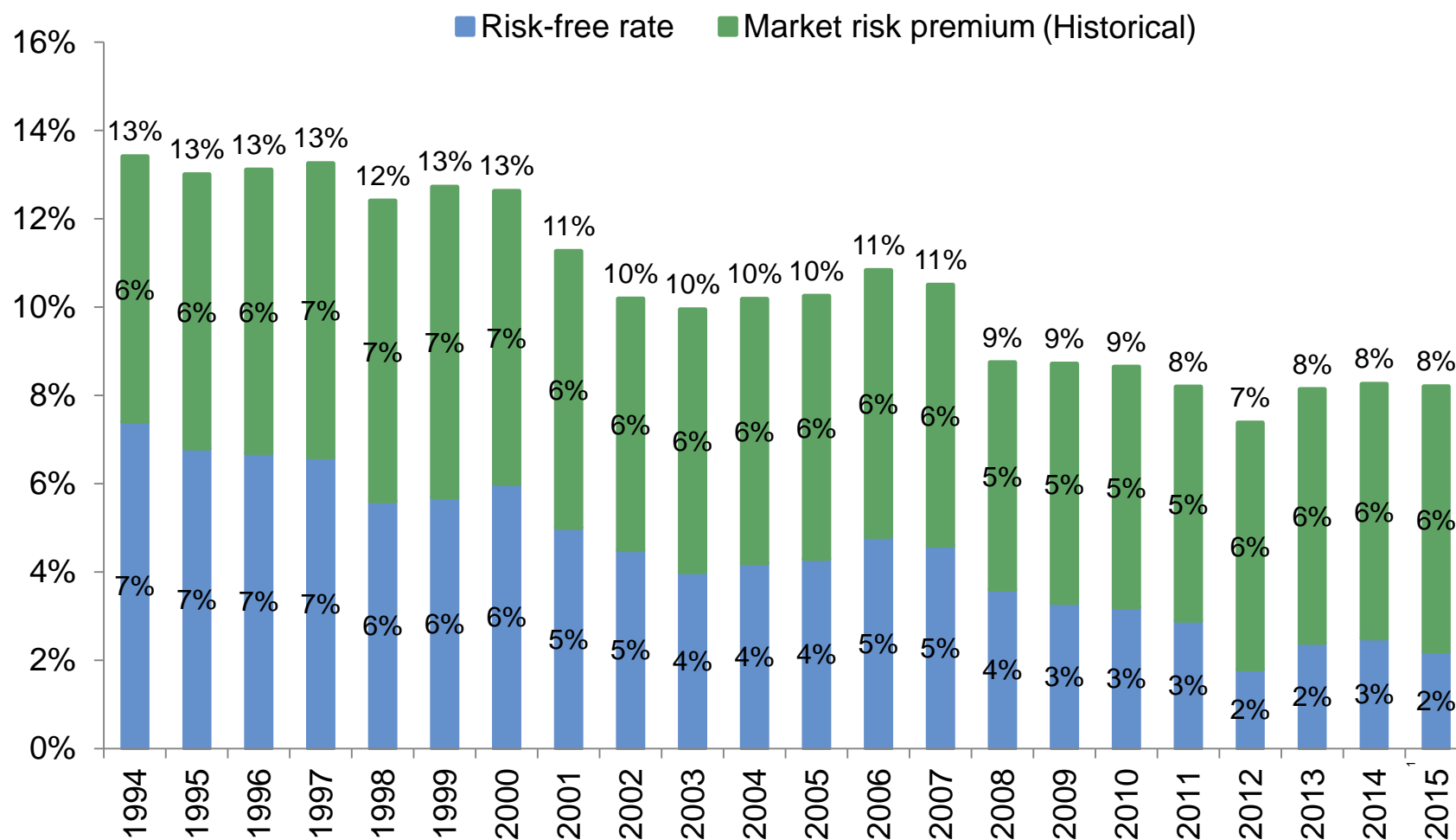
## Cost of equity – Implied market risk premium



Source: Bloomberg and JPM DDM model

Or did it drop from 13% to 8%?

## Cost of equity – Historical market risk premium



Source: Bloomberg and Ibbotson

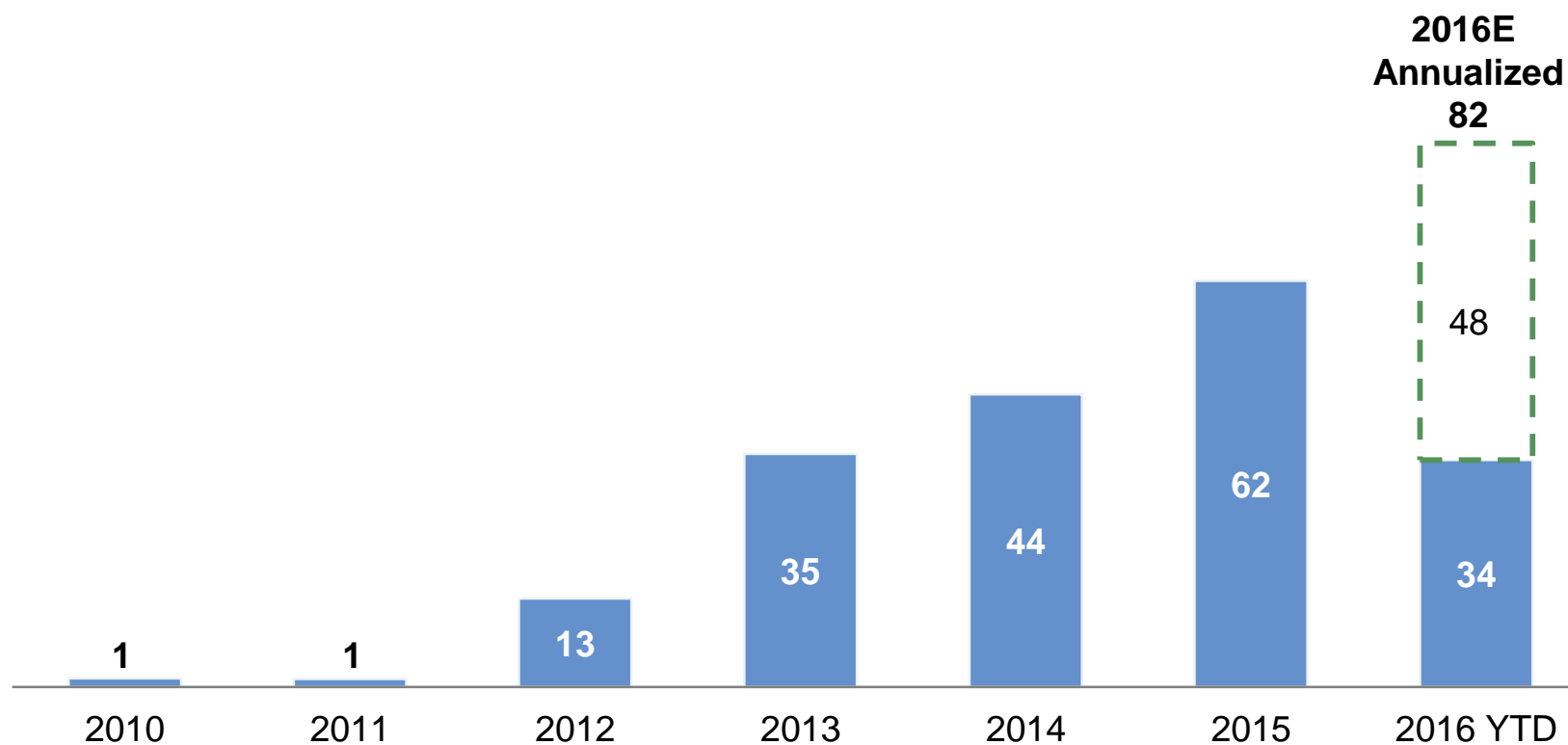
Note: MRP takes the average between the arithmetic and geometric averages

<sup>1</sup> Assumes the historical risk premium is 6% for 2015

## Take advantage of cheap money across the pond

### EUR debt issuance by U.S. IG issuers

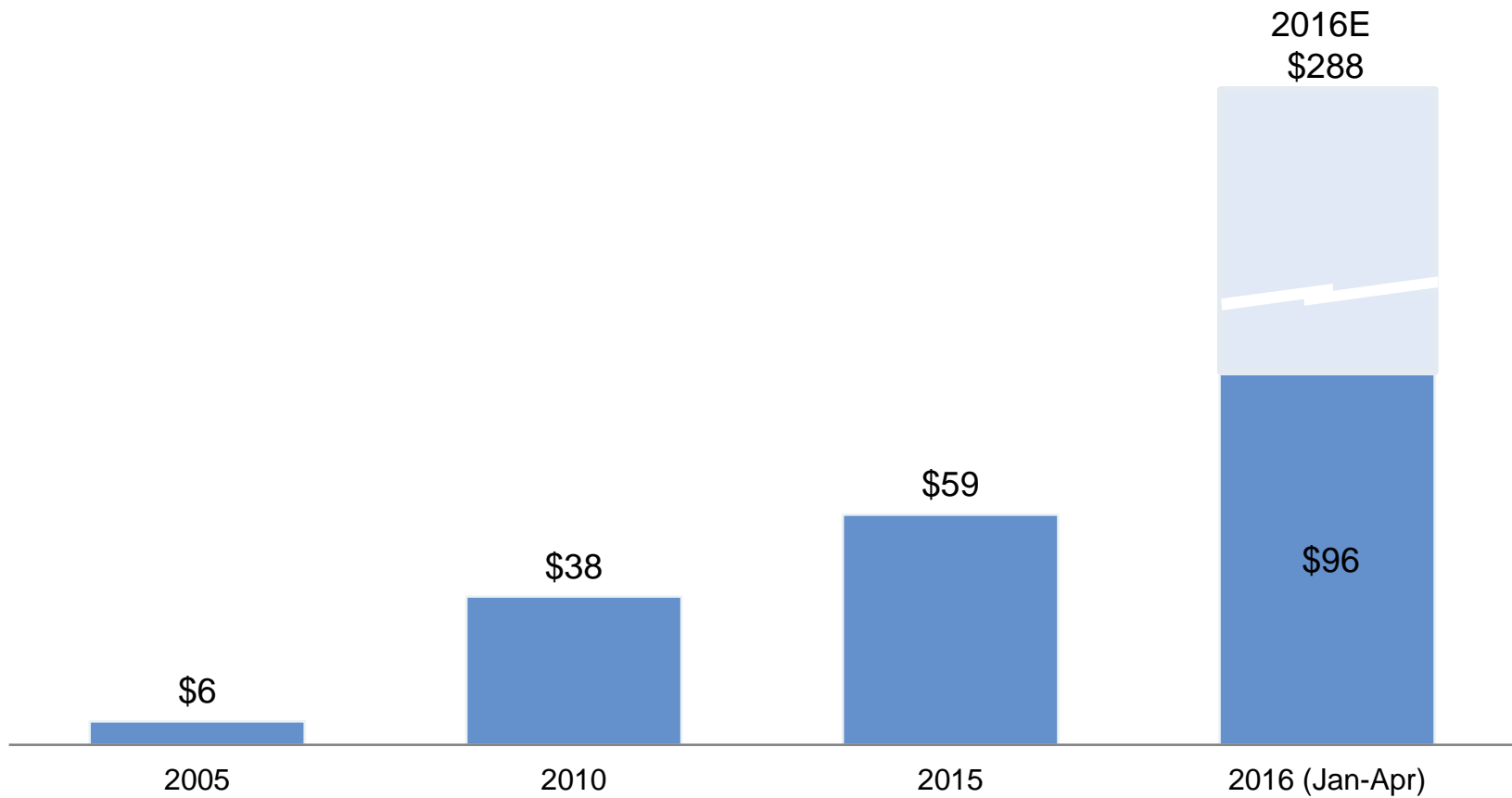
■ EUR issuance (\$bn)



Source: Securities Data Corporation, J.P. Morgan Credit Research and Bloomberg.  
Note: Non-USD issuance converted to USD as of issue date

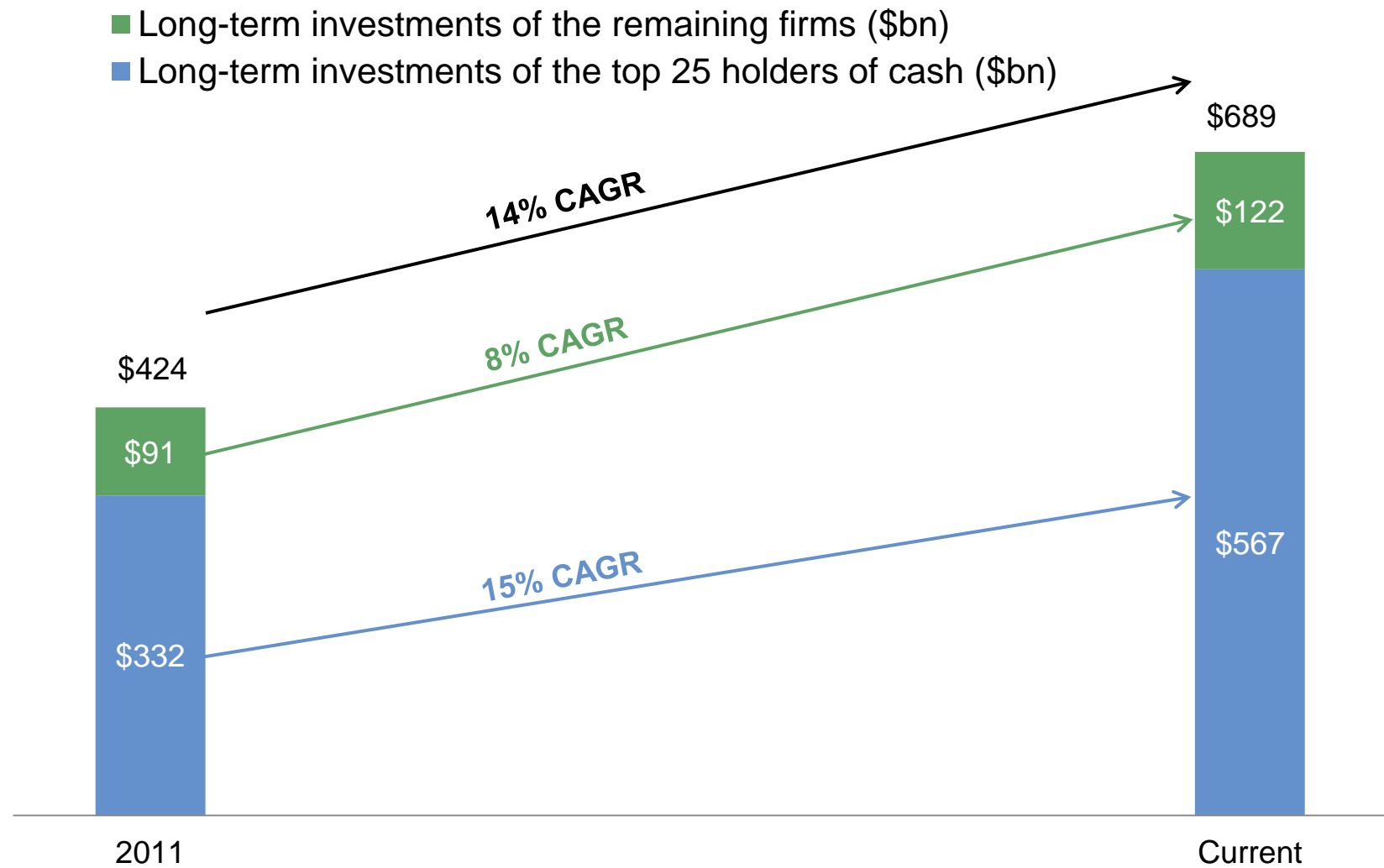
## Chinese firms sure are on a buying spree

### China outbound M&A volume (\$bn)



Source: Dealogic (M&A Manager) as of April 30, 2016  
Note: Rank eligible deals with value greater than \$10mm

Cash has increasingly been put into long-term investments, particularly for the top holders

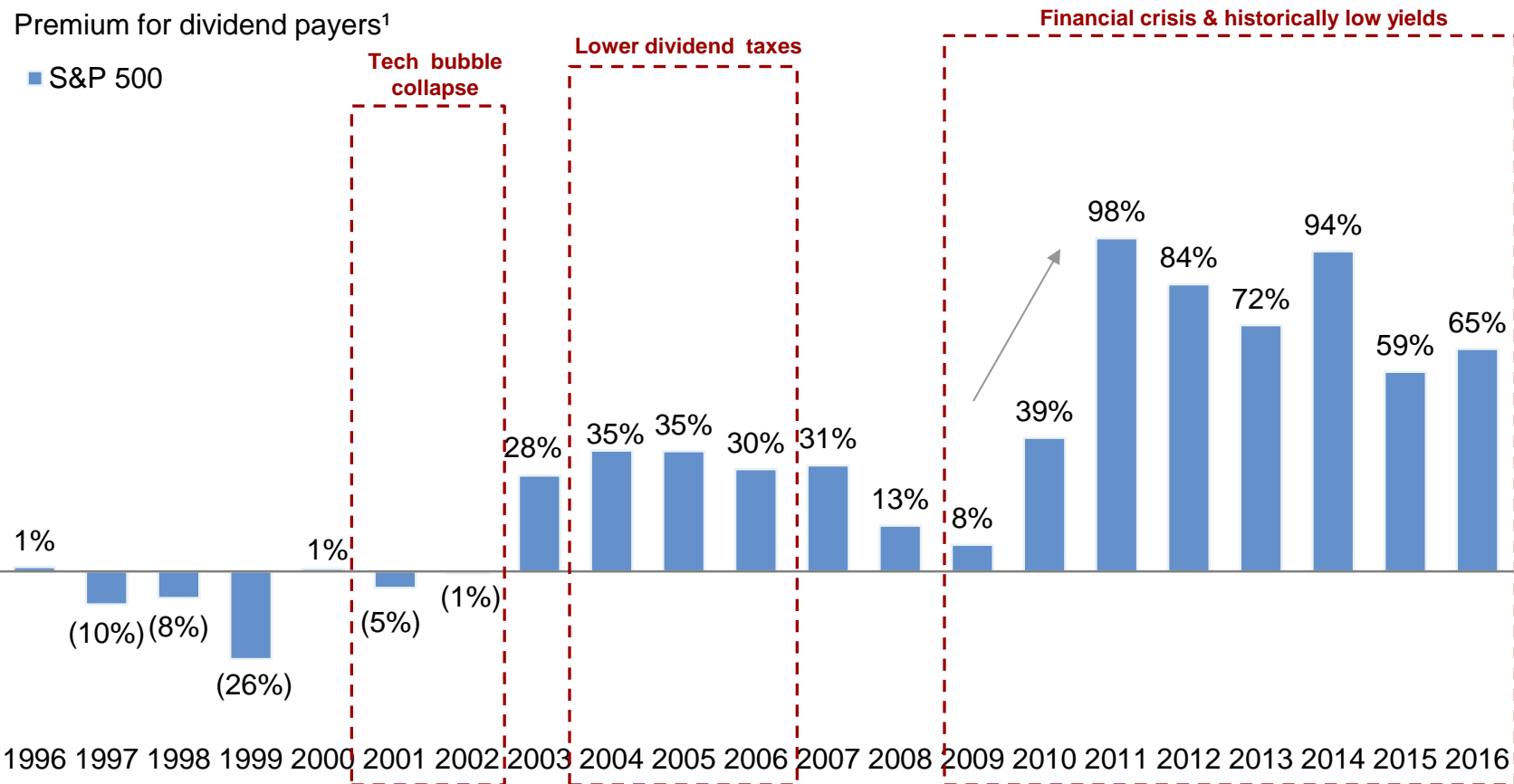


Source: J.P. Morgan, Bloomberg  
Note: For S&P 500 non-financials and current as of Q4 2015



## The dividend premium ain't going away

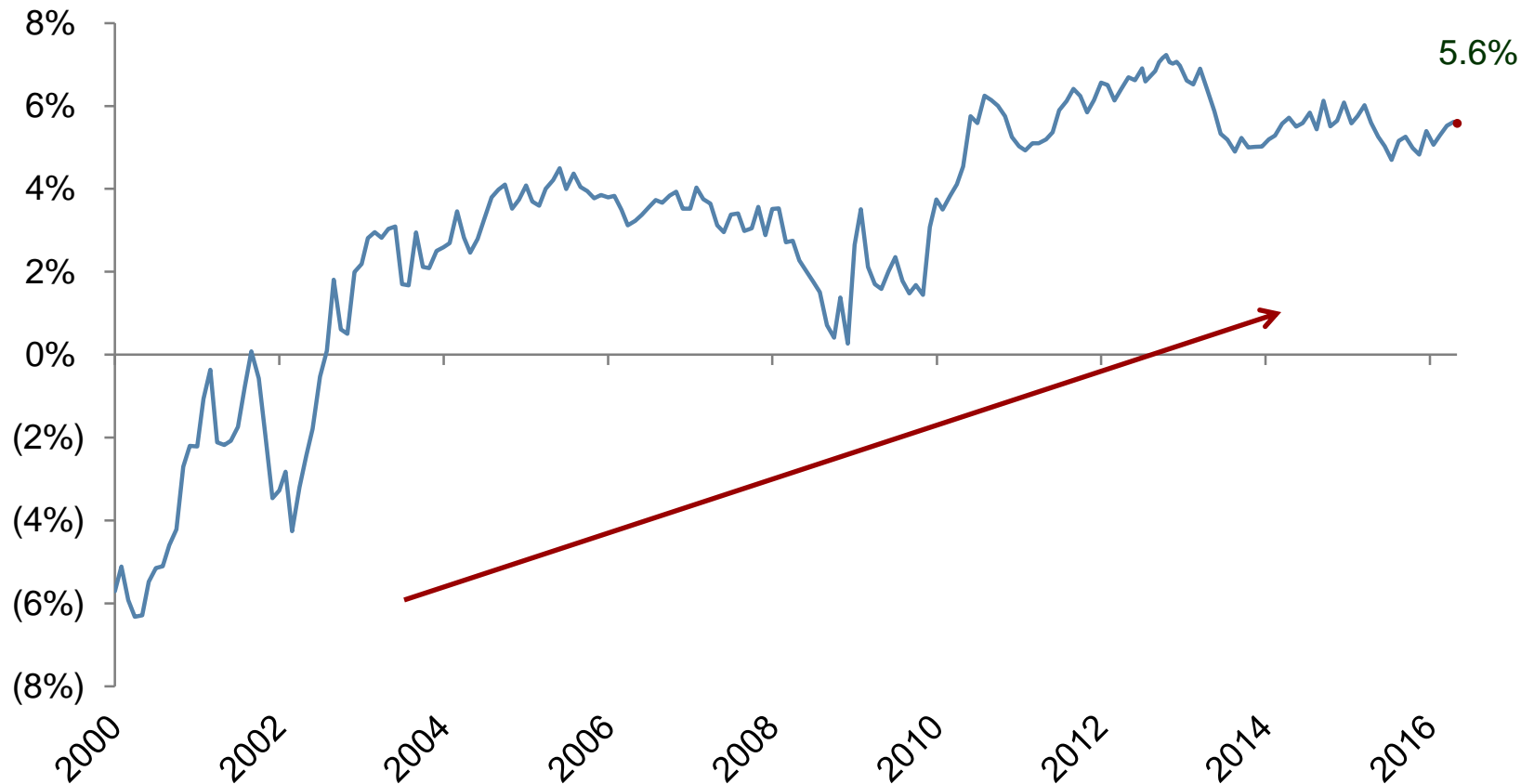
### Historical dividend premium since 1996



Source: FactSet, Bloomberg, The Wall Street Journal; Median values as of 3/31 of each respective year for all S&P 500 firms excluding financials; Year 2016 updated as of 3/31/2016; <sup>1</sup> Based on difference in median PEG ratio for high dividend payers (75th percentile, 3.1% dividend yield) & low dividend payers (25th percentile, 1.4% dividend yield) in S&P 500 by dividend yield

## A high PE or a persistent disconnect between equity and debt?

Illustrative EPS accretion of debt financed buybacks<sup>1,2</sup>

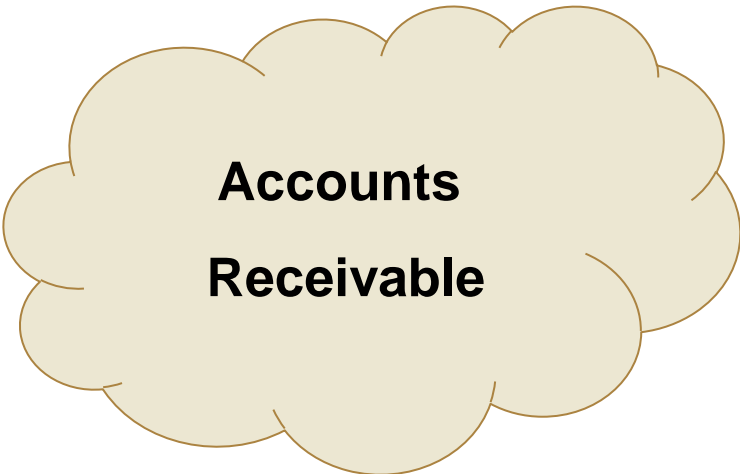


Source: Bloomberg, FactSet, J.P. Morgan as of 5/16/2016

<sup>1</sup> Assumes cost of debt as per the BBB rated issuers of the JULI index and beta of 1.0

<sup>2</sup> Assumes buyback size of 10% of market capitalization, 5% repurchase premium, 35% marginal tax rate, S&P 500 price to earnings, and JULI index cost of debt for BBB rated issuer

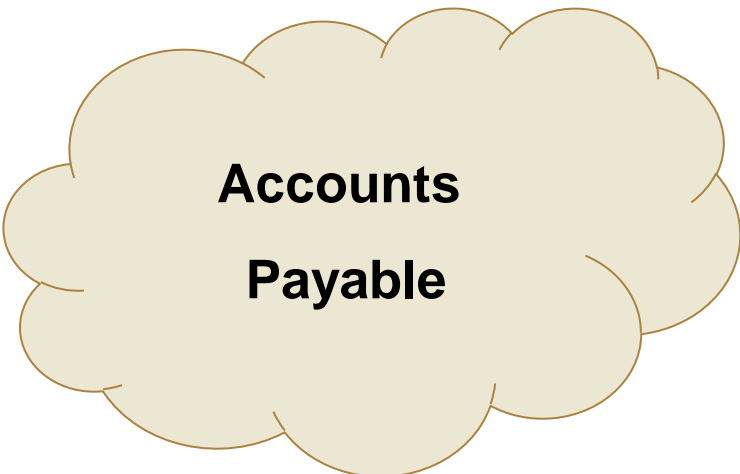
## The unknown in a world with negative rates



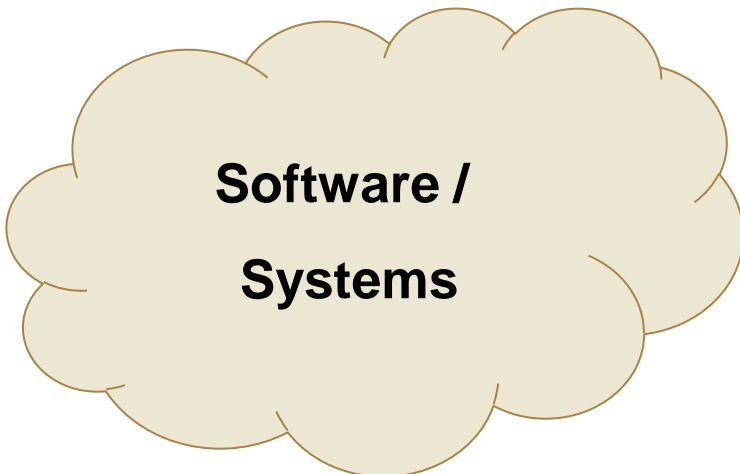
**Accounts  
Receivable**



**Pensions**

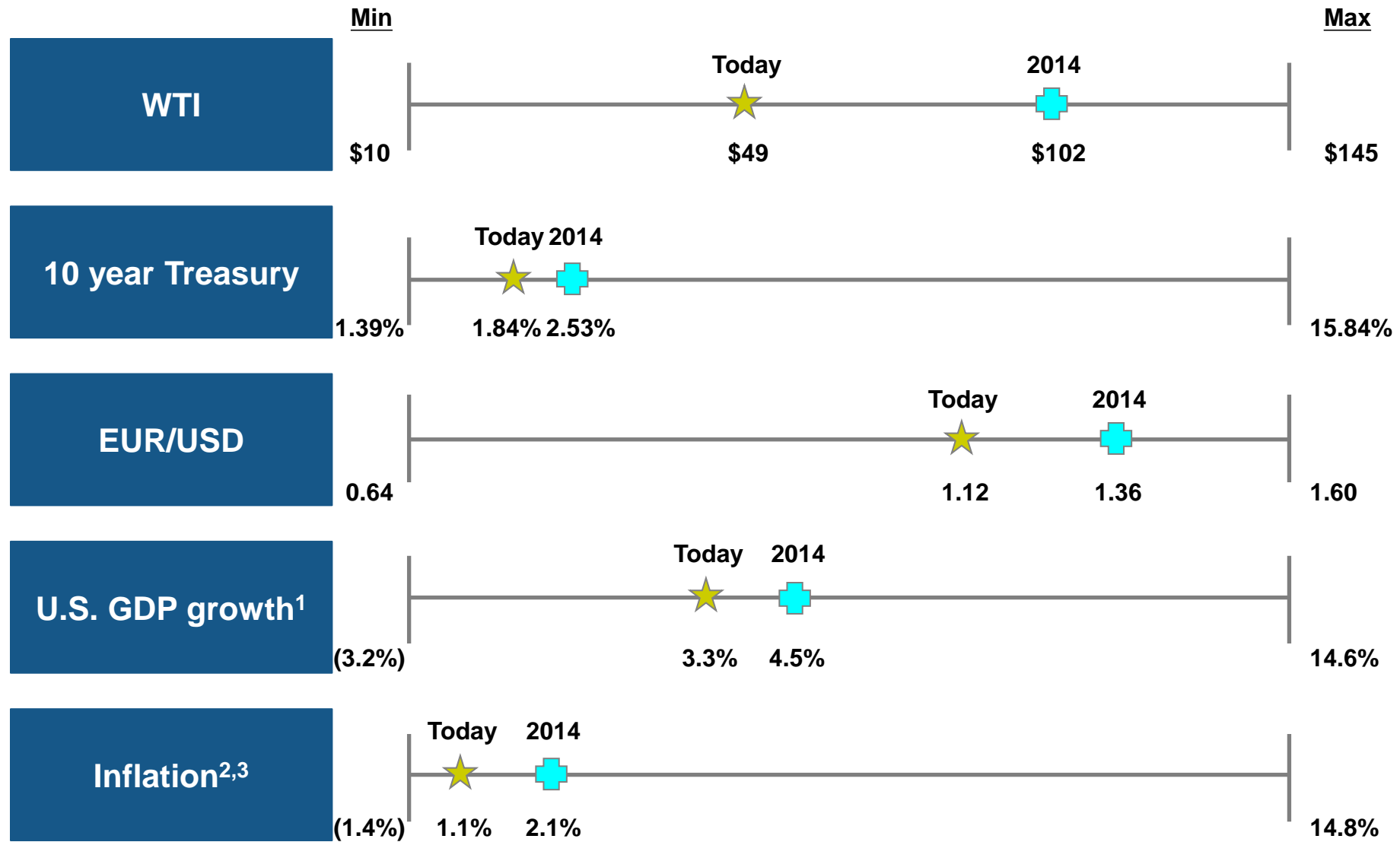


**Accounts  
Payable**



**Software /  
Systems**

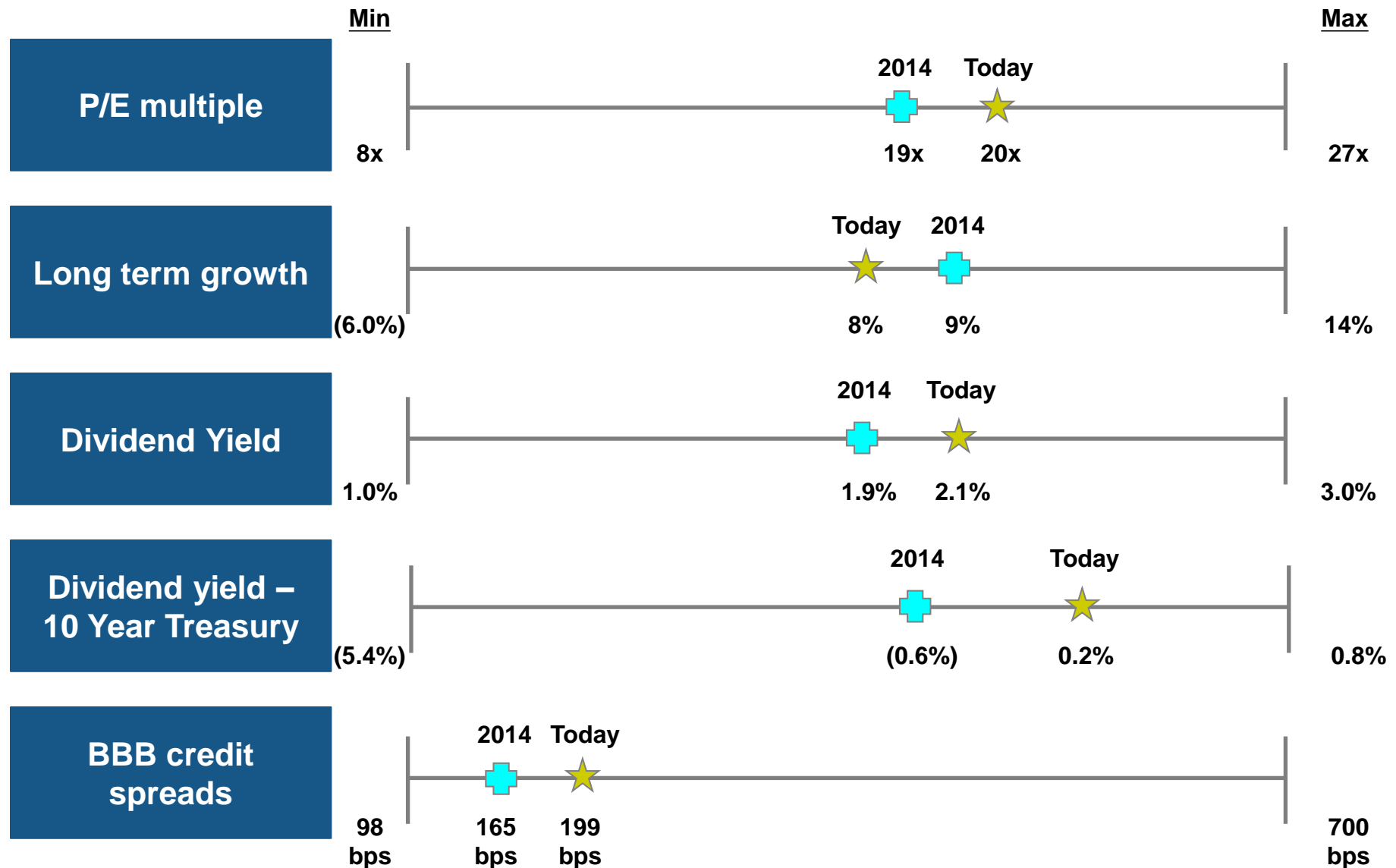
## So what is the weather like today?



Source: J.P. Morgan, Bloomberg, Factset

Note: Today is 6/1/2016 and data range is last 50 years or first reported; <sup>1</sup> U.S. GDP Nominal Dollars YOY seasonally adjusted; <sup>2</sup> Inflation defined as US CPI Urban Consumers YOY not seasonally adjusted; <sup>3</sup> Last reported was 03/31/2016

## And how are firms doing in this weather?



Source: J.P. Morgan, Bloomberg, Factset and JULI index

Note: Today is 6/1/2016 and data range is last 50 years or first reported; Dividend yield is measured on an annual basis

## Performance in this environment

	Stock Market Leaders	Stock Market Laggards
2 year Stock Price Return <sup>1</sup>	56%	(38%)
Credit Ratings	BBB	BB
Total Payout Ratio	62%	77%
% of Firms that Cut Dividend <sup>2</sup>	0%	18%
Stock Volatility <sup>3</sup>	31%	52%
P/E Multiple	24x	12x
Long term growth <sup>4</sup>	12%	8%

Source: J.P. Morgan, Bloomberg and Factset

Note: Financials are excluded; Free cash flow defined as operating income – capex; Total payout is LTM Dividends + LTM Repurchases / FCF

<sup>1</sup> Last 24 months as of 6/1/2016

<sup>2</sup> 2016 dividend cut timeframe is the last 8 quarters

<sup>3</sup> 6 month historical volatility

<sup>4</sup> LTG defined as long term EPS growth

## Key takeaways

- Conservative balance sheets
- Disciplined capital allocation to Capex, M&A and shareholders
- Growth deficit
- Negative rates
- Regulatory and political surprises