



Economic Overview:
The US, Higher Education & Healthcare

May 21, 2015

Section 1

General Economic Overview



Overview of Global Economy

Europe

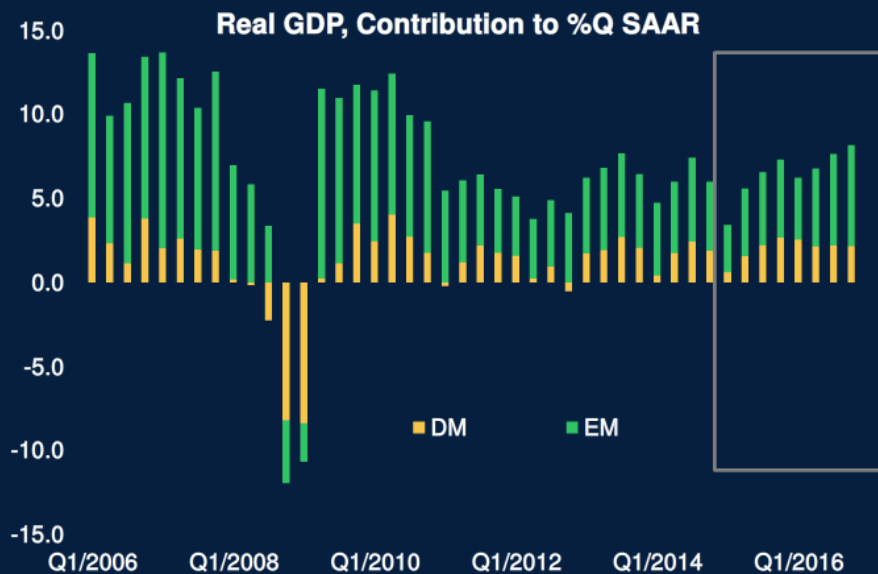
- Recovery underway, inflation rising; loose monetary policy; expectation of rate hikes; Greece

Economic Recovery to Support Asset Reflation

Asia

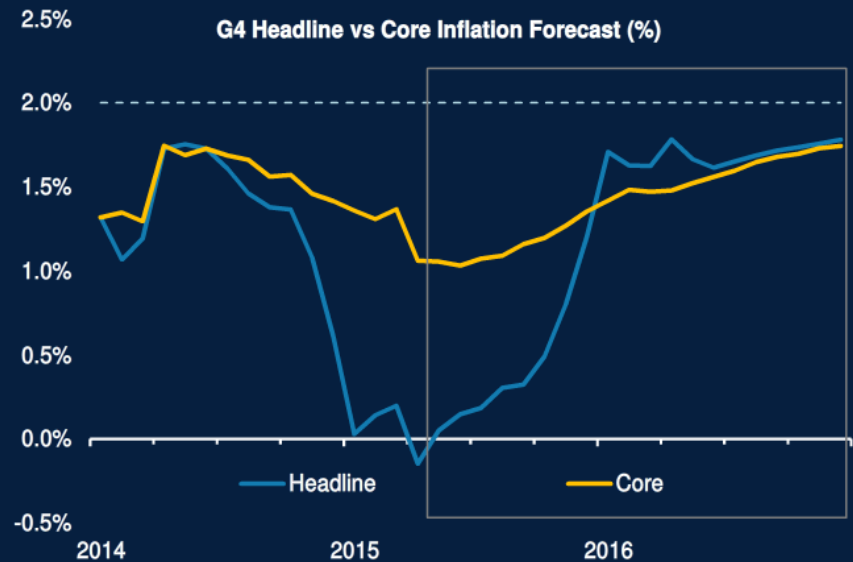
- China slowing growth, but reforming; Japan maintaining expansionary policies

Global growth set to recover after 1Q dip



Source: Eurostat, Morgan Stanley Research

DM inflation to inflect up and converge to core

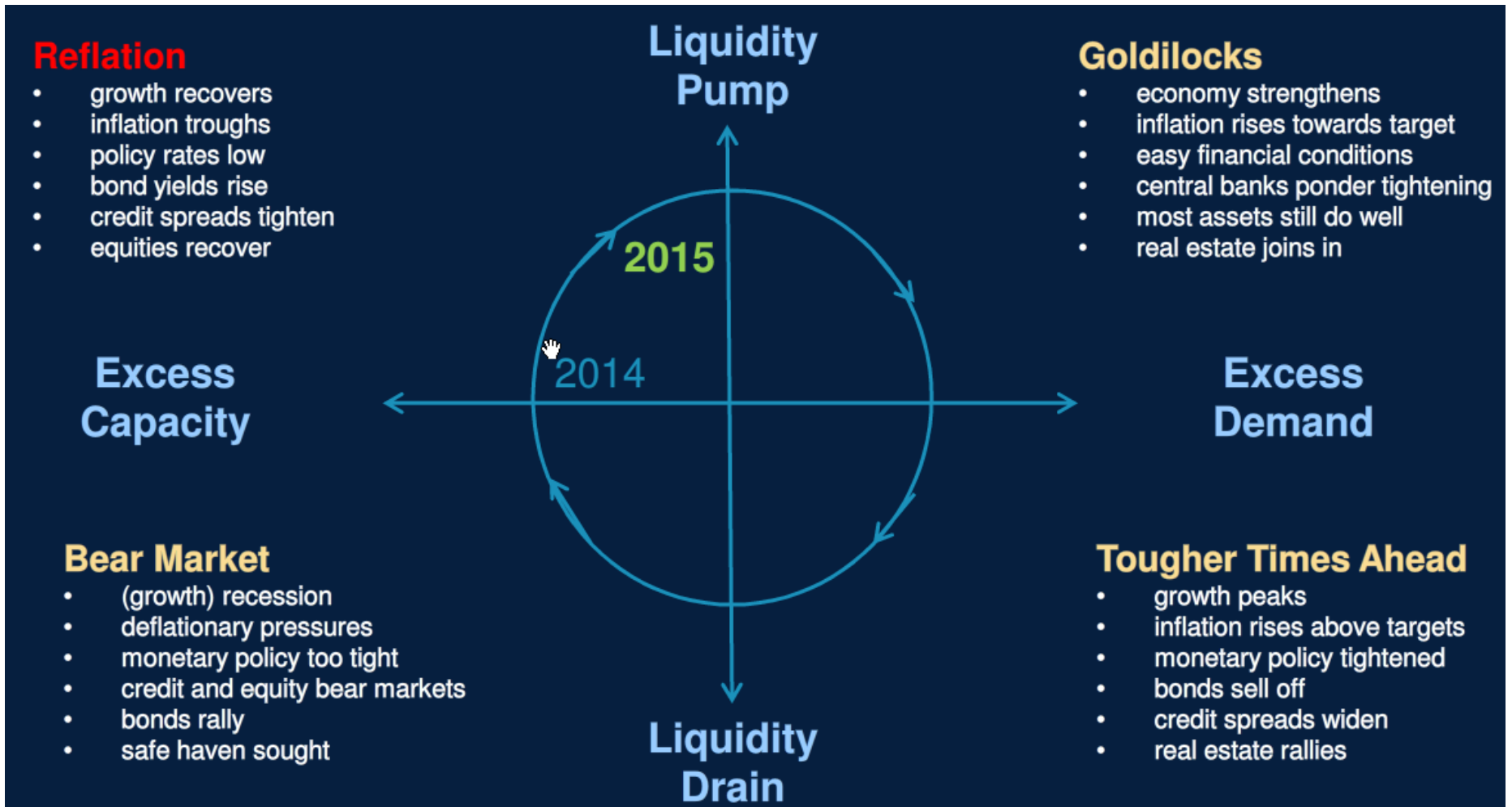


Source: National data, IMF, Morgan Stanley Research estimates



Reflation

Global Liquidity and Growth Cycle at a Glance



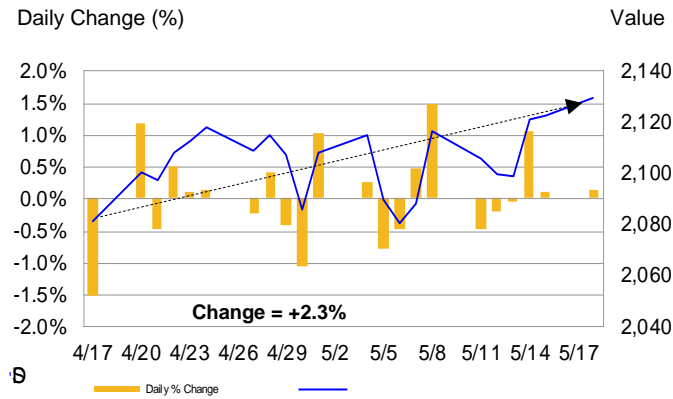


GENERAL ECONOMIC OVERVIEW

US Economic Measures

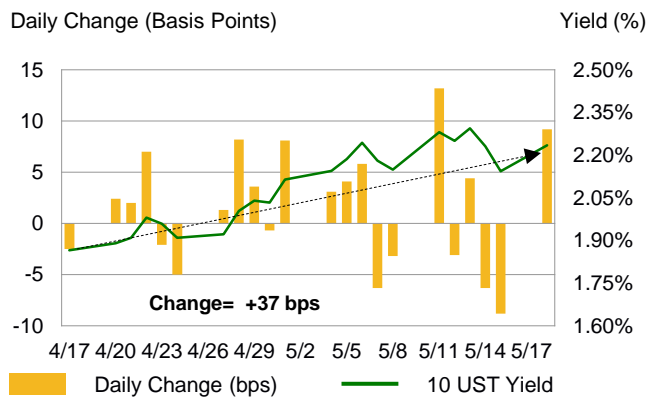
April 17th to May 18th

S&P 500



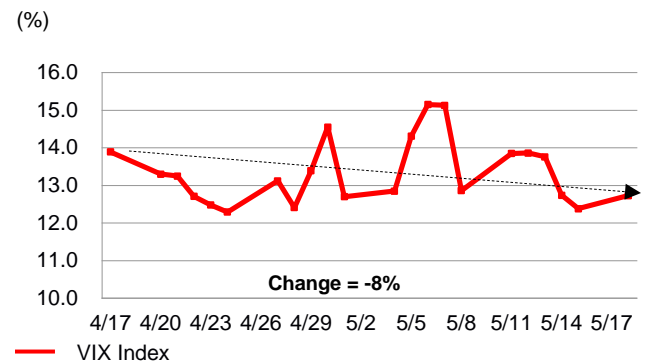
Source: Bloomberg

10Y UST Yield



Source: Bloomberg

VIX Volatility Index



Source: Bloomberg

Market Recap

4/17 to 5/18

	4/17	5/18	Change
Dow	17,826	18,298	+2.6%
S&P 500	2,081	2,129	+2.3%
Oil	\$55.74	\$59.43	+6.6%
10Y UST	1.87%	2.24%	+37 bps
30Y UST	2.52%	3.03%	+51 bps

Source: Bloomberg

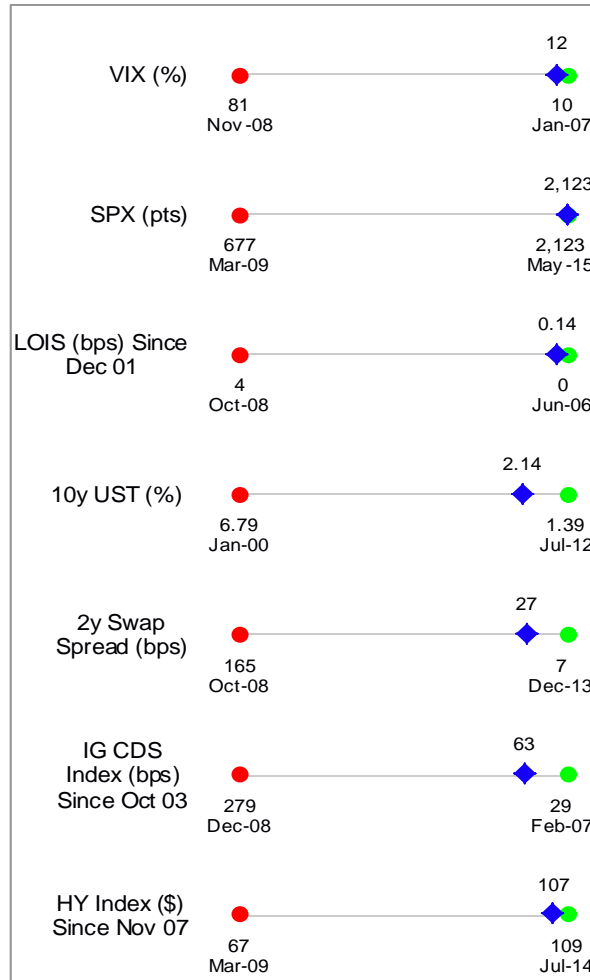


GENERAL ECONOMIC OVERVIEW

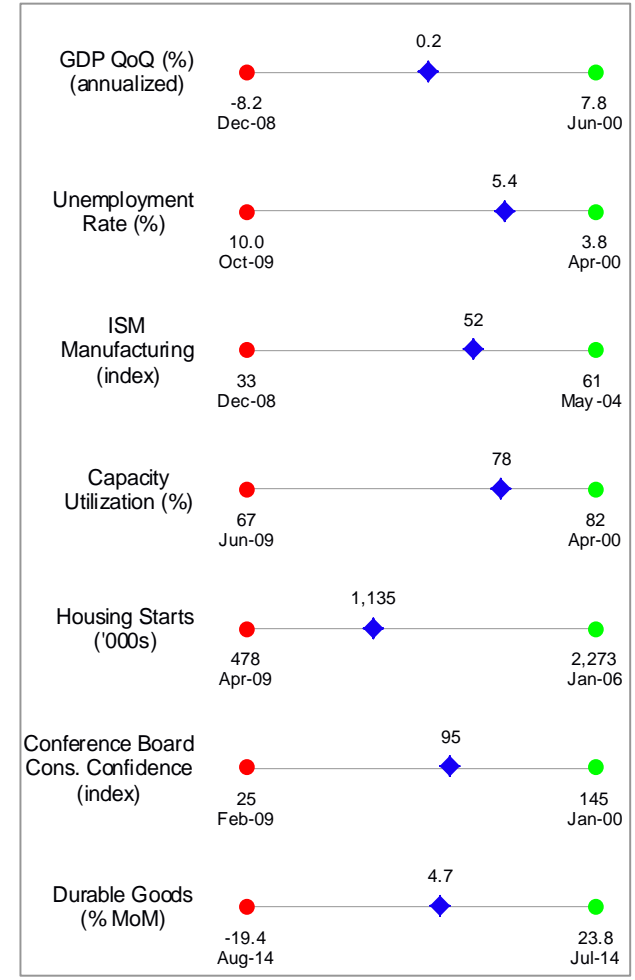
Current Snapshot of Economic and Risk Indicators

Overall, US Economic Data Indicators Show Signs of Stabilizing Markets

Risk Indicators



Economic Indicators



● Worst since Jan 2000 (unless otherwise noted) ● Best since Jan 2000 (unless otherwise noted) ◆ Current



- Historically, lower Treasury yields have correlated with higher investment grade credit spreads, and vice versa
- In 2012 and 2013, however, markets dislocated from this trend
 - The sharp fall in Treasury yields during 2H 2011 saw only a modest widening in spreads
 - By historical comparison, 2012 and 2013 were characterized by a compression in spreads despite a further drop in yields
- The combination of these factors, historically low Treasury yields and relatively tight credit spreads, has contributed to historically attractive financing costs for investment grade issuers
 - Many issuers achieved attractive financing levels in 2014
 - A number of corporates/munis in 2015 have already set records for low coupons

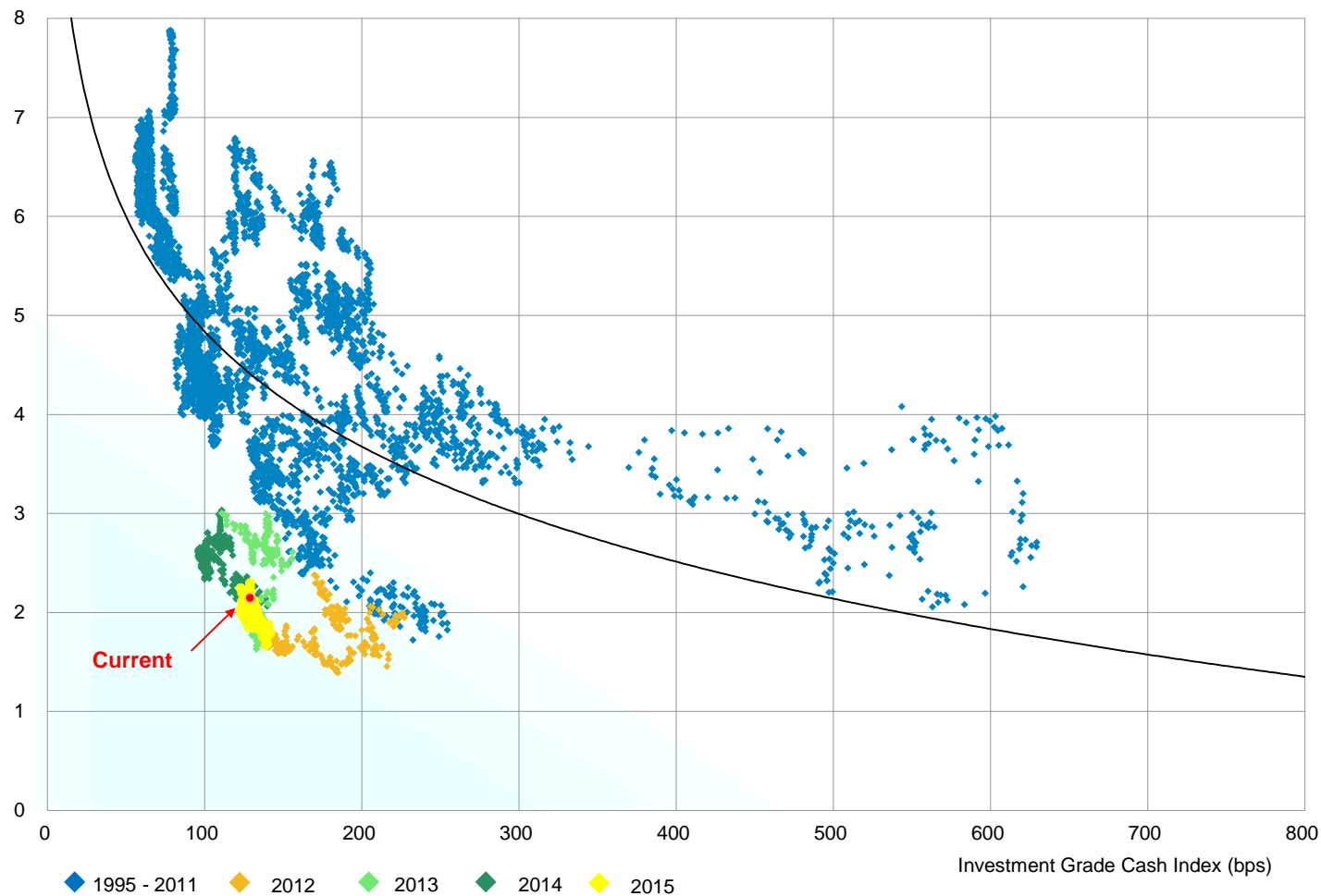
GENERAL ECONOMIC OVERVIEW

Low Rates + Tight Spreads = Cheap Financing

Investment Grade Credit Spreads and Treasury Yields Well Below Trend

Regression Analysis: Treasuries & Investment Grade Bond Spreads (1995 – Present)

10-year UST (%)



Source Bloomberg, Morgan Stanley, Solomon Analytics



GENERAL ECONOMIC OVERVIEW

Morgan Stanley 2015 10-Year Treasury Forecast

Morgan Stanley Interest Rate Strategy Team

Forecast Considerations

• Bull Case

- US consumer fails to spend out of the energy savings, reflected in a sustained shift higher in the personal savings rate
- Treasury yields remain constrained, volatility low, and US economic growth weaker

• Base Case

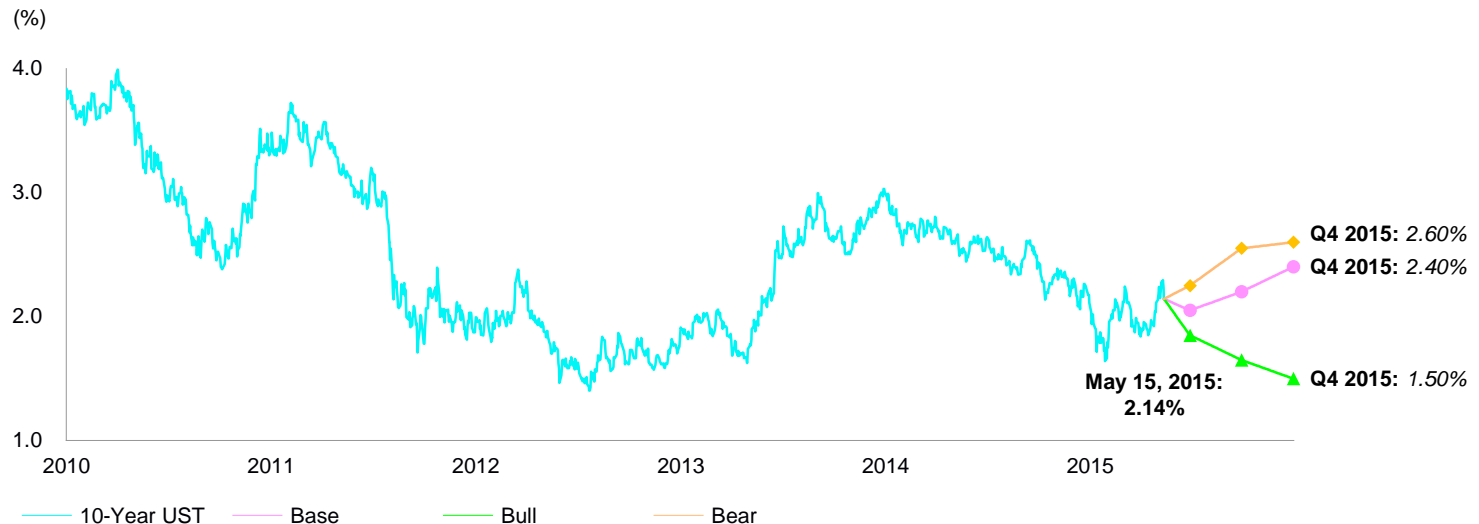
- U.S. economic growth will pick up in 2015 with unemployment expected to average 5.3% by 4Q15
- The market will push the timing of the first rate hike into December by the end of 1Q15

• Bear Case

- The decline in energy prices feeds through into increased consumer spending, and wage growth accelerates
- The Fed hikes rates in June 2015 as the unemployment rate ends the half-year at 5.2%

10-Year Base, Bull & Bear Case Scenarios

Scenarios Diverge Based on Fiscal Policy Choices and Subsequent Fed Reaction



Interest Rate Outlook: Morgan Stanley vs. Consensus

	Morgan Stanley				Market Consensus			
	Treasury Yield Curve				Treasury Yield Curve			
	2y	5y	10y	30y	3mo. LIBOR	2y	10y	30y
May 15	0.54%	1.46%	2.14%	2.93%	0.28%	0.54%	2.14%	2.93%
2015 Q2	0.70%	1.55%	2.05%	2.55%	0.32%	0.71%	2.16%	2.81%
2015 Q3	0.90%	1.80%	2.20%	2.70%	0.52%	0.96%	2.32%	2.97%
2015 Q4	1.20%	1.95%	2.40%	2.85%	0.78%	1.22%	2.50%	3.12%
2016 Q1	1.40%	2.15%	2.55%	2.90%	1.05%	1.47%	2.67%	3.27%
2016 Q2	1.70%	2.40%	2.75%	3.05%	1.34%	1.70%	2.82%	3.41%

Note

1. Forecasts reflect Morgan Stanley's Interest Rate Strategists, not necessarily the views of Morgan Stanley's Economists



GENERAL ECONOMIC OVERVIEW

2015 U.S. Economic Calendar

May 2015

Monday	Tuesday	Wednesday	Thursday	Friday
				<ul style="list-style-type: none"> ISM (10am) Construction Spending (10am) Univ. of Mich. Consumer Sentiment (9:55am) Motor Vehicle Sales <p style="text-align: right;">1</p>
<ul style="list-style-type: none"> Factory Orders (10am) <p style="text-align: right;">4</p>	<ul style="list-style-type: none"> Trade Balance (8:30am) ISM Nonmanufacturing (10am) <p style="text-align: right;">5</p>	<ul style="list-style-type: none"> ADP Survey (8:15am) Productivity and Costs (8:30am) Treasury Quarterly Refunding Announcement (8:30am) <p style="text-align: right;">6</p>	<ul style="list-style-type: none"> Challenger Survey (7:30am) Consumer Credit (3pm) <p style="text-align: right;">7</p>	<ul style="list-style-type: none"> Employment Situation (8:30am) Wholesale Trade (10am) <p style="text-align: right;">8</p>
	<ul style="list-style-type: none"> NFIB Survey (7:30am) JOLTS (10am) Auction 3-Year Treasury Note (1pm) Treasury Budget (2pm) <p style="text-align: right;">11</p>	<ul style="list-style-type: none"> Retail Sales (8:30am) Import/Export Prices (8:30am) Business Inventories (10am) Auction 10-Year Treasury Note (1pm) <p style="text-align: right;">12</p>	<ul style="list-style-type: none"> Producer Price Index (8:30am) Announce 10-Year TIPS (11am) Auction 30-Year Treasury Bond (1pm) MSBCI <p style="text-align: right;">13</p>	<ul style="list-style-type: none"> Empire State Survey (8:30am) Industrial Production (9:15am) Univ. of Mich. Consumer Sentiment (9:55am) TICS Report (4pm) <p style="text-align: right;">14</p>
<ul style="list-style-type: none"> NAHB Housing Market Index (10am) <p style="text-align: right;">18</p>	<ul style="list-style-type: none"> Housing Starts (8:30am) <p style="text-align: right;">19</p>	<ul style="list-style-type: none"> FOMC Minutes (2pm) <p style="text-align: right;">20</p>	<ul style="list-style-type: none"> Philadelphia Fed Survey (10am) Existing Home Sales (10am) Leading Indicators (10am) KC Fed Survey (11am) Announce 2-Year, 5-Year and 7-Year Treasury Notes (11am) Auction 10-Year TIPS (1pm) <p style="text-align: right;">21</p>	<ul style="list-style-type: none"> Consumer Price Index (8:30am) <p style="text-align: right;">22</p>
<p style="text-align: center;">MEMORIAL DAY</p> <p style="text-align: right;">25</p>	<ul style="list-style-type: none"> Durable Goods (8:30am) S&P/C-S Home Price Index (9am) FHFA House Price Index (9am) New Home Sales (10am) Conf. Bd. Consumer Confidence (10am) Richmond Fed Survey (10am) Dallas Fed Survey (10:30am) Auction 2-Year Treasury Note (1pm) <p style="text-align: right;">26</p>	<ul style="list-style-type: none"> Auction 5-Year Treasury Note (1pm) <p style="text-align: right;">27</p>	<ul style="list-style-type: none"> Pending Home Sales Index (10am) Auction 7-Year Treasury Note (1pm) Farm Prices (3pm) <p style="text-align: right;">28</p>	<ul style="list-style-type: none"> GDP Revision (8:30am) Chicago PMI (9:45am) Univ. of Mich. Consumer Sentiment (9:55am) <p style="text-align: right;">29</p>

June 2015

Monday	Tuesday	Wednesday	Thursday	Friday
<ul style="list-style-type: none"> Personal Income and Spending (8:30am) ISM (10am) Construction Spending (10am) <p style="text-align: right;">1</p>	<ul style="list-style-type: none"> Factory Orders (10am) Motor Vehicle Sales <p style="text-align: right;">2</p>	<ul style="list-style-type: none"> ADP Survey (8:15am) Trade Balance (8:30am) ISM Nonmanufacturing (10am) Beige Book (2pm) <p style="text-align: right;">3</p>	<ul style="list-style-type: none"> Challenger Survey (7:30am) Productivity and Costs Revision (8:30am) Announce 3-Year and 10-Year Treasury Notes, and 30-Year Treasury Bond (11am) <p style="text-align: right;">4</p>	<ul style="list-style-type: none"> Employment Situation (8:30am) Consumer Credit (3pm) <p style="text-align: right;">5</p>
	<ul style="list-style-type: none"> NFIB Survey (7:30am) Wholesale Trade (10am) JOLTS (10am) Manpower Employment Outlook Survey Auction 3-Year Treasury Note (1pm) <p style="text-align: right;">8</p>	<ul style="list-style-type: none"> Quarterly Services Report (10am) Auction 10-Year Treasury Note (1pm) Treasury Budget (2pm) <p style="text-align: right;">9</p>	<ul style="list-style-type: none"> Retail Sales (8:30am) Import/Export Prices (8:30am) Business Inventories (10am) Announce 30-Year TIPS (11am) Auction 30-Year Treasury Bond (1pm) MSBCI <p style="text-align: right;">10</p>	<ul style="list-style-type: none"> Producer Price Index (8:30am) Univ. of Mich. Consumer Sentiment (9:55am) <p style="text-align: right;">11</p>
<ul style="list-style-type: none"> Empire State Survey (8:30am) Industrial Production (9:15am) NAHB Housing Market Index (10am) TICS Report (4pm) <p style="text-align: right;">15</p>	<ul style="list-style-type: none"> FOMC Meeting Housing Starts (8:30am) <p style="text-align: right;">16</p>	<ul style="list-style-type: none"> FOMC Meeting (second day, SEP and press conference) <p style="text-align: right;">17</p>	<ul style="list-style-type: none"> Consumer Price Index (8:30am) Current Account Balance (8:30am) Philadelphia Fed Survey (10am) Leading Indicators (10am) Announce 2-Year, 5-Year and 7-Year Treasury Notes (11am) Auction 30-Year TIPS (1pm) <p style="text-align: right;">18</p>	
<ul style="list-style-type: none"> Existing Home Sales (10am) <p style="text-align: right;">22</p>	<ul style="list-style-type: none"> Durable Goods (8:30am) FHFA House Price Index (9am) New Home Sales (10am) Richmond Fed Survey (10am) Auction 2-Year Treasury Note (1pm) <p style="text-align: right;">23</p>	<ul style="list-style-type: none"> GDP Revision (8:30am) Auction 5-Year Treasury Note (1pm) <p style="text-align: right;">24</p>	<ul style="list-style-type: none"> Personal Income and Spending (8:30am) KC Fed Survey (11am) Auction 7-Year Treasury Note (1pm) <p style="text-align: right;">25</p>	<ul style="list-style-type: none"> Univ. of Mich. Consumer Sentiment (9:55am) <p style="text-align: right;">26</p>
<ul style="list-style-type: none"> Pending Home Sales Index (10am) Dallas Fed Survey (10:30am) Farm Prices (3pm) <p style="text-align: right;">29</p>	<ul style="list-style-type: none"> S&P/C-S Home Price Index (9am) Chicago PMI (9:45am) Conf. Bd. Consumer Confidence (10am) <p style="text-align: right;">30</p>			

Section 2

Higher Education Industry Trends



Current Trends in Higher Education

- **Cost Containment / Revenue pressures**
 - In reaction to weak economy much of the sector has focused on operating more efficiently by reducing or containing expenses
 - Growing share of institutions experiencing weak to declining growth in net tuition revenue, due to affordability concerns, the public scrutiny on the cost of higher education and flat to declining enrollment nationally
- **Investment in Capital**
 - As part of efforts to minimize/reduce debt and contain costs, the investment in capital has slowed over the past five years
 - It is estimated that over the last couple of years approximately 1/3 of institutions have had depreciation expense figures that have exceeded capital spending
 - 2015 YTD – a turnaround?
- **Low rates have continued to motivate many to refund existing debt**
- **Continued use of Taxable Financings**
 - Compression of rates (MMD/UST); May result in lower near-term cash flow due to couponing at par
 - Fewer constraints on use and investment of funds; no tracking of private use / facilities; fewer compliance costs
 - Projects do not need to be pre-established at issuance and can be many years in the future
 - Simpler / faster issuance process (for privates, no conduit needed)



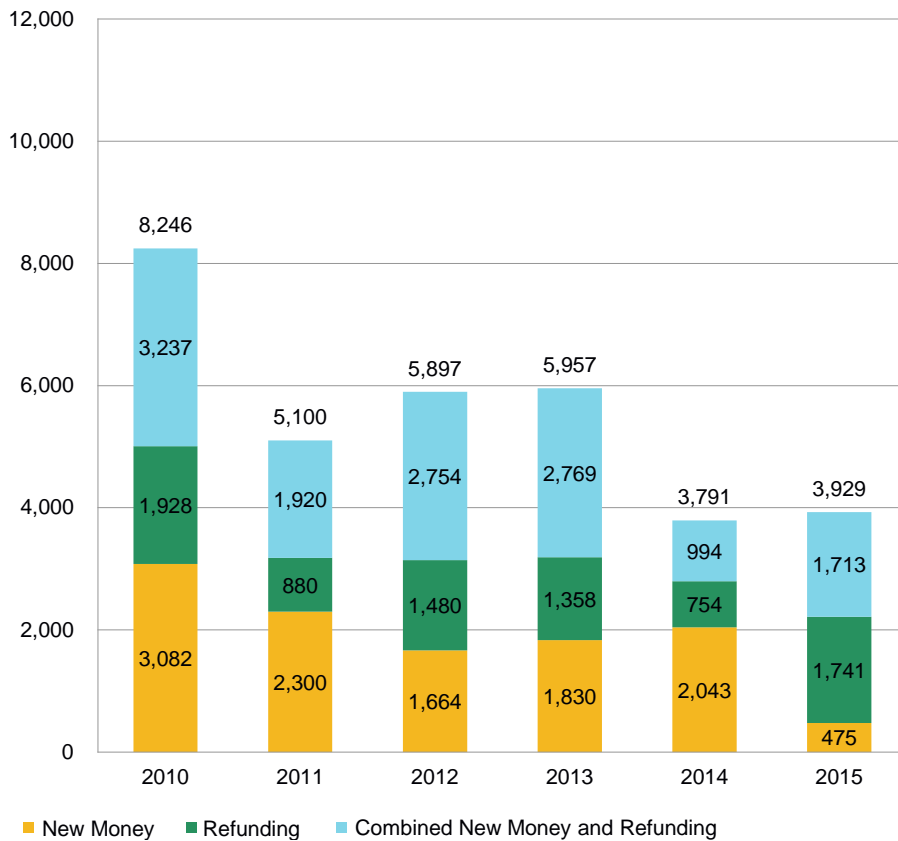
HIGHER EDUCATION INDUSTRY TRENDS

Recent Issuance Overview

Use of Proceeds

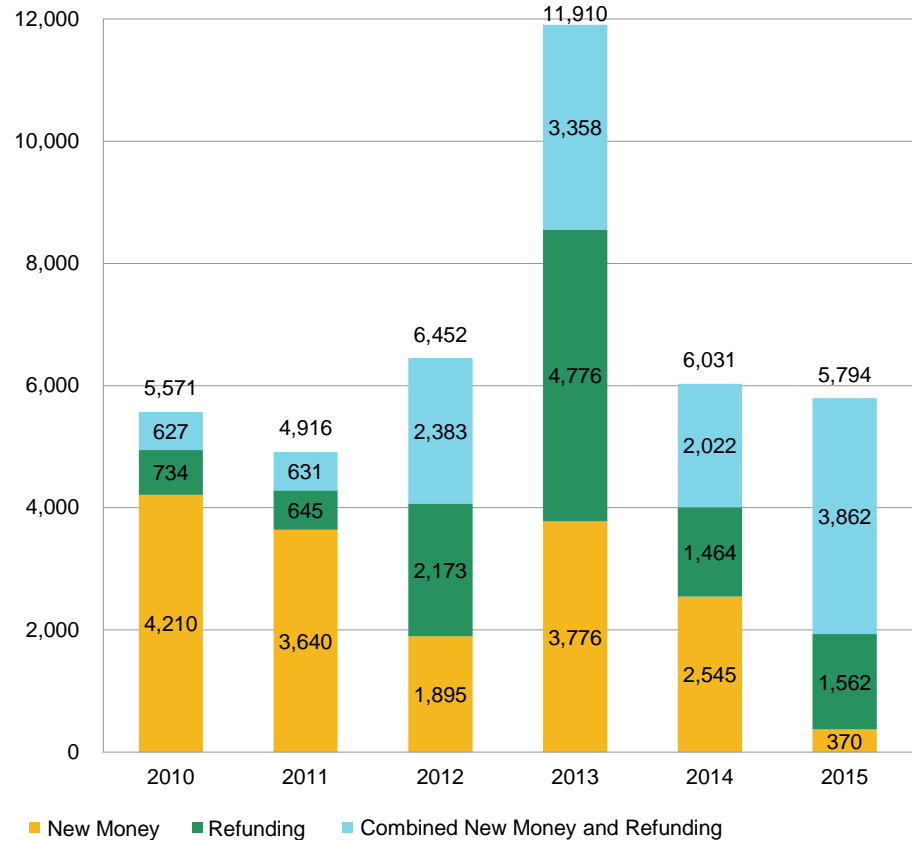
Private Universities - Use of Proceeds

2010 - present
(\$MM)



Public Universities - Use of Proceeds

2010 - present
(\$MM)



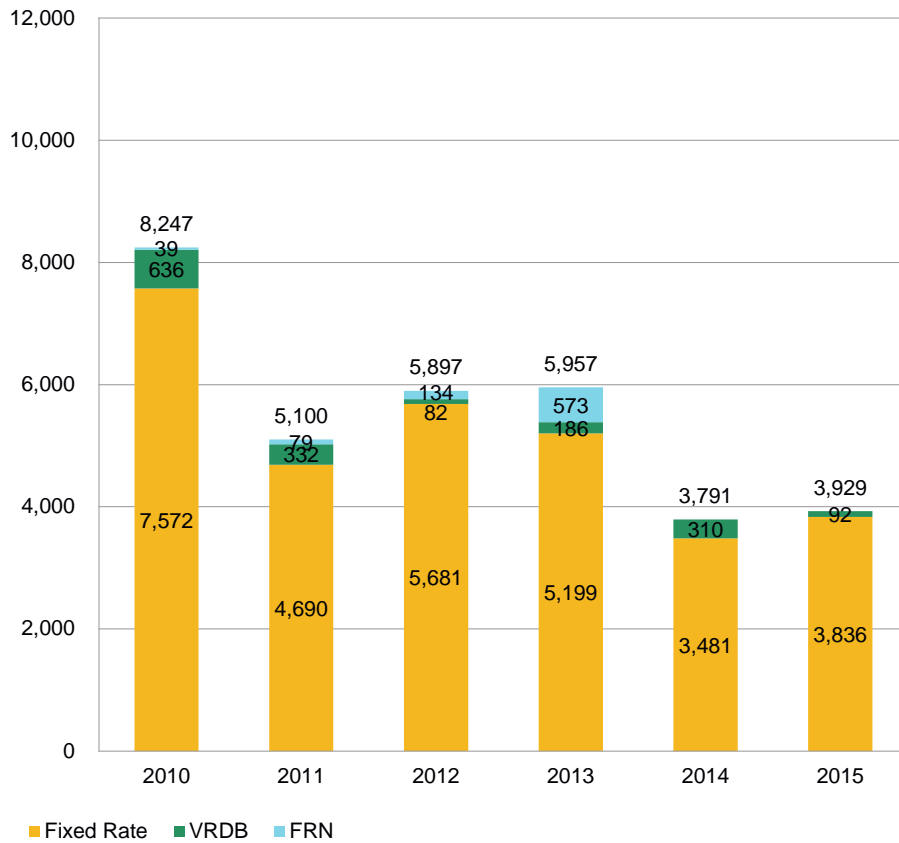


Recent Issuance Overview

Coupon Type

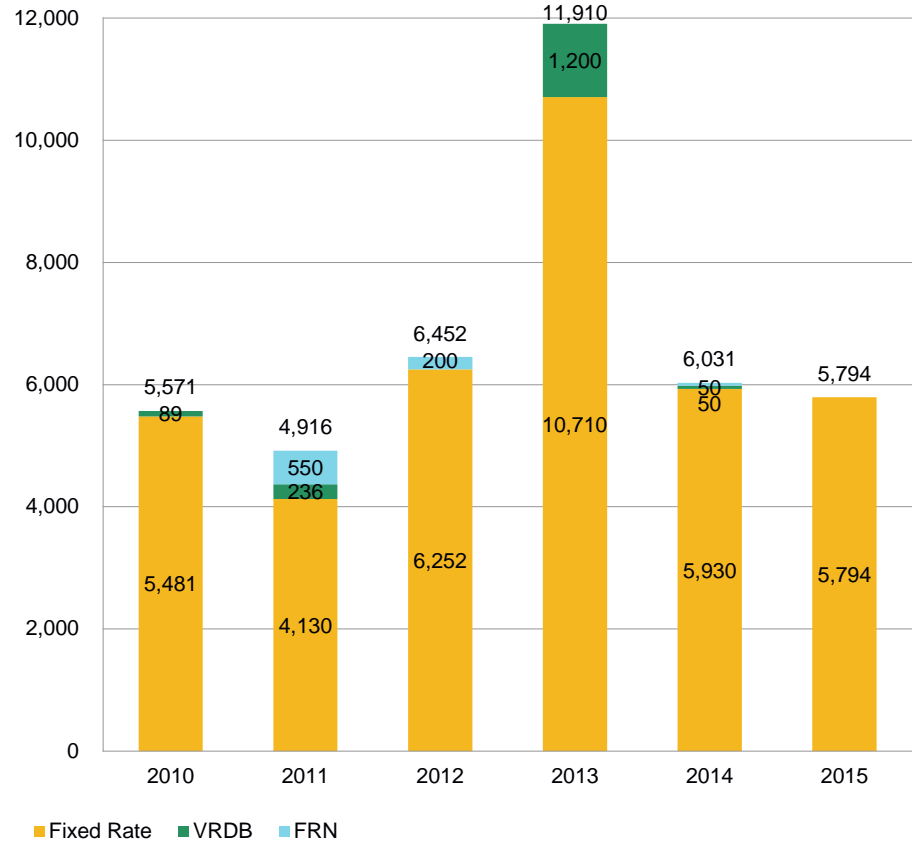
Private Universities – Coupon Type

2010 - present
(\$MM)



Public Universities – Coupon Type

2010 - present
(\$MM)



Notes

1. SDC Data

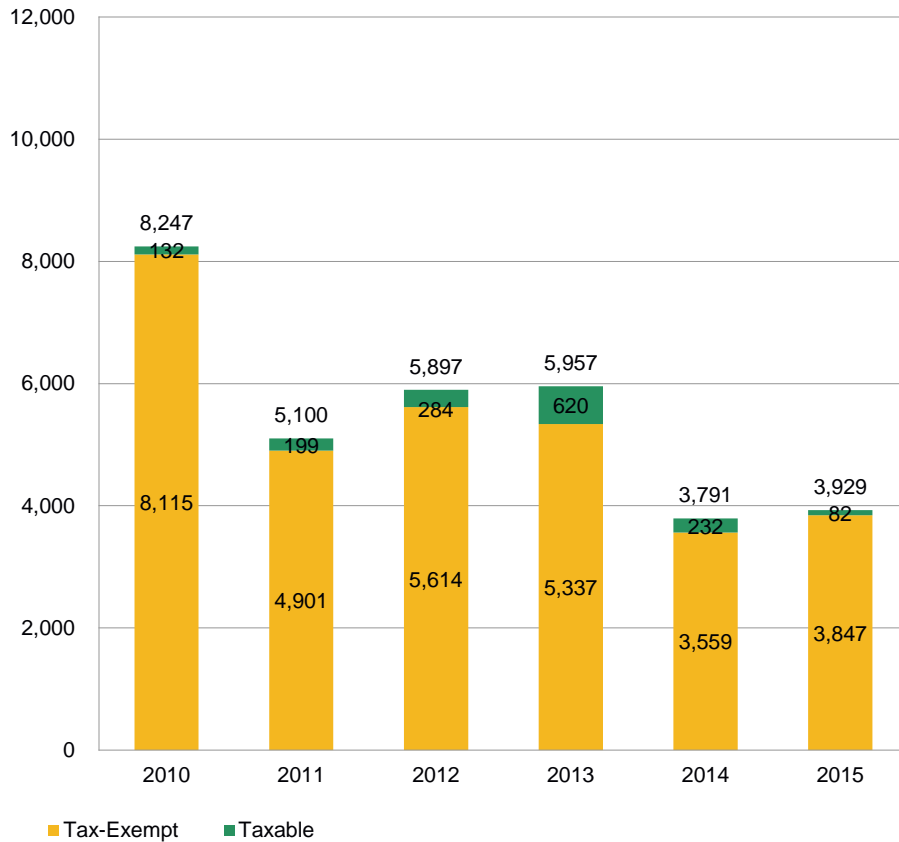


Recent Issuance Overview

Taxable/Tax-Exempt

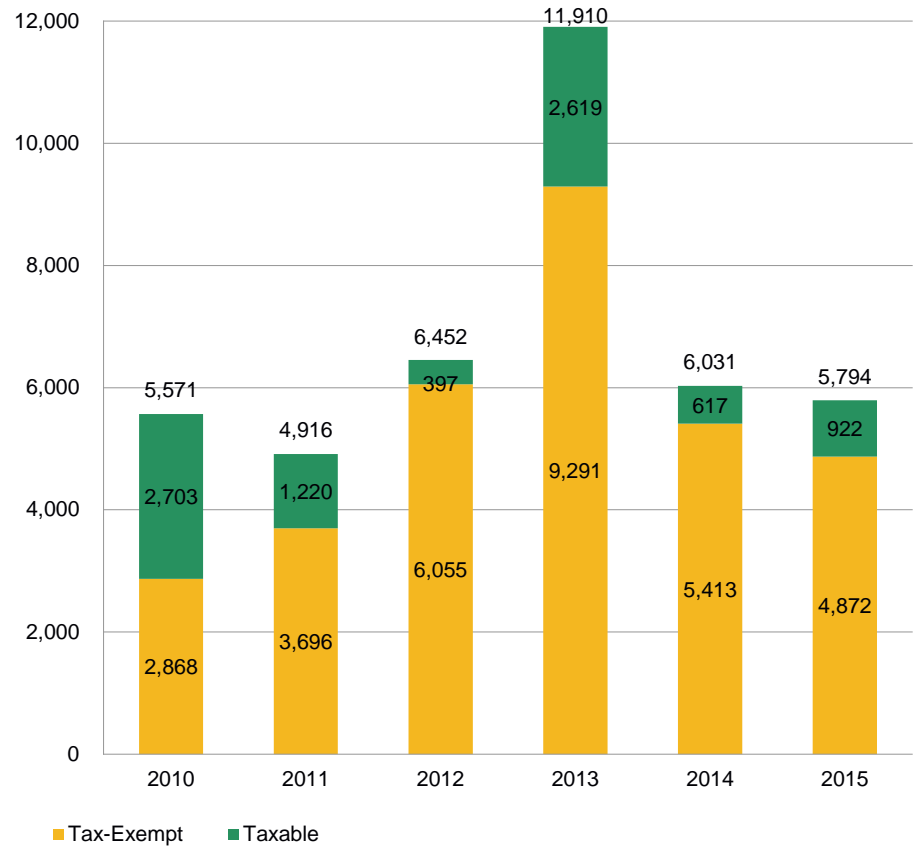
Private Universities – Taxable Status

2010 - present
(\$MM)



Public Universities – Taxable Status

2010 - present
(\$MM)










Taxable transactions above represent municipal CUSIPS only.
 Approximate figures for corporate CUSIP transactions since 2013:
 2013: \$3.35B
 2014: \$2.05B
 2015: \$3.55B (YTD)



HIGHER EDUCATION INDUSTRY TRENDS

















Select Recent Tax-Exempt Higher Education Financings

	Sale Date	Par (\$MM)	Issuer	Tax Status	Ratings	Final Maturity	Yield	Spread to Benchmark	Call Feature
	05/07/15	182.165	Penn State University	TE	Aa2/AA	2040	3.49%	+31 bps	10Y Call
	04/22/15	124.920	Rowan University	TE	Baa3/BBB-	2048	4.25%	+134 bps	10Y Call
	04/15/15	156.790	Princeton University	TE	Aaa/AAA/AAA	2035	3.01%	+29 bps (4%)	10Y Call
	04/09/15	691.435	New York University	TE	Aa3/AA-	2048	3.17%	+36 bps	10Y Call
	03/12/15	1,229.765	University of California LPRB	TE	Aa3/AA-/AA-	2050	3.52%	+54 bps	10Y Call
	03/11/15	788.520	University of California GRB	TE	Aa2/AA/AA	2040	3.26%	+29 bps	10Y Call
	03/04/15	146.960	Indiana University	TE	Aaa/AA+	2042	3.52%	+63 bps (4%)	10Y Call
	03/04/15	340.640	Arizona State University	TE	Aa3/AA	2046	3.80%	+88 bps (4%)	10Y Call
	03/04/15	29.550	University of Oklahoma	TE	AA-/AA	2044	3.01%	+29 bps	10Y Call
	02/27/15	370.820	University of Pennsylvania	TE	Aa2/AA+	2045		Step Coupon	5Y, 10Y
	02/19/15	57.595	Jackson State University	TE	Aa2/AA	2045	3.85%	+97 bps (4%)	10Y Call
	02/18/15	197.970	University of Texas System	TE	Aaa/AAA/AAA	2035	3.50%	+77 bps (4%)	10Y Call
	02/12/15	69.575	Tufts University	TE	Aa2/AA-	2045	3.88%	+102 bps (3.75%)	10Y Call
	02/05/15	51.630	Case Western Reserve University	TE	A1/AA-	2034		Step Coupon	5Y, 10Y
	01/22/15	170.555	University of Washington	TE	Aaa/AA+	2037	3.18%	+67 bps	10Y Call
	01/15/15	35.340	New Jersey City University	TE	A2/AA/A	2045		Step Coupon	5Y, 10Y
	01/06/15	206.825	Texas A&M University System	TE	Aaa/AA+/AA+	2044	3.28%	+61 bps (4%)	8Y Call
	12/15/14	51.485	Pepperdine University	TE	Aa3/AA	2044	3.18%	+30 bps	10Y Call
	12/10/14	121.725	Indiana University	TE	Aaa/AA+	2034	3.19%	+58 bps (4%)	10Y Call
	12/03/14	48.630	Purdue University	TE	Aaa/AA+	2034	2.93%	+20 bps	10Y Call
	12/02/14	129.185	University of Arizona	TE	Aa3/A+	2044	3.52%	+51 bps	10Y Call
	11/13/14	250.700	University of Texas System	TE	Aaa/AAA/AAA	2037	3.46%	+54 bps (4%)	10Y Call



HIGHER EDUCATION INDUSTRY TRENDS

Recent Notable Taxable Higher Education Financings

	Sale Date	Par (\$MM)	Issuer	Tax Status	Ratings	Final Maturity	Yield	Spread to Benchmark	Call Feature
	05/14/15	400.000	California Institute of Technology	TX	Aa2/AA-	2045	4.32%	+125 bps	MWC
	04/29/15	500.000	Northwestern University	TX	Aaa/AAA	2048	3.87%	+110 bps	MWC
	4/15/205	700.000	Rice University	TX	Aaa/AAA	2055	3.77%	+125 bps	MWC
	04/09/15	272.285	New York University	TX	Aa3/AA-	2048	4.14%	+160 bps	10Y Call
	04/01/15	500.000	University of California GRB	TX	Aa3/AA-/AA-	2115	4.77%	+230 bps	MWC
	03/26/15	75.000	Columbia University	TX	Aaa/AAA	2045	3.46%	+90 bps	MWC
	03/11/15	435.750	University of California LPRB	TX	Aa3/AA-/AA-	2045	4.13%	+145 bps	MWC
	03/11/15	381.690	University of California GRB	TX	Aa2/AA/AA	2045	3.93%	+125 bps	MWC
	02/10/15	165.000	Johns Hopkins University	TX	A2/AA/AA+	2045	3.75%	+118 bps	MWC
	02/05/15	47.715	University of Washington	TX	Aaa/AA+	2044	3.70%	+128 bps	10Y Call
	01/26/15	100.800	Colby College	TX	Aa2/AA	2055	4.25%	+185 bps	MWC
	01/13/15	400.000	University of Notre Dame du Lac	TX	Aaa	2045	3.44%	+96 bps	MWC
	01/07/15	176.925	Texas A&M University System	TX	Aaa/AA+/AA+	2034	3.45%	+94 bps	MWC
	12/03/14	18.985	Purdue University	TX	Aaa/AA+	2032	3.81%	+80 bps	MWC
	10/27/14	150.000	University of Missouri	TX	Aa1/AA+	2054	4.24%	+121 bps	MWC
	09/25/14	265.600	UNC Chapel Hill	TX	Aaa/AAA/AAA	2034	3.85%	+63 bps	MWC



MOODY'S

Rating Agency Backdrop

STANDARD
& POOR'S

Fitch Ratings

Outlook: Negative

"...slowed revenue growth coupled with mounting expenses will contribute to weaker operating performance in fiscal year 2015."

Positive Factors:

- Strong investment performance and fundraising

Negative Factors:

- Price sensitivity contributes to constrained net tuition growth. While state funding for publics will grow, it should remain lower than historical and may come with strings attached

Outlook: Negative

"The sector faces growing challenges on several fronts that will require institutional change for many"

Positive Factors:

- Improved economic conditions
- Stronger balance sheets
- Institutions with diverse operations expected to fare well

Negative Factors:

- Tuition discount rates, net tuition revenue change, matriculation could impact privates especially

Outlook: Stable

"...operating surpluses, along with positive investment performance, is how institutions build their balance sheet resources. Balance sheet support has grown the past few years for most"

Positive Factors:

- Improved balance sheet and liquidity levels

Negative Factors:

- Affordability may impact margins, particularly for highly tuition-dependent institutions



Moody's "Scorecard" Methodology

- Mapping scale is as follows:

Weighted Score Legend	
Aaa	≤ 1.5
Aa1	> 1.5 ≤ 2.5
Aa2	> 2.5 ≤ 3.5
Aa3	> 3.5 ≤ 4.5
A1	> 4.5 ≤ 5.5
A2	> 5.5 ≤ 6.5
A3	> 6.5 ≤ 7.5
Baa1	> 7.5 ≤ 8.5
Baa2	> 8.5 ≤ 9.5
Baa3	> 9.5 ≤ 10.5
SG	> 10.5

- While the scorecard maps to a rating with a numerical score, qualitative factors can adjust the scale by several notches
- For Private colleges and universities (based on FY13 data):
 - 27% of the time they are the same
 - 61% of the time they are within one-notch
 - 86% of the time they are within two-notches
 - 95% of the time they are within three-notches

- Moody's introduced the concept of a "scorecard" in their August 26th, 2011 *U.S. Not-for-profit Private and Public Higher Education* rating methodology report
- The scorecard is a weighted quantitative grid with a notching for qualitative factors
- In assigning ratings, Moody's factors in non-quantitative assessments that are not included in the scorecard grid, including:
 - Governance and management
 - Legal security
 - Debt structure
- This report also introduced a consolidated methodology for both private and public colleges and universities, reflecting the common broad rating factors for these sectors
 - In addition, Moody's perceives a continued evolution of public universities into market-driven organizations that are increasingly dependent on the same competitive strategies as private university peers



S&P's Proposed Criteria for Not-For-Profit Public and Private Colleges and Universities

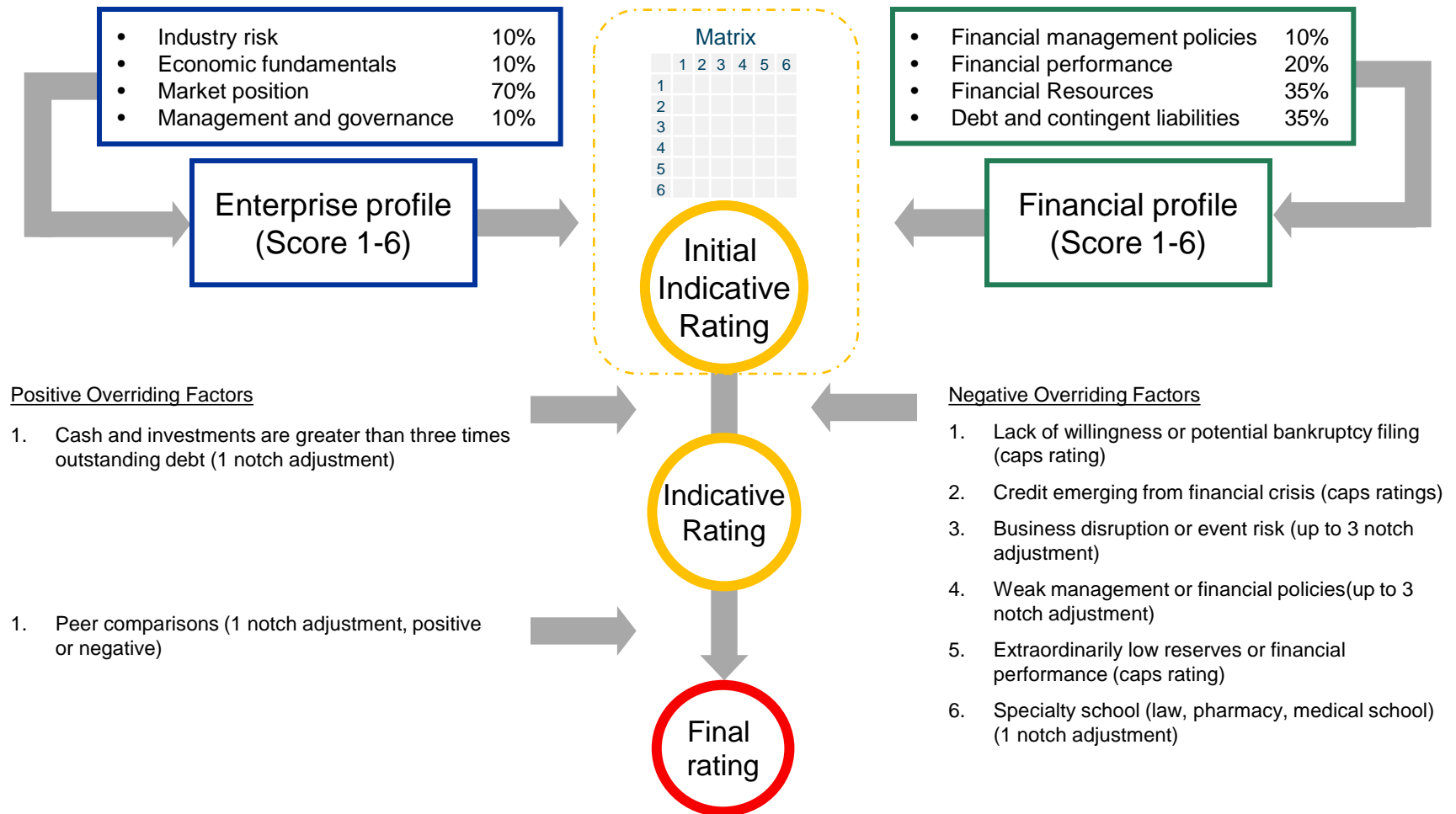
Overview of New Criteria

- The scorecard approach seeks to provide additional transparency on rating outcomes by identifying the factors and their relative weights used for calculating ratings, when compared to S&P's prior methodology
 - The factors have initial scores ranging from 1 (best) to 6 (worst) based on data metrics
 - Qualitative factors provide the ability to adjust factor and sub-factor scores by 1 or 2 points
- Final ratings can be different from those suggested by the profile scores due to:
 - Application of government related entity criteria, if relevant and application of rating above the sovereign, if relevant
 - Legal Structure pledge
- Based upon the final criteria, of the 560 U.S. not-for-profit public and private universities, eight Canadian public universities, three Australian public universities, three Mexican public universities, and six U.K. Public universities included in the scope of the proposed criteria, testing suggests that 85% of ratings would be unchanged under the new criteria, while 4% of ratings could be lowered and 11% could be raised, generally by one notch

- As a result of Dodd-Frank, S&P released its Higher Education “scorecard” based criteria on April 8th, 2015
- Responses are requested by June 5th, 2015
- This new Criteria approach is consistent with the criteria approach it has finalized for healthcare, states, local governments, and other municipal sectors
- The new approach is intended to promote:
 - Transparency
 - Consistency
 - Accuracy



S&P Stand-Alone Framework



S&P's Methodology for Not-For-Profit Public and Private Colleges and Universities proposed as of April 8, 2015

Section 3

Not-for-Profit Healthcare Industry Trends



Current Trends in Nonprofit Healthcare

- **Margins have improved, but pressure remains**
 - While the Accountable Care Act expanded coverage, rates still do not cover all costs
 - The industry is moving away from an emphasis on episodes of care to one of health management, resulting in prioritization of lower-cost settings
 - After softening in 2013, inpatient volumes have stabilized in 2014 leaving hospitals on firmer ground this fiscal year
- **Significant provider consolidation**
 - Driven in part by thinner margins, many providers have deemed scale to be a key factor in the long-term health of the organization, driving heightened merger and acquisition activity
 - Larger entities are deemed to have lower unit costs, greater access to capital, and a better ability to create a fully integrated network of clinical care
- **Evolution towards providers' taking greater risk**
 - Quality-driven contracts and payment reform initiatives like DSRIP driving providers to re-engineer care delivery for higher quality and lower cost
- **Investment in clinical and operational integration and information technology**
 - Greater operational effectiveness, ability to utilize data to better manage care and take risk, and preparation for ICD-10



Drivers of Merger and Acquisition Trends

- **A belief in scale**
 - As volume moves out of the hospital setting, smaller providers seek to join larger organizations to secure lower overhead
 - Improves access to capital at a time of growing need for investment
 - Electronic health record
 - Investment in ambulatory settings
 - Shift to private rooms
 - Consolidation of programs
 - Allows for development of ACO initiatives
 - Enhances development of clinically integrated networks
 - Facilitates establishment of narrow networks to offer insurers and employers



Industry Consolidation

Hospital Merger and Acquisition Activity Continues at a Rapid Pace

Transaction Structures

• 2012/2013: Megamergers

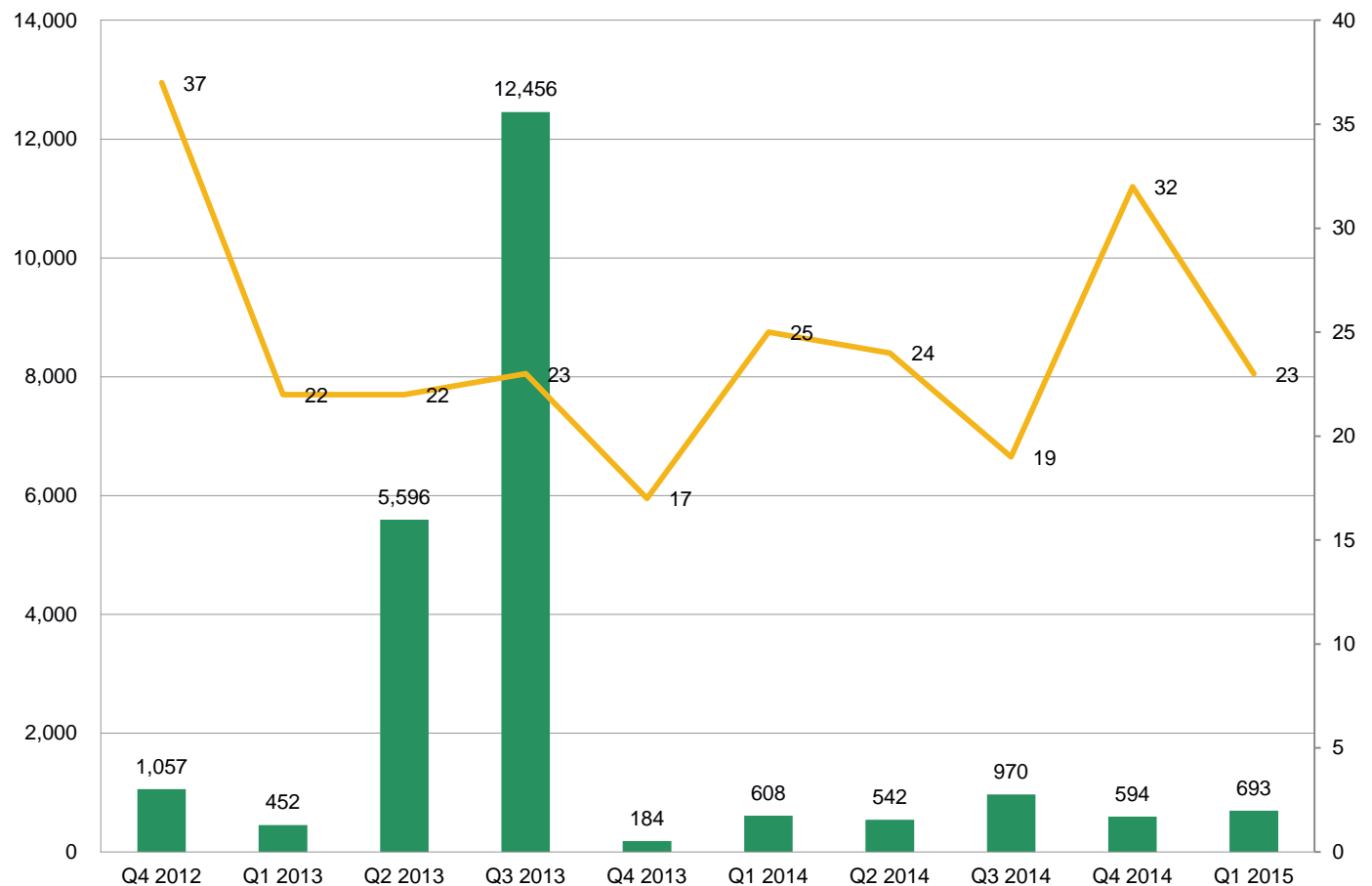
- Several multi-state nonprofit systems acquired major hospital organizations
- Tenet acquired Vanguard
- Community Hospital Systems acquired HMA
- Dignity Health acquired HealthWorks
- Transactions were often accomplished through outright purchase/defeasance of debt

• 2014/2015

- Single state and regional multi-hospital systems expanded through acquisition of smaller community hospitals
- Defeasance of debt only pursued through refinancing when necessary
- Generally structured as a substitution or membership

Hospital Merger and Acquisition Activity

Number of Transactions and Stated Value



Source: Irving Levin Associates, "The Healthcare M&A Report" First Quarter 2013 – First Quarter 2015



Select Regional Examples

- **University of Vermont Health Network**

- Central Vermont Medical Center (2011)
- Champlain Valley Physicians Hospital (2013)
- Elizabethtown Community Hospital (2013)
- Alice Hyde (Pending)

- **MaineHealth**

- Southern Maine Medical Center (2009)
- Waldo County Healthcare, Inc. (2009)
- PenBay Healthcare (2011)
- Memorial Hospital New Hampshire (2014)
- Franklin Community Health (2014)

- **Baystate Health System**

- Wing Memorial Hospital (2014)

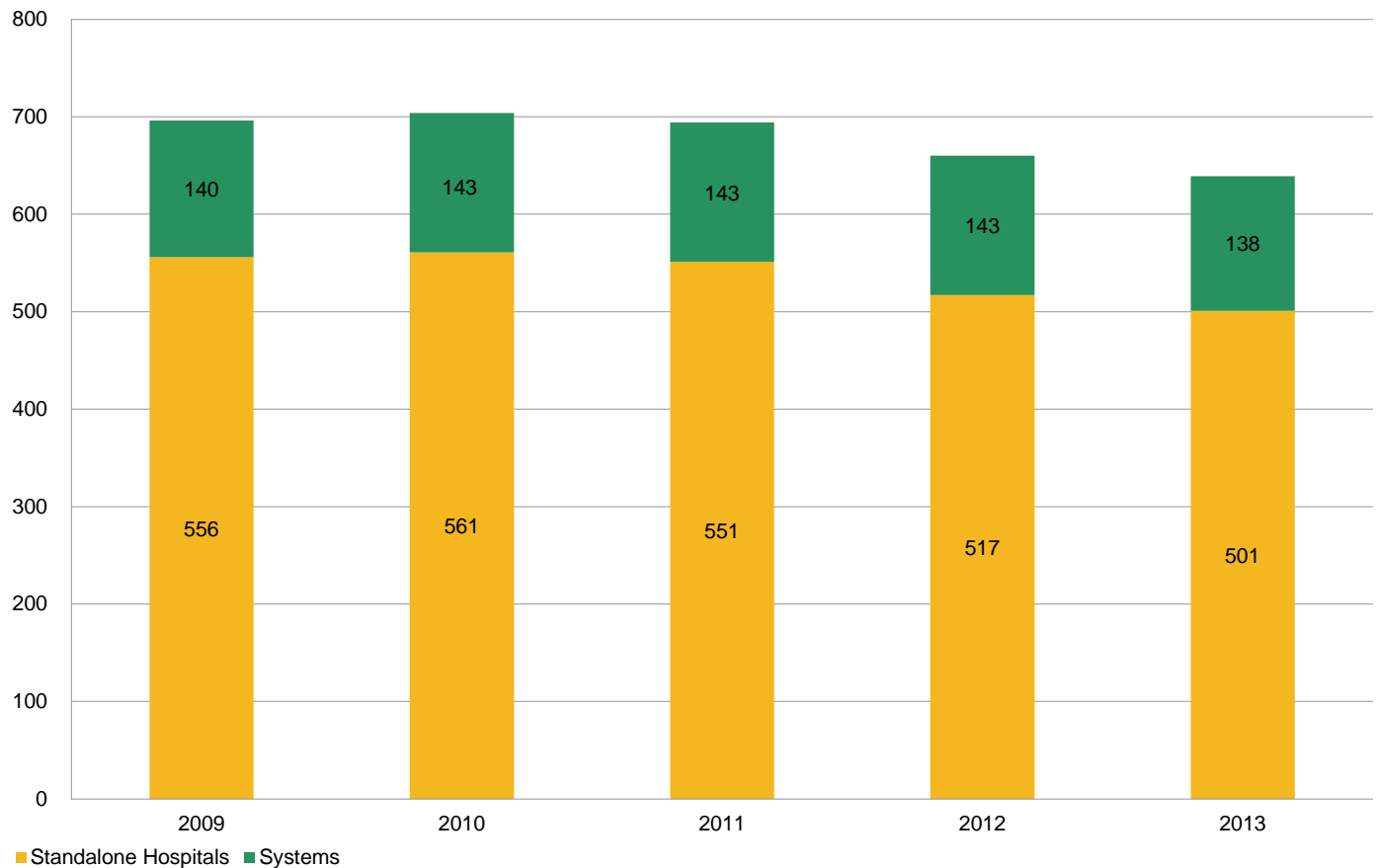
NOT-FOR-PROFIT HEALTHCARE INDUSTRY TRENDS

Industry Consolidation

The Credit Markets Now Have Fewer Hospital Organizations to Follow

The Number of Discreet Healthcare Organizations is Declining

Systems and Standalone Facilities Rated by S&P



Source Standard & Poor's Corporation, "2014 Standalone Medians" (2013 data, published August 14, 2014), "2014 System Medians" (2013 data, published August 13, 2013)



Many Are Also Pursuing Non-Traditional Partnerships

Regional Examples

- 2012: Partners Healthcare (MA) acquires Neighborhood Health Plan
 - Acquired managed care capabilities to build expertise in population health management
- 2013/Ongoing: UMass Memorial partners with Quest Diagnostics on lab businesses
 - Monetized asset at strong point in the valuation cycle while retaining strategic interest and investment opportunities
- 2015: Tenet Healthcare acquires USPI
 - For-profit operator of acute care facilities expands post-acute service compliment
- 2014-5: Yale-New Haven Health joins with Vanguard/Tenet to acquire certain Connecticut Hospitals
 - Strategic partnership created alternative capital source and shared risk platform for System expansion; Tenet dissolved receiving list of conditions from State officials



Healthcare Capital Cycle

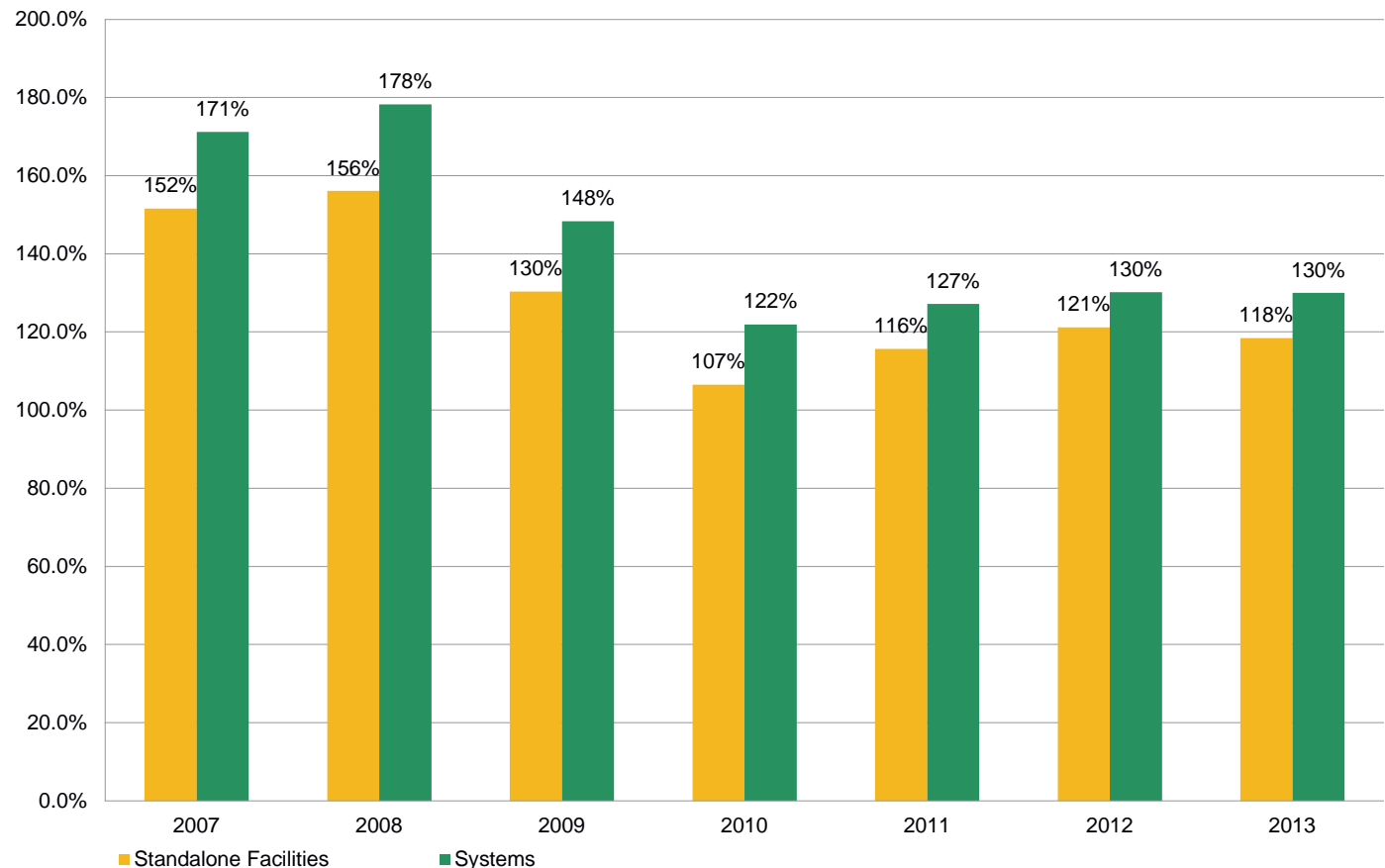
2015: Rebound in Capex?

- Facilities Investment
 - While the wave of replacement hospitals is past, major tower/infrastructure improvements are coming to the forefront
 - Invest in key service lines
 - Decompress existing footprint and move to all private rooms
- IT
 - Secure meaningful use dollars
 - Enhance interoperability of existing systems
 - Create necessary data analysis platform to position for risk-taking
 - Prepare for ICD-10

Capital Expenditures as a Percentage of Depreciation

Based Upon Audited Financials/Fiscal Year End

Axis Label



Notes

1. Source: Standard and Poor's Corporation, 2014 Standalone Medians (2013 data, published August 14, 2014), 2013 Standalone Medians (2012 data, published August 8, 2013) and System Medians (2013 data, published August 13, 2014).



MOODY'S

Rating Agency Backdrop

STANDARD
& POOR'S

Fitch Ratings

Outlook: Negative

"...the industry should settle into a period of very low, but stable growth that could ultimately lead us to change our outlook to stable"

Positive Factors:

- Improved balance sheets; benefits of M&A; cost discipline; expanded coverage/reduced bad debts

Negative Factors:

- Transition to new payment model; inability to further reduce costs; costs from expanded physician employment; investments in IT

Outlook: Negative

"Outlook remains negative despite a glimmer of relief"

Positive Factors:

- Improved economic conditions
- Stronger balance sheets from robust investment markets
- Increased M&A activity led to stronger systems

Negative Factors:

- Weak operating trends from declining volumes
- Costs from technology installations and healthcare reform readiness

Outlook: Negative

"...outlook reflects the ongoing uncertainties ...however we expect the vast majority of rating actions and outlooks in 2015 to be affirmations and stable"

Positive Factors:

- Ongoing M&A trend; strong management and expense management; moderation of volume trends

Negative Factors:

- Pace of change; uncertainty over ACA implementation; pressure on profitability



- In 2006 Congress passed the Credit Rating Agency Reform Act requiring the SEC to establish regulations
- Dodd Frank bolstered SEC's enforcement which included specific focus on rating methodologies
 - Transparency
 - Consistency
 - Accuracy
- In response, both Moody's and Standard & Poor's Corporation have introduced rating scorecards into their healthcare methodologies

New Rating Methodologies

Moody's

- Moody's introduced the first healthcare scorecard in 2012
- Moody's conducts an analysis of recent financial statements, leading to an initial rating score; this is subsequently adjusted by an analysis of qualitative factors which drive to the final credit rating
- Moody's will provide the issuer with a copy of the financial analysis and resulting score, but not the qualitative assessment

S&P

- S&P has finalized a scorecard rating methodology for standalone hospitals (which includes networks of up to three hospitals), finalized December 2014
- This methodology entails a significantly more detailed spreadsheet, including multi-year financial analysis and a robust, detailed assessment of an organization's qualitative factors

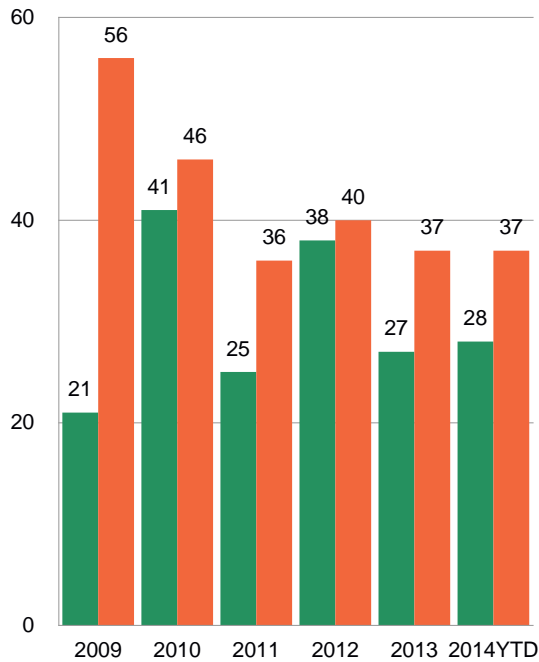
Fitch

- Fitch has indicated that they do not expect to utilize a scorecard methodology



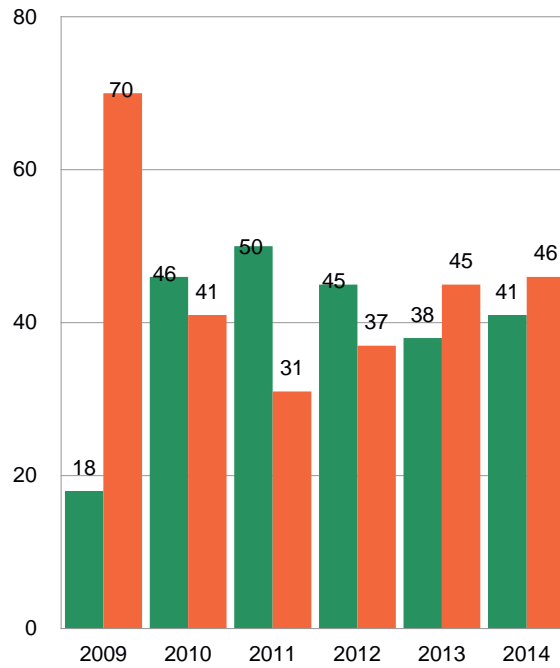
Healthcare Rating Trends by Agency

MOODY'S



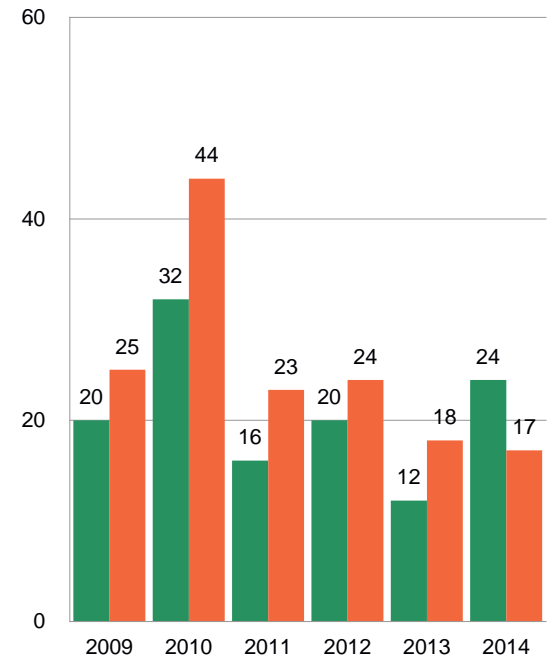
Upgrades Downgrades

STANDARD & POOR'S



Upgrades Downgrades

Fitch Ratings



Upgrades Downgrades

Notes

1. Moody's YTD 2014 upgrades/downgrades represents data through Q3. Q4 statistics have not yet been released.



- There were 19 S&P rating changes from January to March of 2015 due to the stand-alone hospital criteria revision
 - 13 upgrades
 - 6 downgrades

NOT-FOR-PROFIT HEALTHCARE INDUSTRY TRENDS

S&P Rating Changes Attributable to New Criteria

Healthcare Rating Actions Due to New Criteria

Hospitals	State	Old Rating	Current Rating	Current Outlook
Upgrades				
Bellin Health	WI	A	A+	Stable
Children's Hospital of Chicago	IL	A	A+	Stable
Citrus Valley Health Partners*	CA	BBB-	A-	Stable
Community Medical Centers*	CA	BBB	A-	Stable
Hendrick Health System	TX	A-	A	Stable
Highland Hospital of Rochester	NY	A-	A	Stable
Holy Name Medical Center	NJ	BBB-	BBB	Stable
Holy Redeemer Health System	PA	BBB-	BBB+	Stable
Martin Memorial Medical Center	FL	BBB	BBB+	Stable
Memorial Health System*	IL	A+	AA-	Stable
Queen's Health System	HI	A+	AA-	Stable
Renown Regional Medical Center	NV	A-	A	Stable
Silver Cross Hospital	IL	BBB-	BBB	Stable
Downgrades				
Crittenton Hospital Medical Center*	MI	BBB+	BBB	Stable
Kershaw Health*	SC	BBB-	BB	Stable
Medical Center of Central Georgia	GA	AA	AA-	Stable
Mission Regional Medical Center	TX	BBB	BBB-	Stable
Northern Inyo County Local Hospital District	CA	BB+	BB	Stable
Russell Hospital Corp	AL	BB+	BB-	Stable

Notes

1. Asterisk indicates rating change due to both credit specific trends and the stand-alone hospital criteria revision.



Healthcare Debt Activity in 2015

Rates, Credit and Pent-up Demand Have Resulted in Growing Volumes

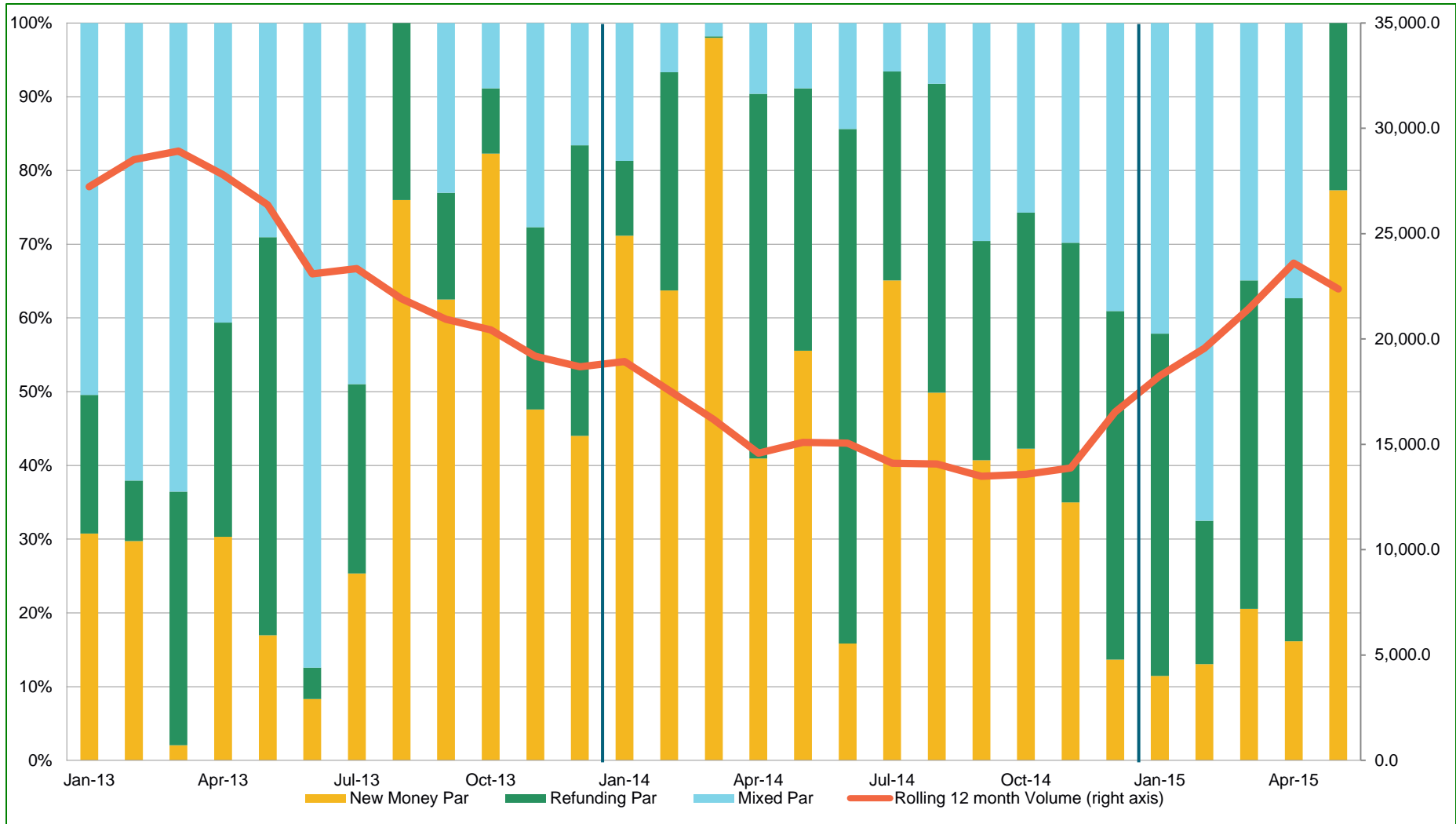
2015 Commentary

- \$11.7 billion publicly-issued healthcare debt has been issued through mid-May in 2015
 - This compares to \$16.5 billion issued in all of 2014
- Of this amount, 81% of transaction principal has included some amount of refunding
 - In 2014, this figure was 58%
- Reasons for heightened market activity
 - Low interest rates and opportunities to capture interest rate savings
 - Stabilized issuer profiles versus 2013/2014
 - Improved operating performance
 - Competed and integrated affiliations
 - Pent-up capital demand
 - Credit consolidation
 - Capital structure refinements



Issuance Volume

After Declining in 2014, Healthcare Issuance Has Rebounded in 2015



Notes

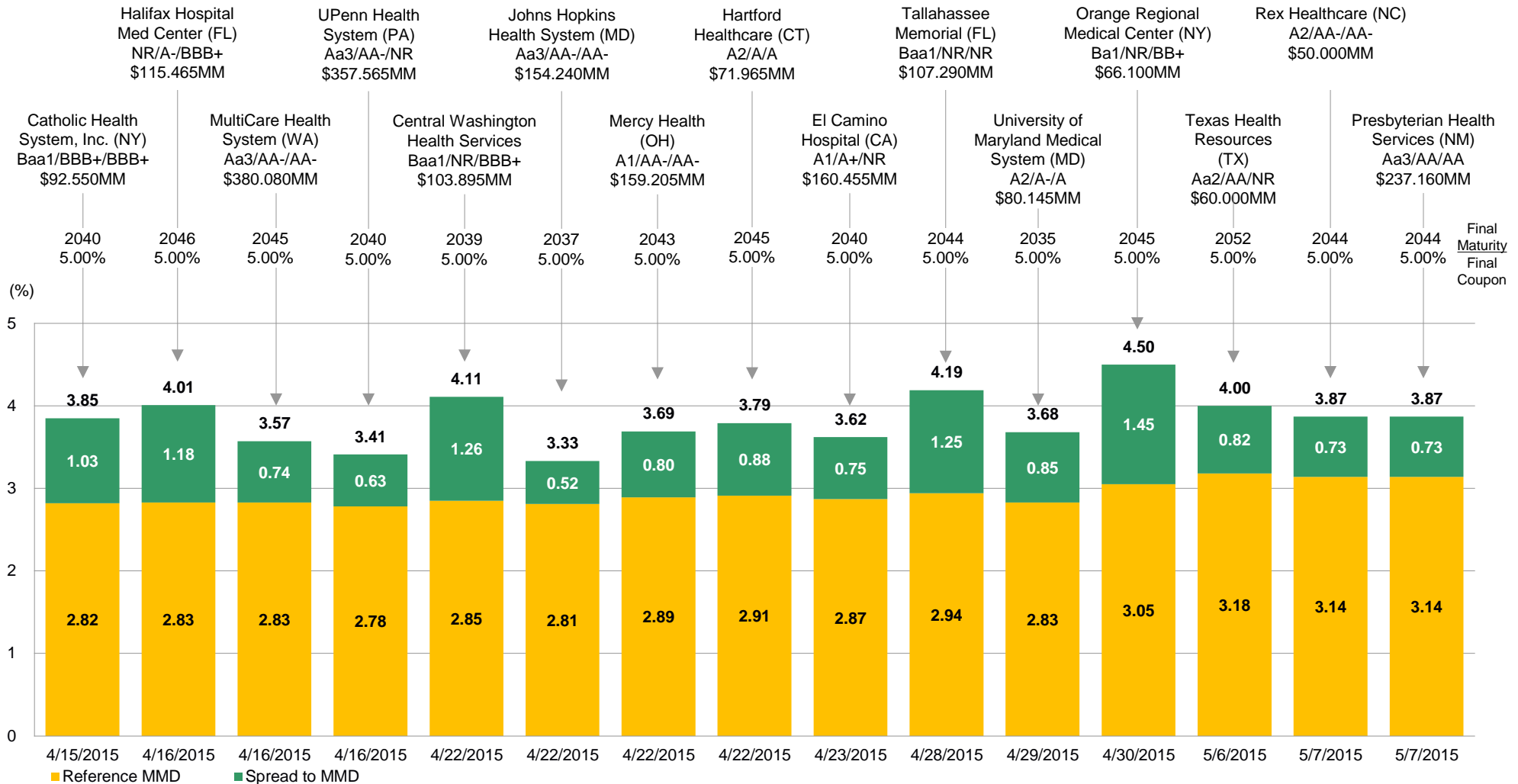
1. Source: Securities Data Corporation.



NOT-FOR-PROFIT HEALTHCARE INDUSTRY TRENDS

Recent Fixed Rate Tax-Exempt Healthcare Transactions

Pricing of Recent Healthcare Transactions



Source Thomson Municipal Market Monitor. Reference MMD is based off of the final maturity of each issuance

Appendix A

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