



# Bond Market & Credit Ratings Overview

Bill Mack – Morgan Stanley

Ryan Barrow - Office of Financial Management

# Prior Meeting Summary

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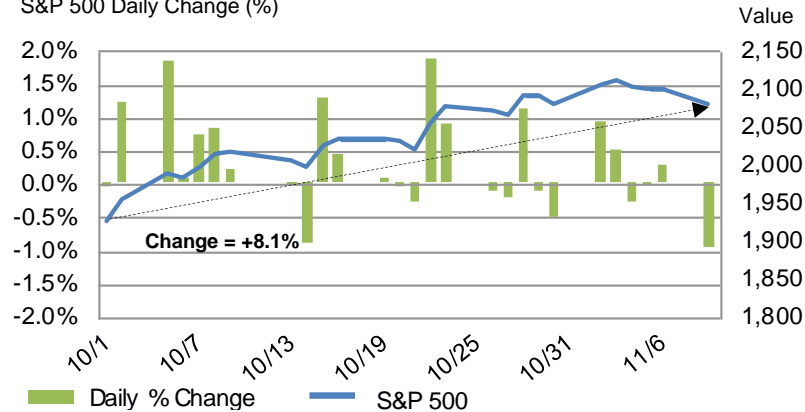
- Discussion on Pension Obligation Bonds
  - What they are (Borrowing vs. Annual payments)
  - Risk & Benefits
  - Marketing and Funding (Structured approach over time)
  
- Rating Agency View of Kentucky's Pension Funding
  - The most important credit factor facing the Commonwealth
  
- Rating Agency Publications on POBs
  - At best, neutral or negative without a comprehensive plan



# Market Overview

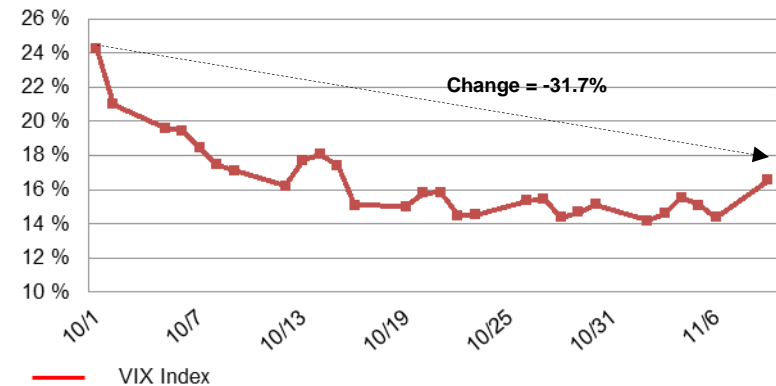
## Equities are Trending Higher Again

S&P 500 Daily Change (%)



## Volatility Has Moderated

VIX Volatility Index



## Market Indicators

	10/01	11/09	% Change
Dow Jones	16,272	17,730	9.00%
S&P 500	1,923	2,078	8.10%
Oil	\$44.74	\$43.87	-1.90%
Gold	\$1,114.20	\$1,088.10	-2.30%
\$/Euro	\$4.00	\$1.08	-4.00%

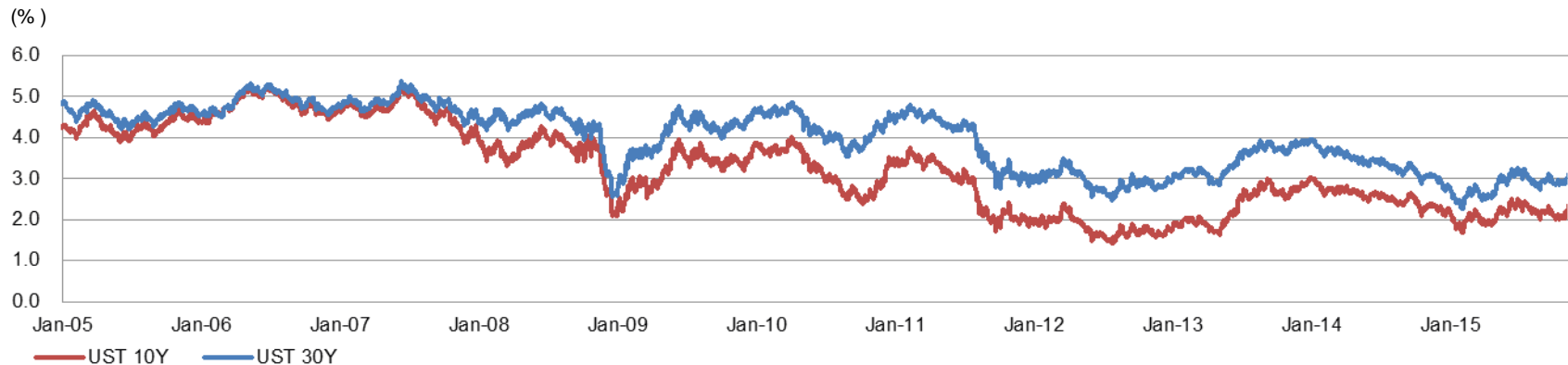
- US equity markets have trended higher over the last month
  - The Dow Jones and S&P 500 gained 8-9% in the month of October
- We have continued to see global volatility, but investors have shown a renewed risk appetite



# Bond Market

## UST 10Y and 30Y Yields

As of November 9, 2015



- Taxable borrowing rates remain near all-time lows
- Improving economic indicators, including November's stronger than expected employment number, continue to increase the likelihood of the Federal Reserve increasing interest rates in December 2015

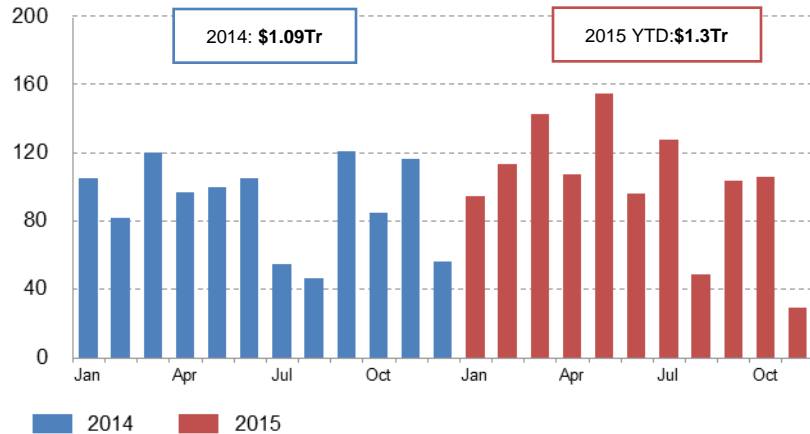
UST	Current	High	Low
10-Year	2.33%	5.25%	1.40%
30-Year	2.25%	5.35%	3.09%



# Bond Market

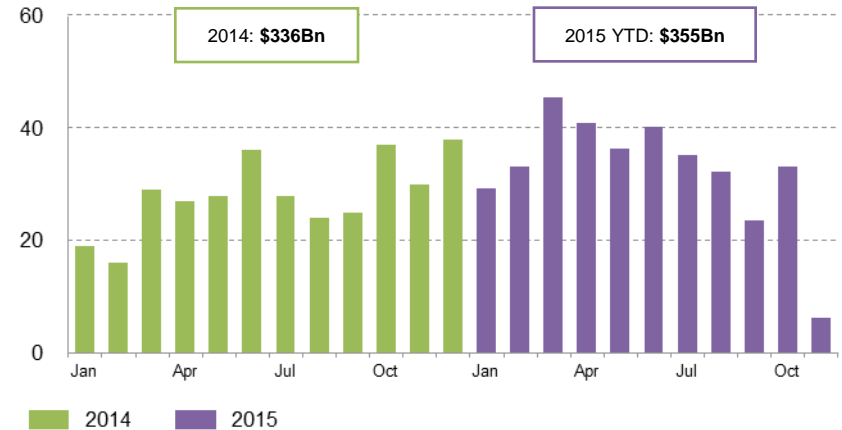
## US Investment Grade Issuance (\$BN)

As of November 9, 2015



## US Municipal Issuance (\$BN)

As of November 9, 2015



- As rates have remained low, we have seen outsized supply in both the corporate investment grade bond market as well as the municipal bond market
- Municipal new issuance volume is up 28% year-over-year while US investment grade issuance is up 12%



# Credit Ratings

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## Rating Agencies

- Moody's Investors Service (Moody's), Standard & Poor's (S&P), Fitch Ratings (Fitch), Kroll Bond Rating Agency (Kroll)

“A municipal credit rating is the grade an independent rating agency assigns to indicate the risk of default.”



# Credit Ratings, Investment Grade

Moody's	S&P	Fitch	Description
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2*	AA	AA	
Aa3**	AA-	AA-*	
A1	A+*	A+**	Upper medium grade
A2	A**	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	



\* Commonwealth of Kentucky implied GO rating

\*\* Commonwealth of Kentucky lease appropriation rating

# Credit Ratings, General Fund

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- GO (General Obligation) Implied                      Aa2/A+/AA-
- Lease Appropriation                                      Aa3/A/A+
  
- Action taken from rating agencies over last 2 years:
  - June 2014: Moody’s revised Kentucky GO Implied Aa2 rating outlook from negative to stable
  - September 2015: S&P downgraded Kentucky GO Implied rating from AA- with a negative outlook to A+ with a stable outlook primarily to “chronic underfunding” of pensions





# Credit Ratings, Benchmarking

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- Ranked 42<sup>nd</sup>
  - Net Tax-Supported Debt (“NTSD”) as % of State Gross Domestic Product (GDP)
  
- Ranked 40<sup>th</sup>
  - NTSD Per Capita
  
- Ranked 42<sup>nd</sup>
  - NTSD as % of Personal Income



# Credit Ratings, Conclusion

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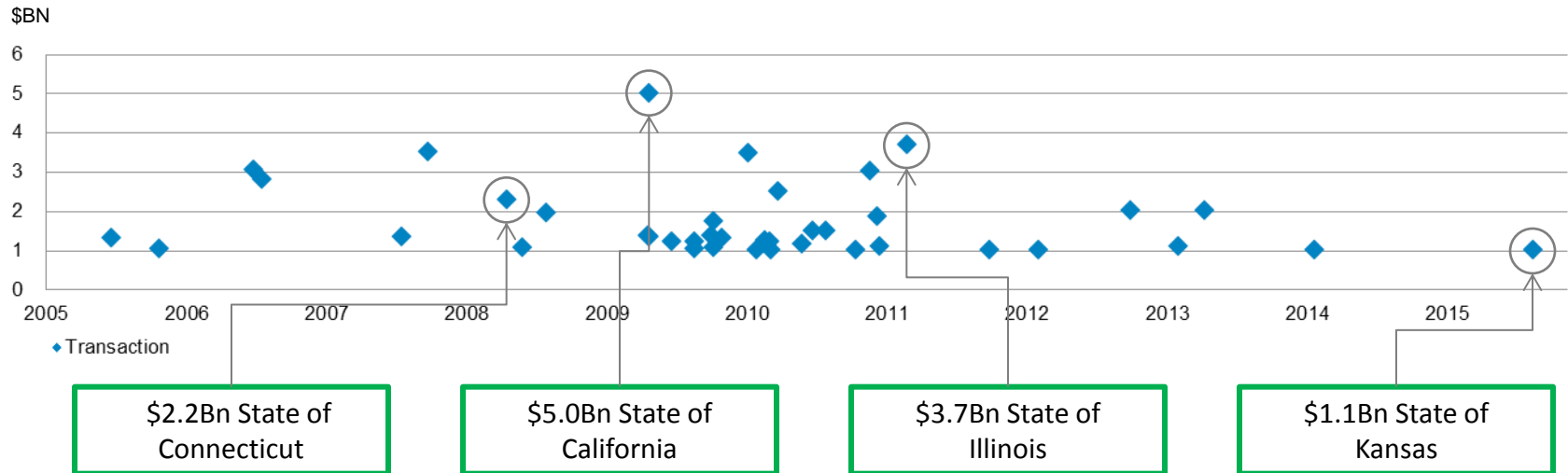
1. Holding other variables constant ratings correlate to the cost of capital. Generally the higher the rating, the lower the interest cost to taxpayers.
2. Ratings are an assessment, by an independent agency, of the financial condition of a municipal government.



# Large Municipal Taxable Transactions

## Municipal Taxable Transactions >\$1 Billion

January 1, 2005 to Present



- Over the past 10 years, there have been 42 taxable municipal transactions with par amounts greater than \$1 billion
- While these transactions are not particularly common, they are certainly not unprecedented, especially for state-level issuers



# Kansas Pension Bonds

- In 2015, the Kansas State Legislature authorized the issuance of \$1 billion of pension obligation revenue bonds
- State of Kansas, KDFA
- Taxable Revenue Bonds
- \$1,005,180,000
- Moody's: Aa3 (Stable)
- S&P: AA- (Negative)
- August 11-12, 2015

## NEW ISSUE BOOK-ENTRIES ONLY

Ratings: Moody's: "Aa3" S&P: "AA-"  
See "BOND RATINGS" herein.

*In the opinion of Gilmore & Bell, P.C., Bond Counsel to the Authority, the interest on the Bonds is included in gross income for federal income tax purposes. Pursuant to K.S.A. 74-5908 and the Bond Resolution, the Authority has declared that the interest on the Bonds is subject to all Kansas state, county and municipal taxes. See the caption "TAX MATTERS."*



\$1,005,180,000  
KANSAS DEVELOPMENT FINANCE AUTHORITY  
Revenue Bonds  
(State of Kansas—KPERs)  
Series 2015H (Taxable)

Dated: Date of Delivery

Due: April 15, as set forth on the inside cover page hereof

The Series 2015H Bonds referenced above (the "Bonds") are being issued by the Kansas Development Finance Authority (the "Authority") pursuant to Bond Resolution No. 334, adopted by the Authority on July 23, 2015 (the "Bond Resolution"). The principal of, redemption premium, if any, and interest on the Bonds will be payable in lawful money of the United States of America by check or draft of the Treasurer of the State of Kansas, as Paying Agent and Bond Registrar, to the registered owners thereof whose names are on the registration books of the Bond Registrar as of the fifteenth day (whether or not a business day) of the calendar month next preceding each interest payment date.

Interest due with respect to the Bonds is payable semiannually on April 15 and October 15 of each year, to and including the date of maturity or redemption, whichever is earlier, commencing on October 15, 2015. The Bonds will consist of fully registered bonds in the denomination of \$5,000 or any authorized integral multiple thereof, becoming due on April 15 of each year as set forth on the inside cover hereof.

## MATURITY SCHEDULE—SEE INSIDE COVER PAGE

The principal of, redemption premium, if any, and interest on the Bonds are payable solely and only from the revenues received and the investment earnings thereon (the "Revenues") from the State of Kansas Department of Administration ("DOA") pursuant to a Pledge Agreement dated as of August 1, 2015 (the "Pledge Agreement") described herein between the Authority and DOA. The Bonds will be secured by a pledge of the Trust Estate described in the Bond Resolution. The availability of Revenues, as described herein, under the Pledge Agreement is subject to annual appropriation by act of the Legislature.

The Bonds are subject to redemption prior to maturity, as described herein. See the caption "THE BONDS—Redemption" herein.

DOA is obligated under the Pledge Agreement to pay Revenues to the Authority, which in the aggregate will be sufficient to pay the principal of, redemption premium, if any, and interest on the Bonds. DOA'S OBLIGATIONS TO PAY REVENUES AND ANY OTHER OBLIGATION OF DOA UNDER THE PLEDGE AGREEMENT IS SUBJECT TO AND DEPENDENT UPON ANNUAL APPROPRIATIONS BEING MADE BY THE LEGISLATURE FOR SUCH PURPOSE. See the caption "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS" herein.

THE BONDS ARE SPECIAL, LIMITED OBLIGATIONS OF THE AUTHORITY PAYABLE SOLELY FROM THE TRUST ESTATE. DOA'S OBLIGATION TO PAY REVENUES DOES NOT CONSTITUTE A DEBT OR LIABILITY OF THE STATE WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY LIMITATION. IN NO EVENT SHALL THE BONDS CONSTITUTE AN INDEBTEDNESS OF THE STATE OF KANSAS OR AN INDEBTEDNESS FOR WHICH THE FAITH AND CREDIT OR TAXING POWERS OF THE STATE OF KANSAS ARE PLEDGED. THE BONDS DO NOT CONSTITUTE, NOR SHALL THEY BE CONSTRUED TO BE, A GENERAL OBLIGATION OF THE STATE OF KANSAS, DOA, THE AUTHORITY OR ANY OTHER GOVERNMENTAL ENTITY. THE AUTHORITY HAS NO TAXING POWER.

This cover page contains information for quick reference only. It is not a summary of the transaction. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

The Bonds are offered when, as and if issued and delivered by the Authority subject to the receipt of the approving legal opinion of Gilmore & Bell, P.C., Bond Counsel to the Authority. Certain legal matters will be passed upon for the Authority by its counsel and disclosure counsel, Kutak Rock LLP, and for DOA by its general counsel and by its disclosure counsel, Bracewell & Giuliani LLP, and for the Underwriters by their counsel, Bryan Cave LLP. It is expected that delivery of the Bonds in definitive form will be made through the facilities of The Depository Trust Company in New York, New York, on or about August 20, 2015.

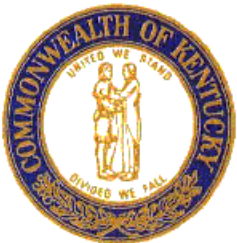
BofA Merrill Lynch  
Citigroup

Hutchinson, Shockey, Erley & Co.

Piper Jaffray

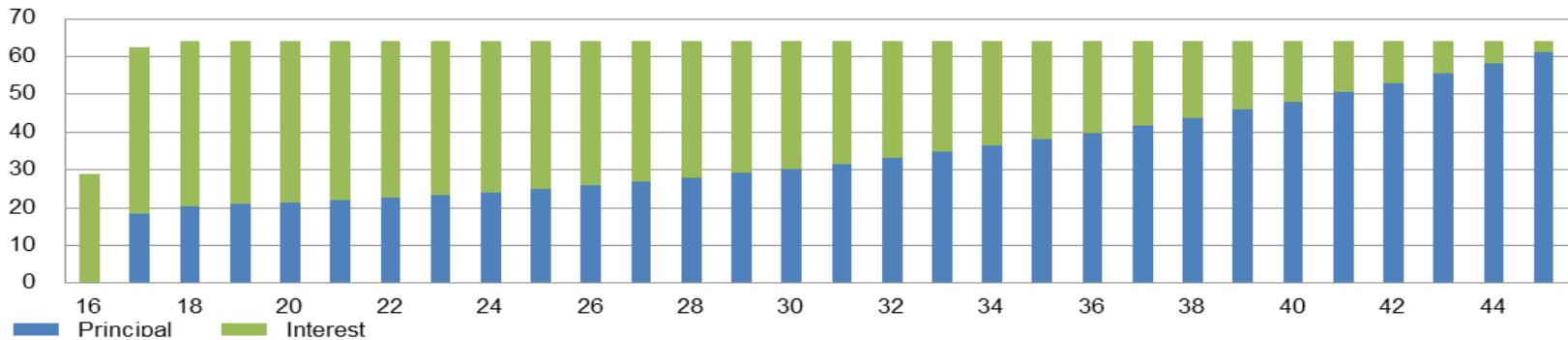
Wells Fargo Securities  
Stifel

The date of this Official Statement is August 12, 2015.



# Kansas Pension Bonds (cont.)

KFDA Series 2015H Debt Service Schedule (\$MM)



“The state has reduced pension contributions the next few years, an indication that these bonds are being used to some extent as budgetary relief”

– Moody’s, July 30, 2015

- Credit – Aa3/AA (Moody’s and S&P)
  - The Bonds are secured by funds appropriated annually by the State Legislature
- Structure
  - The State structured the financing with a 2045 final maturity and level debt service payments of \$64 million in each year
  - The financing had an all-in borrowing cost of 4.70%





Thank You

# Morgan Stanley Bio and Disclaimers

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- **Bill Mack, Executive Director**, has served as Morgan Stanley's Banking Coverage Officer for the past ten years. In this role, Mr. Mack has led numerous underwritings for all of the Commonwealth's major credits. Mr. Mack received his J.D. from Loyola University Chicago and B.A. from the University of St. Thomas in St. Paul, Minnesota.

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