

NCSHA 2018 Annual Conference & Showplace

Presented by: Mina Choo
RBC Capital Markets
October 15, 2018



RBC Capital Markets

Disclaimer

RBC Capital Markets, LLC (“RBC CM”) is providing the information contained in this document for discussion purposes only and not in connection with RBC CM serving as Underwriter, Investment Banker, municipal advisor, financial advisor or fiduciary to a financial transaction participant or any other person or entity. RBC CM will not have any duties or liability to any person or entity in connection with the information being provided herein. The information provided is not intended to be and should not be construed as “advice” within the meaning of Section 15B of the Securities Exchange Act of 1934. The recipient should consult with its own legal, accounting, tax, financial and other advisors, as applicable, to the extent it deems appropriate.

This presentation was prepared exclusively for the benefit of and internal use by the recipient. This presentation is confidential and proprietary to RBC Capital Markets, LLC (“RBC CM”) and may not be disclosed, reproduced, distributed or used for any other purpose by the recipient without RBCCM’s express written consent.

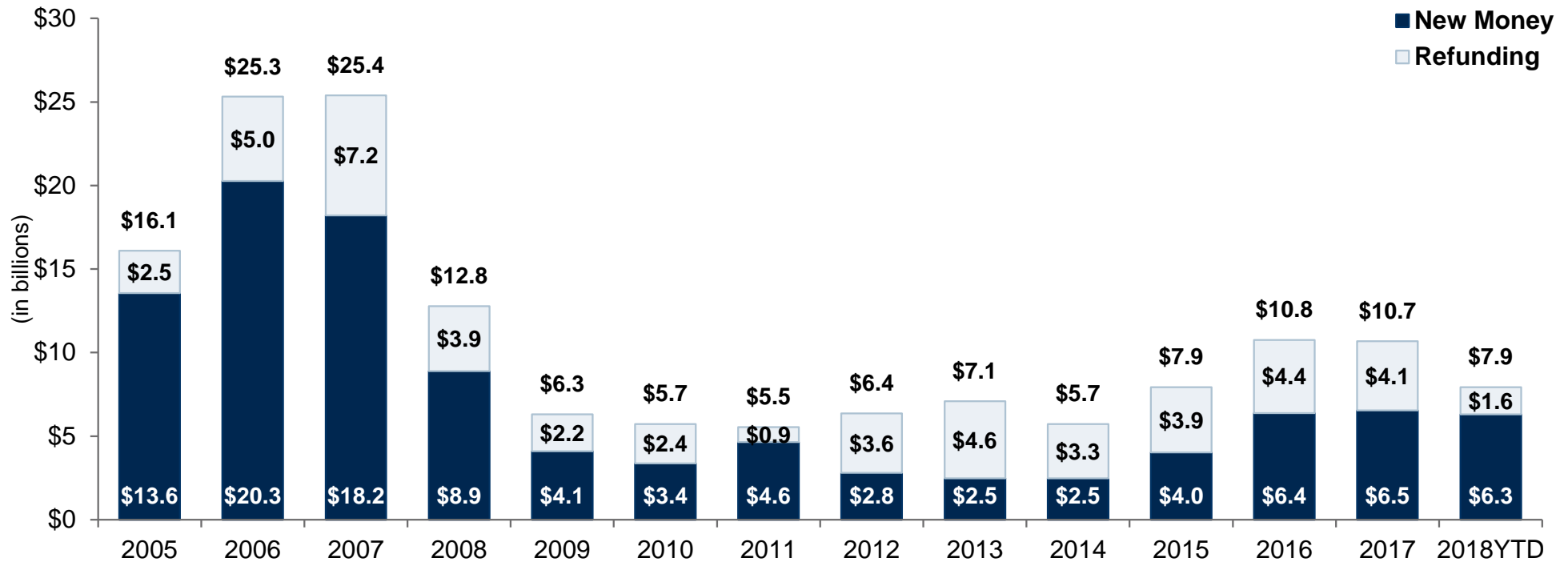
By acceptance of these materials, and notwithstanding any other express or implied agreement, arrangement, or understanding to the contrary, RBC CM, its affiliates and the recipient agree that the recipient (and its employees, representatives, and other agents) may disclose to any and all persons, without limitation of any kind from the commencement of discussions, the tax treatment, structure or strategy of the transaction and any fact that may be relevant to understanding such treatment, structure or strategy, and all materials of any kind (including opinions or other tax analyses) that are provided to the recipient relating to such tax treatment, structure, or strategy.

The information and any analyses contained in this presentation are taken from, or based upon, information obtained from the recipient or from publicly available sources, the completeness and accuracy of which has not been independently verified, and cannot be assured by RBC CM. The information and any analyses in these materials reflect prevailing conditions and RBC CM’s views as of this date, all of which are subject to change.

To the extent projections and financial analyses are set forth herein, they may be based on estimated financial performance prepared by or in consultation with the recipient and are intended only to suggest reasonable ranges of results. The printed presentation is incomplete without reference to the oral presentation or other written materials that supplement it.

IRS Circular 230 Disclosure: RBC CM and its affiliates do not provide tax advice and nothing contained herein should be construed as tax advice. Any discussion of U.S. tax matters contained herein (including any attachments) (i) was not intended or written to be used, and cannot be used, by you for the purpose of avoiding tax penalties; and (ii) was written in connection with the promotion or marketing of the matters addressed herein. Accordingly, you should seek advice based upon your particular circumstances from an independent tax advisor.

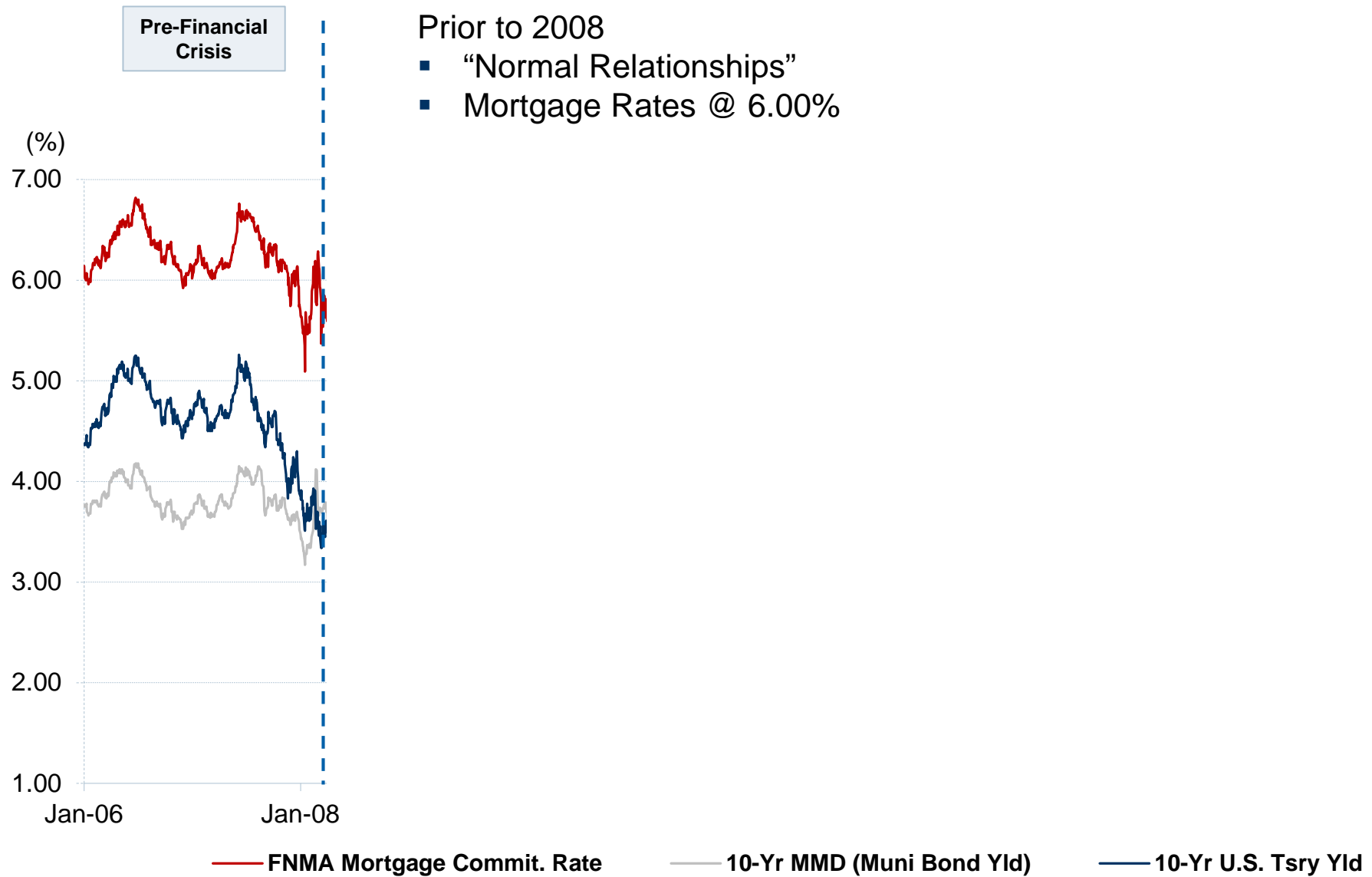
Volume of Single Family Housing Bonds Issued (as of October 1, 2018)



- New Money Volume is up; Refundings down (and will be down)
- For some states, private activity cap will be a challenge

Source: Thompson Financial; New Money figures exclude mixed use financings

Historical FNMA Mortgage Rates, 10-Yr Treasury, 10-Yr MMD

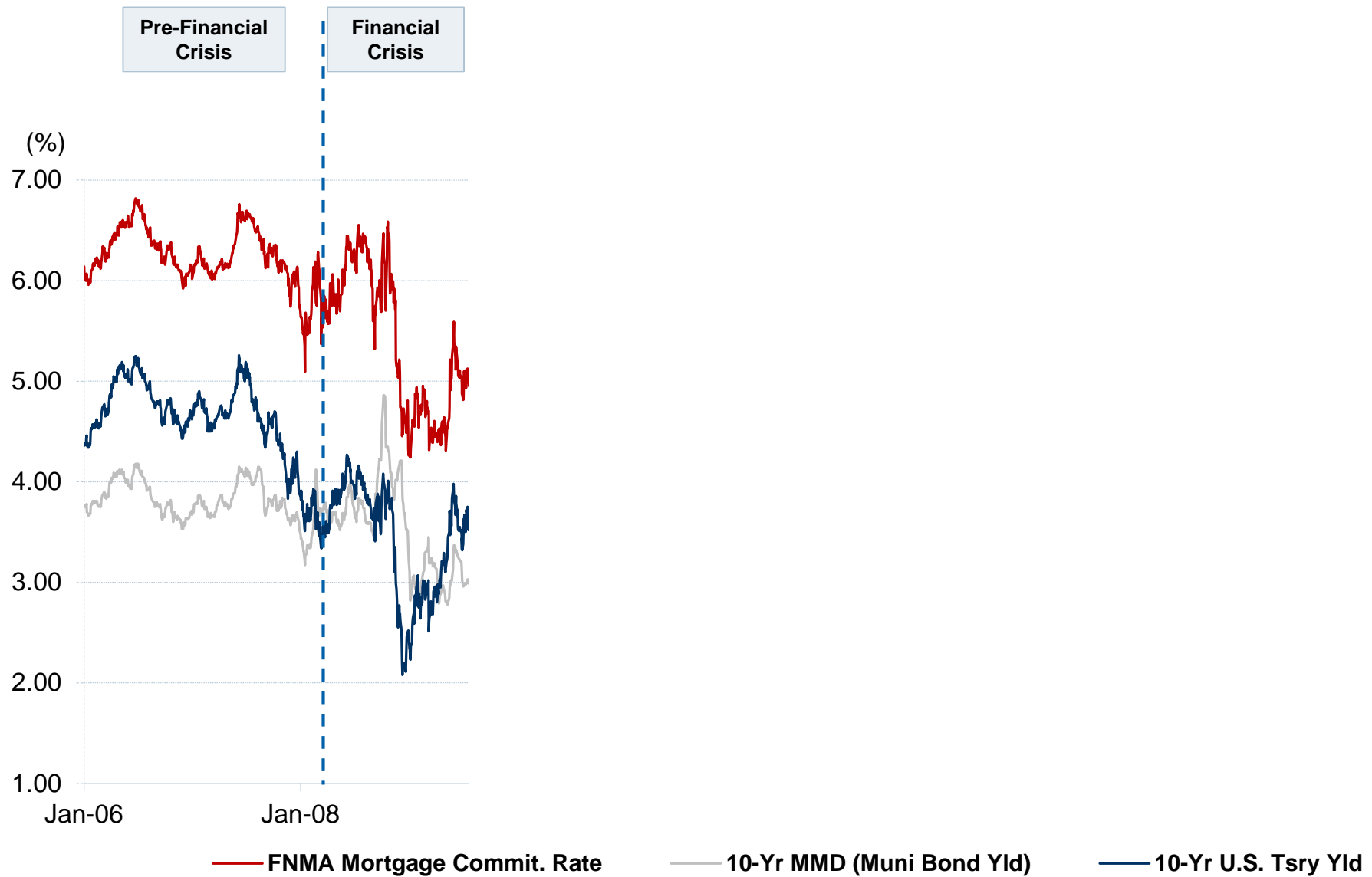


Source: Bloomberg



RBC Capital Markets

Historical FNMA Mortgage Rates, 10-Yr Treasury, 10-Yr MMD

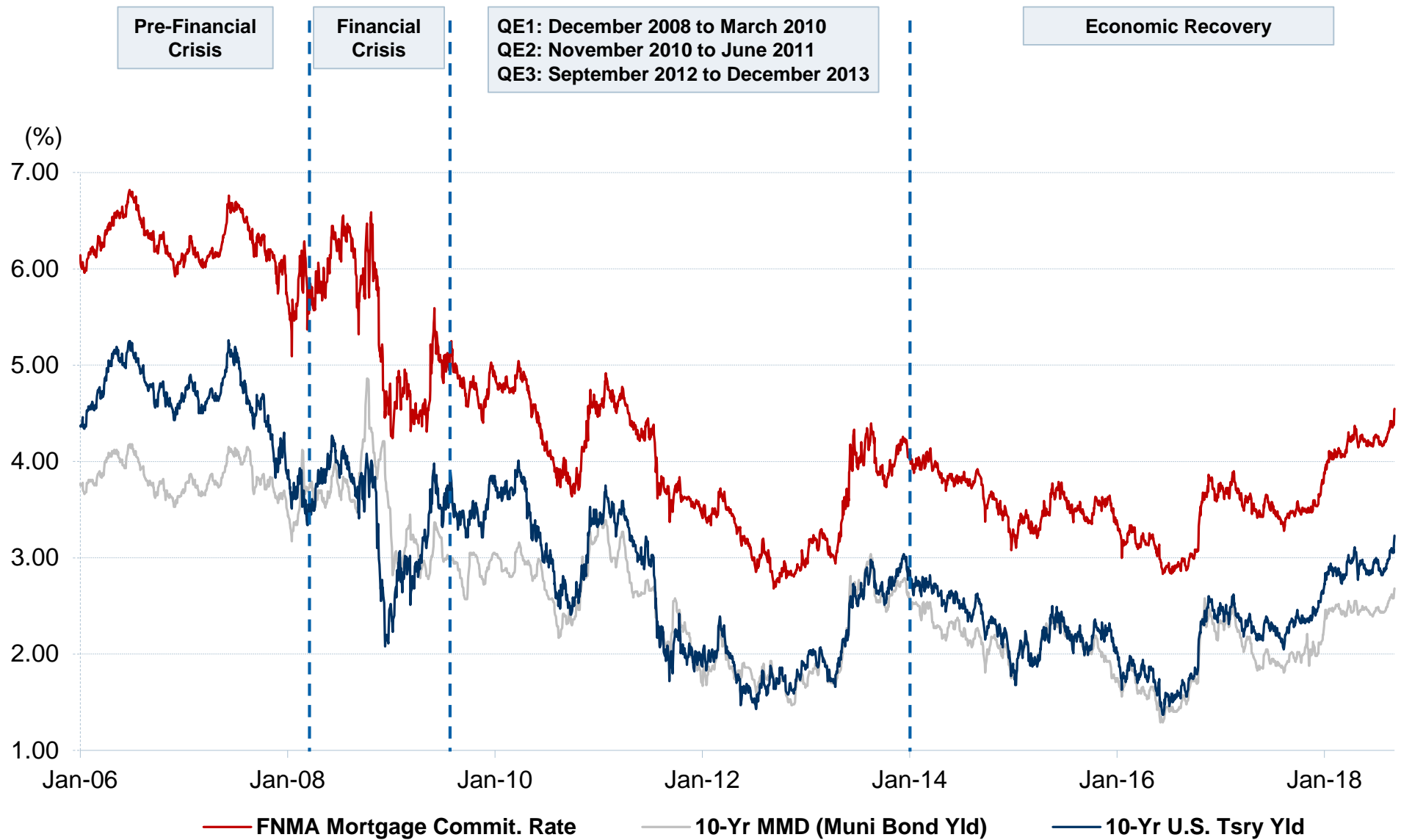


Source: Bloomberg



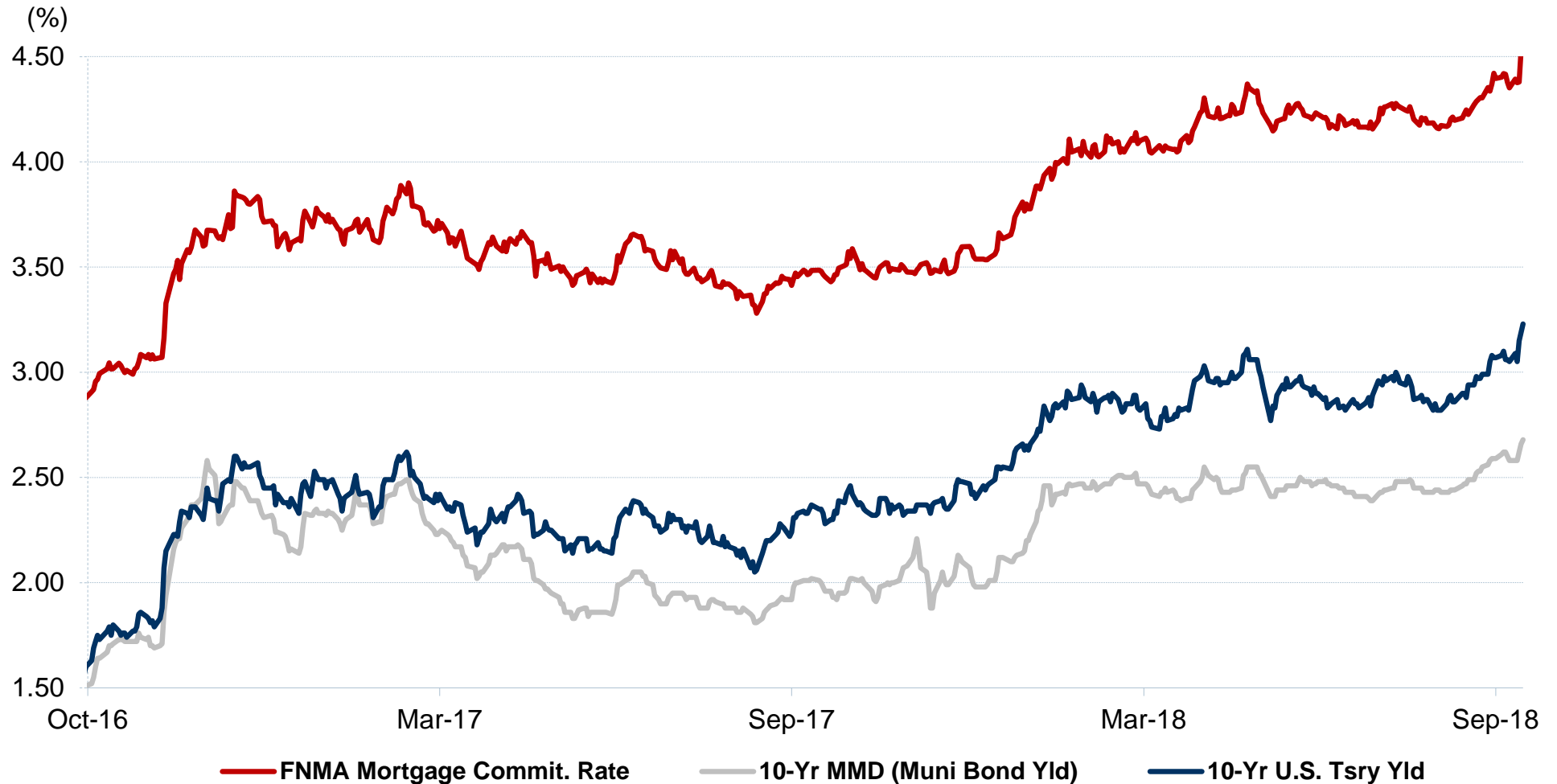
RBC Capital Markets

Historical FNMA Mortgage Rates, 10-Yr Treasury, 10-Yr MMD



Source: Bloomberg

Historical Rates since Election (October 1, 2016)



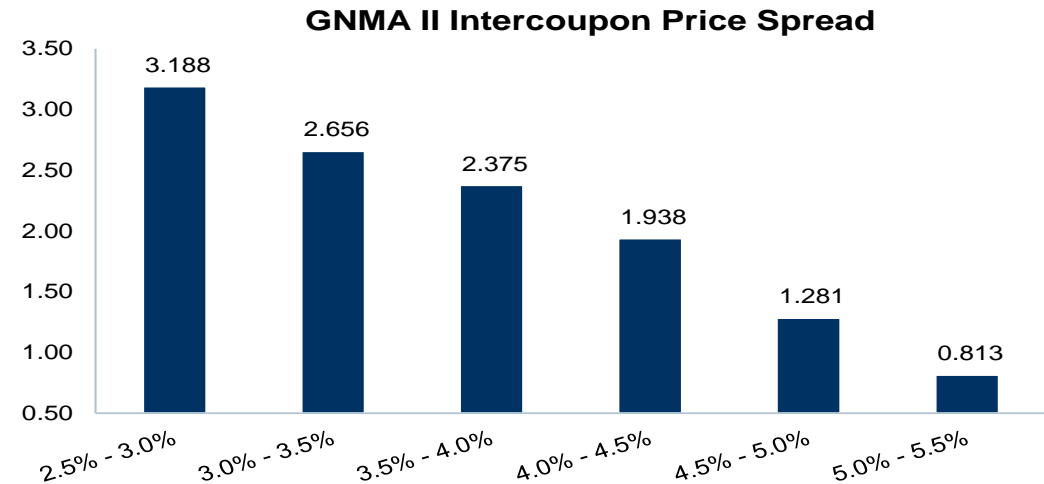
Fed Tapering

- Slow Increase in Rates
- Normalization of Relationships

Source: Bloomberg

TBA Pricing – GNMA II (as of October 8, 2018)

Mortgage Rate	MBS Coupon	GNMA II Price	Intercoupon Spread
3.0%	2.50%	92.438	-
3.5%	3.00%	95.625	3.188
4.0%	3.50%	98.281	2.656
4.5%	4.00%	100.656	2.375
5.0%	4.50%	102.594	1.938
5.5%	5.00%	103.875	1.281
6.0%	5.50%	104.688	0.813

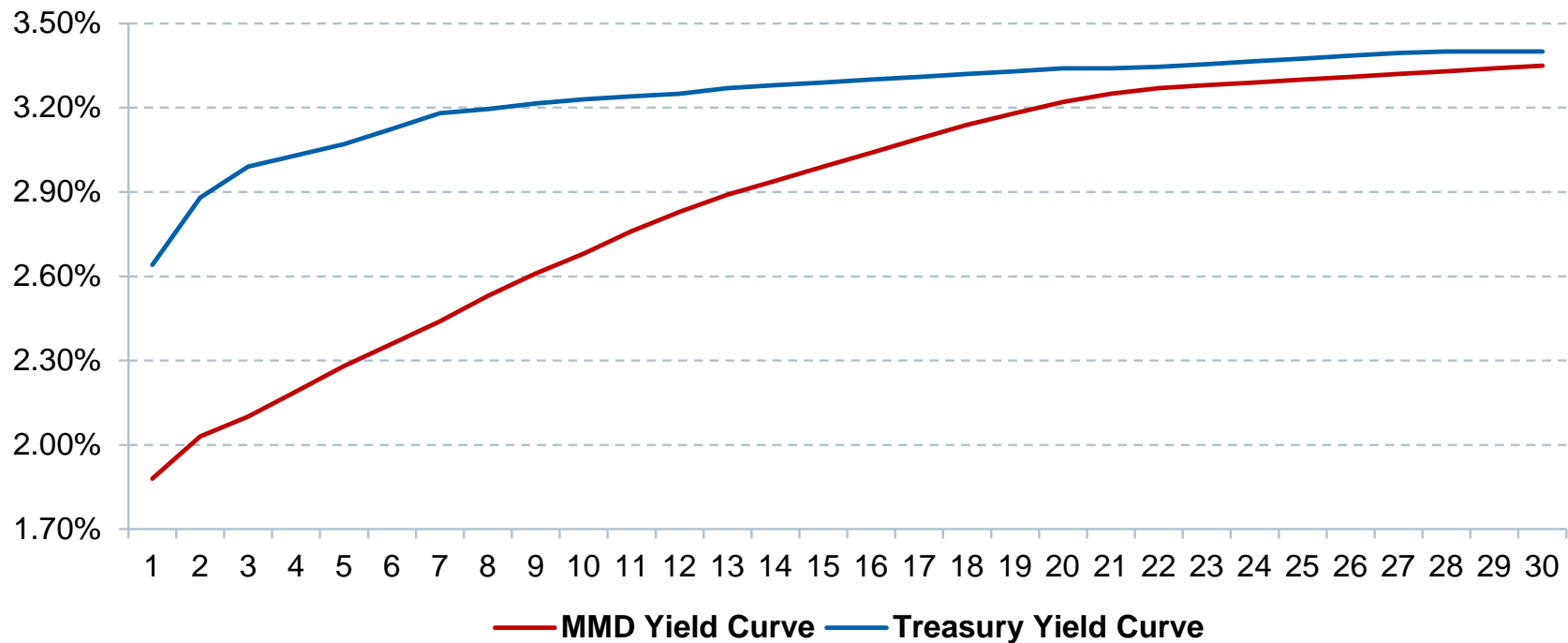


GNMA II TBA PRICING

- Diminishing Marginal Returns as Rates Get Higher
- No Longer Getting 105%+ Pricing to pay for Down Payment Assistance

Long Term Muni Market (as of October 5, 2018)

Municipal GO “AAA” MMD vs. U.S. Treasury



- Flattening of the Treasury Yield Curve (Inversion to signal a recession?)
- Treasury Yield Curve Much Flatter than MMD
- Less Negative Arbitrage (issuance of bonds prior to all loan originations)
- Return of Guaranteed Investment Contracts?
- Increased Variable Rate Debt with Swaps (Floating Rate Notes – FRN)

Summary of Recent Public Floating Rate Note (FRN) Pricings

Issuer	Sale Date	Par Amount	Index	Spread	Mandatory Redemption	Term
low a FA	04/03/2018	\$20,000,000	SIFMA	30bps	05/03/2021	3-Year
Pennsylvania HFA	05/23/2018	\$31,250,000	70% of 1-mo. Libor	60bps	06/01/2023	5-Year
Mass HFA	05/31/2018	\$15,000,000	70% of 1-mo. Libor	35bps	06/01/2021	3-Year
Minnesota HFA	06/07/2018	\$35,000,000	SIFMA	43bps	07/03/2023	5-Year
Pennsylvania HFA	08/15/2018	\$24,440,000	70% of 1-mo. Libor	57bps	10/01/2023	5-Year
Wyoming CDA	08/16/2018	\$20,000,000	SIFMA	32bps	09/01/2021	3-Year
low a FA	09/11/2018	\$15,000,000	70% of 1-mo. Libor	35bps	10/01/2021	3-Year
Washington SHFC	09/12/2018	\$30,000,000	SIFMA	55bps	10/01/2023	5-Year
Mass HFA	09/13/2018	\$15,000,000	70% of 1-mo. Libor	38bps	09/01/2021	3-Year

Floating Rate Note (Public)

- No Need for a Remarketing Agent
- No Need for a Bank to Provide Liquidity (No Counterparty Risk)

LIBOR

- Sunsets in 2021
- Secured Overnight Funding Rate (SOFR) as possible replacement
- New Documents Written to be Flexible to Switch Indices