



## Mortgage Revenue Bonds 101

January 16, 2019



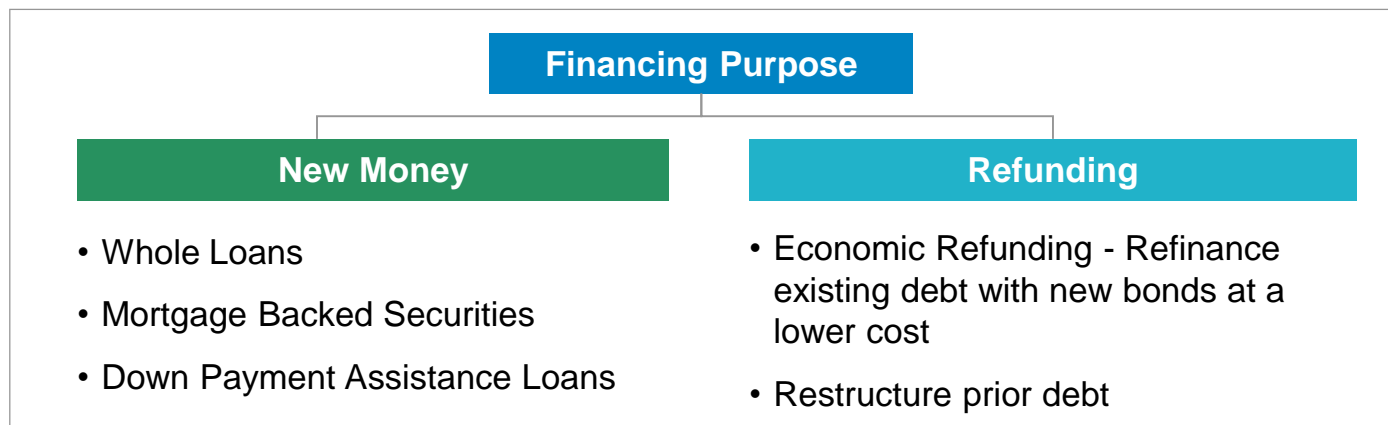
**A Borrower's decision to issue bonds, includes:**

- Borrowing amount
- Transaction costs
- Timing issues
- Market rates
  
- Bond Proceeds are used for new money and/or refunding purposes

# Traditional Mortgage Revenue Bond Issue

What Are Bond Proceeds Used For?

## Use of Bond Proceeds



## Sources of Funds

- Bond proceeds
- Issuer contributions

## Uses of Funds

- Purchase new loans (including DPA loans)
- Refunding outstanding bond
- Cost of issuance



## Types of Bonds

- Fixed rate
  - Serials
  - Terms
  - PACs
- Variable rate
  - Variable Rate Demand Bonds (“VRDB”)
  - Floating Rate Notes (“FRN”)

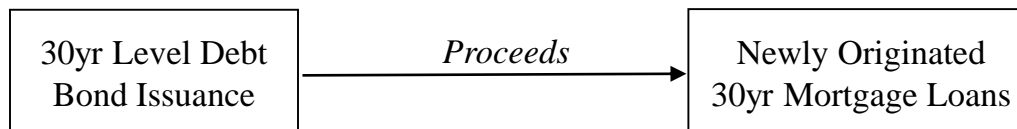
## Structuring Assumptions

- Underlying mortgages pay principal and interest monthly
- Bond debt service paid semi-annually
- Issuer retains significant flexibility with the application of mortgage prepayments which may be used to call bonds at par

Morgan Stanley

# Traditional Mortgage Revenue Bond Issue

- **Purpose**



- **Security for the Bonds** – Parity Bond Indenture

- ✓ Special limited revenue obligation secured by parity Bond Resolution
- ✓ The Bonds are secured equally and ratably by the pledges and covenants contained in the Indenture, including the pledge of scheduled amortization payments and certain other charges on Mortgage Loans acquired with Bond proceeds and Recoveries of Principal, and monies and securities in the funds and accounts established by the Bond Resolution (e.g. debt service reserve funds)

- **Ratings** – Based on Indenture

- **Redemption Features** – Par Call

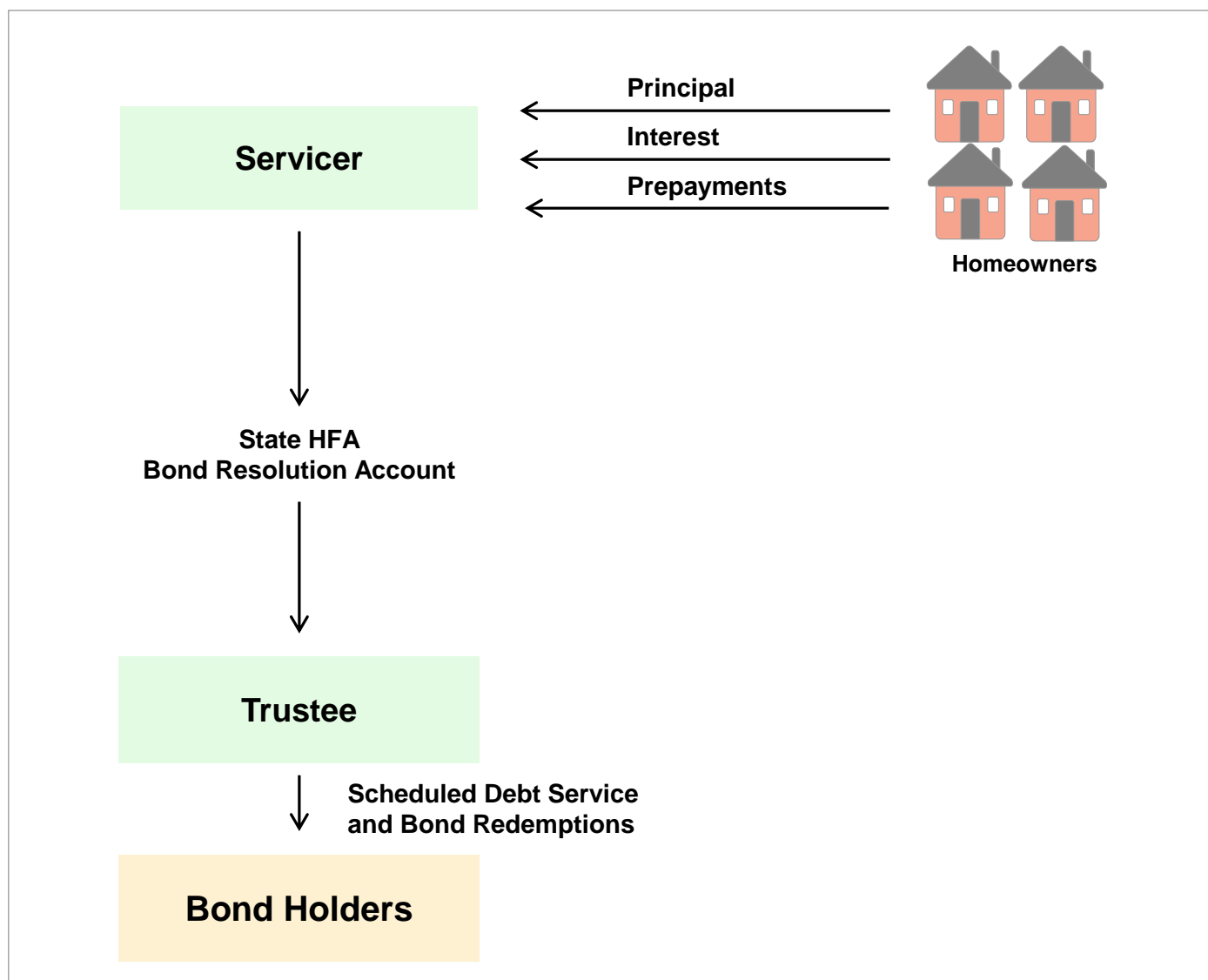
- ✓ Sinking Fund
- ✓ 10 year Optional Call
- ✓ Unexpended Proceeds
- ✓ Prepayments (In Series and Out of Series)
- ✓ Excess Revenues



### Reasons for Mortgage Prepayments:

- Sale of Home
- Refinancing
- Default

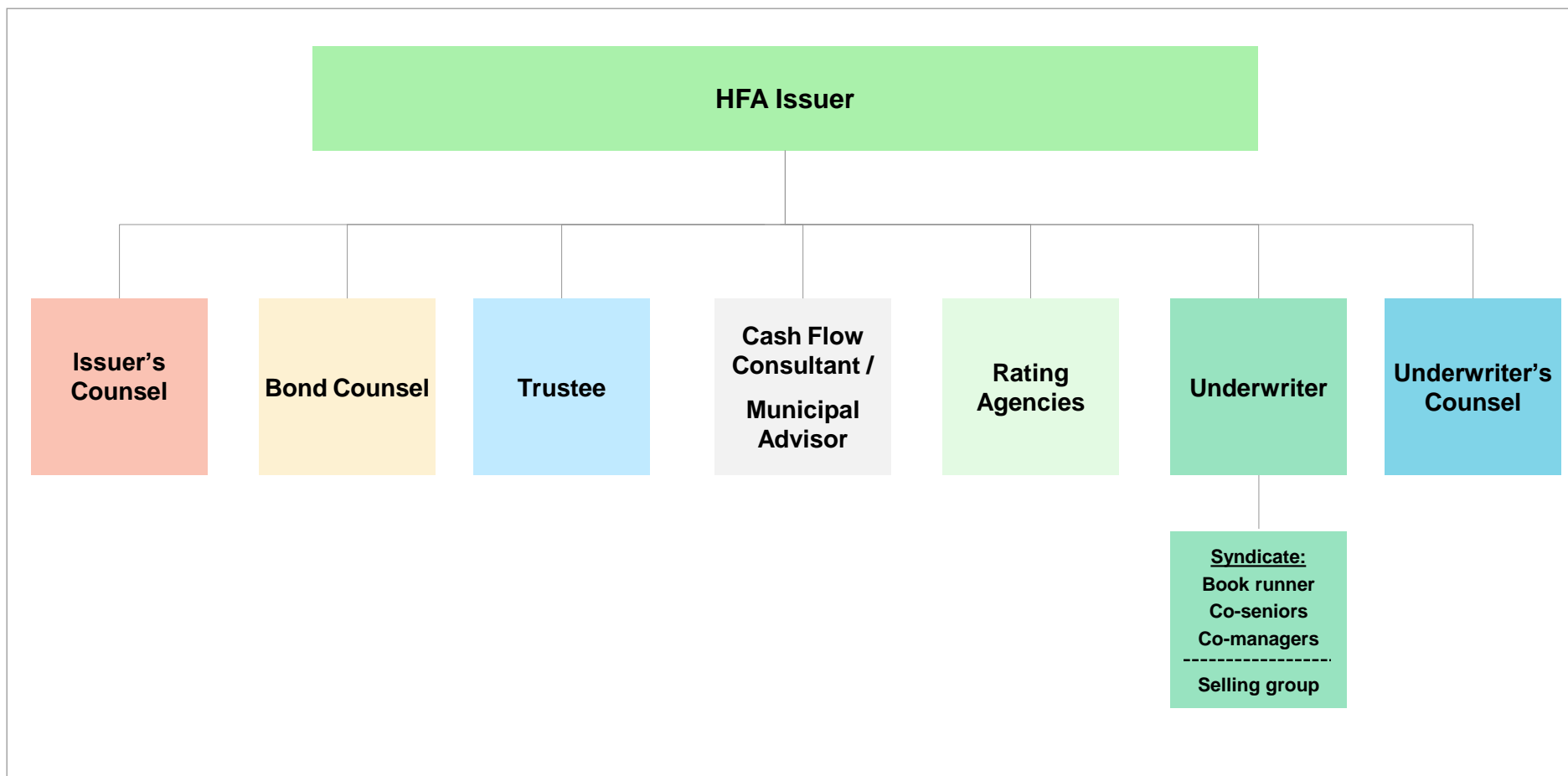
## Housing Bond Issuance: Ongoing Flow of Funds





# Financing Team Members

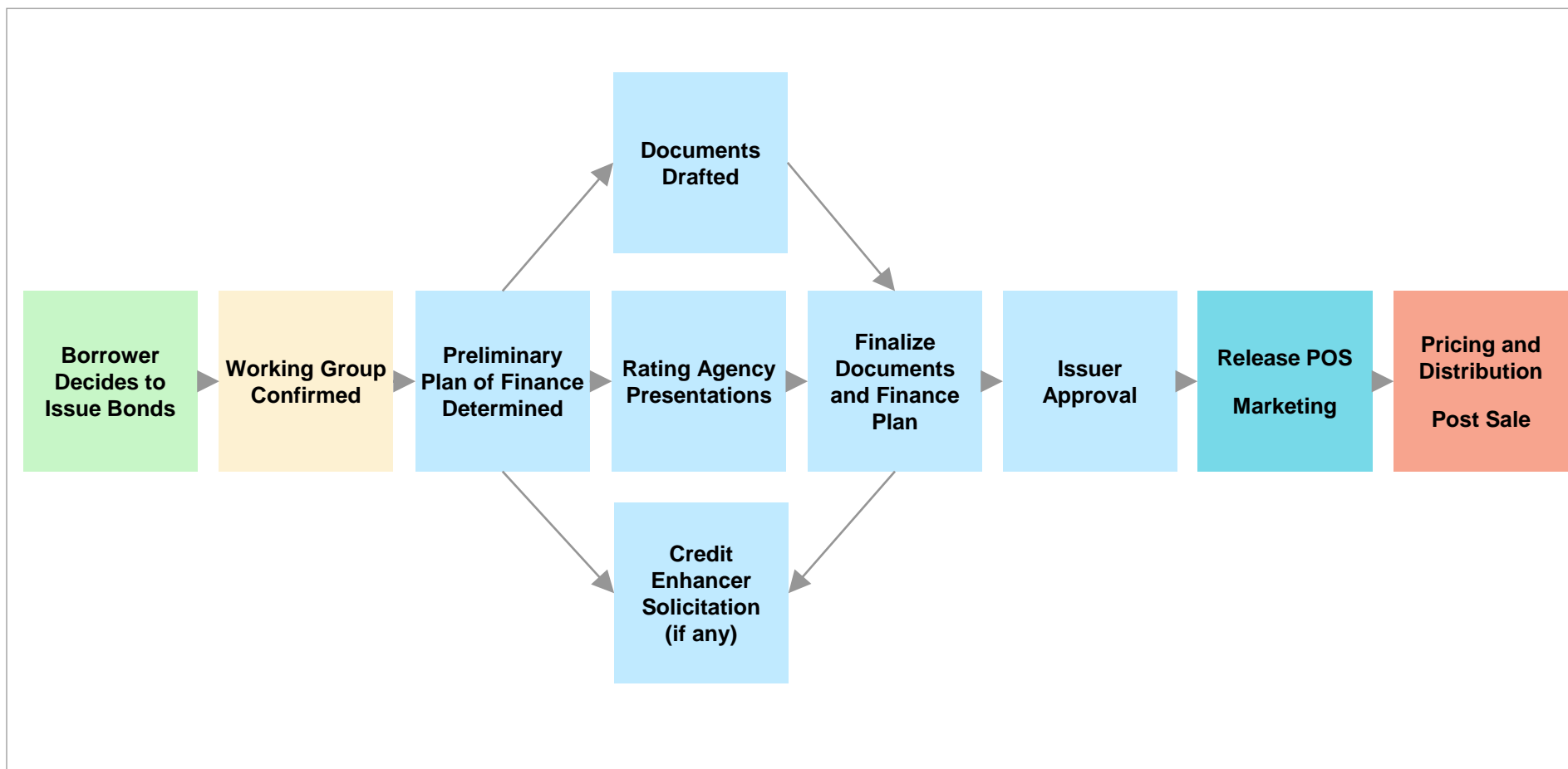
## Financing Team Members





# Overview of the Financing Process

## Example of Typical Transaction Timeline





## Primary Document by Typical Preparer

Summary Description of Legal Documentation

### Bond Counsel

- Bond Resolution / Indenture
- Series Resolution / Supplement Indenture
- Arbitrage Certificate
- Issue Price Certificate

### Underwriter's Counsel

- Preliminary Official Statement
  - Official Statement
  - Bond Purchase Agreement
  - Blue Sky Memorandum
- 
- Agreement Among Underwriters
  - Selling Group Agreement

### Miscellaneous

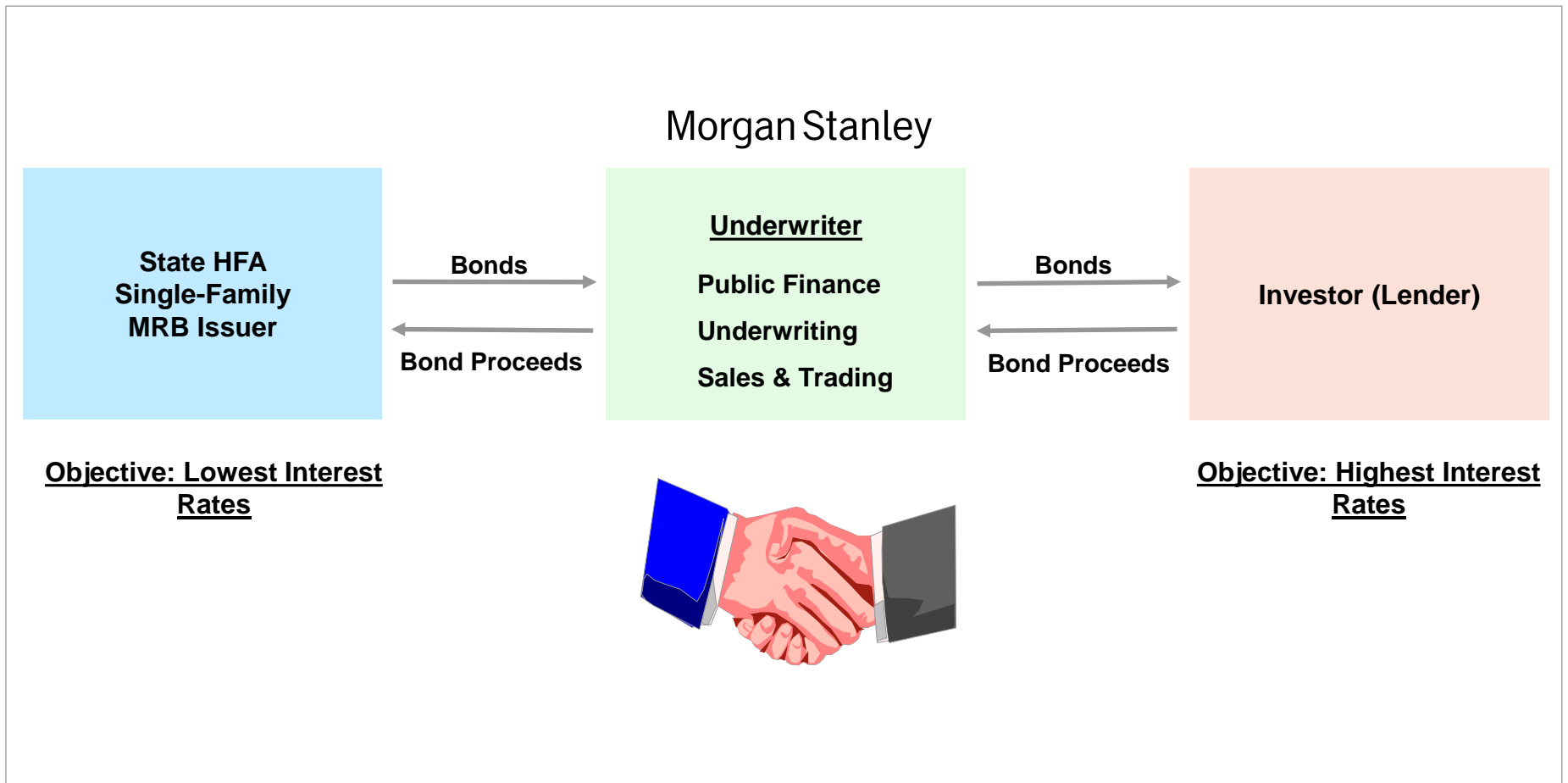
- Legal Opinions – 10(b)(5)
  - Bond Counsel
  - Underwriter's Counsel
  - Trustee's Counsel
- Cross Receipts for Bond Proceeds
- Rating Letters
- Form of Bonds (Specimen)
- Comfort Letter
- Liquidity Agreement (if applicable)
- Remarketing Agreement (if applicable)



# What is Underwriting?

Bond Issuance: Initial Sale

## Intermediation of Risk Between Issuer and Investor





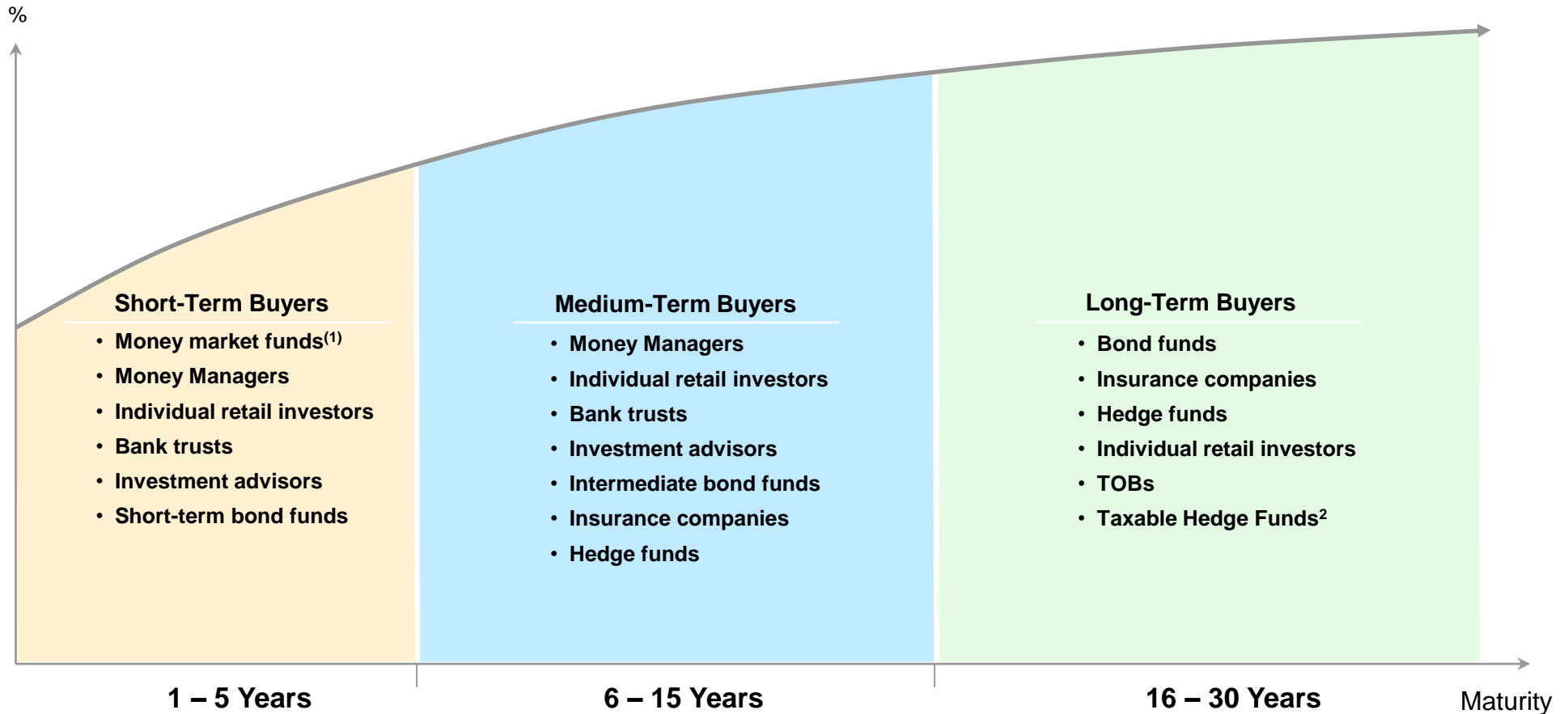


# Housing Bonds Investors

Buyers Across the Yield Curve

## Expected Investor Types by Maturity

Hypothetical Yield Curve (For Illustrative Purposes Only)



### Notes

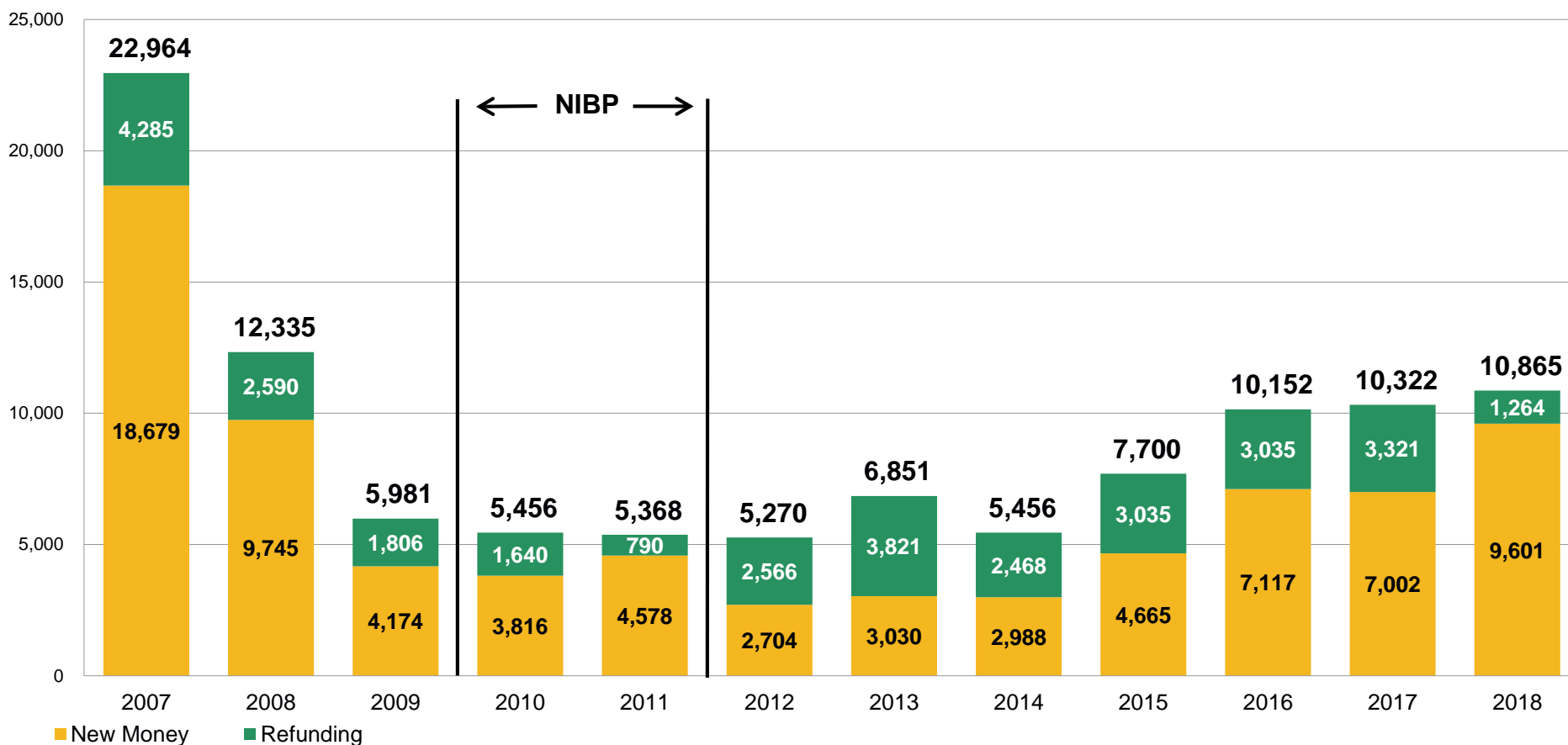
1. Buyers of bonds maturing in thirteen months or less
2. Non-traditional tax-exempt buyers



# New Money Single Family Issuance on the Rise

## Annual Single Family Issuance

2007 – Present  
(\$MM)





## Disclaimer

The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities, prices of instruments or securities, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in instruments (or related derivatives) transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley does not represent that any such assumptions will reflect actual future events or that all assumptions have been considered or stated. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein. Some of the information contained in this document may be aggregated data of transactions executed by Morgan Stanley that has been compiled so as not to identify the underlying transactions of any particular customer.

Notwithstanding anything herein to the contrary, Morgan Stanley and each recipient hereof agree that they (and their employees, representatives, and other agents) may disclose to any and all persons, without limitation of any kind from the commencement of discussions, the U.S. federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including opinions or other tax analyses) that are provided to it relating to the tax treatment and tax structure. For this purpose, "tax structure" is limited to facts relevant to the U.S. federal and state income tax treatment of the transaction and does not include information relating to the identity of the parties, their affiliates, agents or advisors.

This information is not intended to be provided to and may not be used by any person or entity in any jurisdiction where the provision or use thereof would be contrary to applicable laws, rules or regulations.

This communication is directed in the UK to those persons who are eligible counterparties or professional clients and must not be acted on or relied upon by retail clients (each as defined in the UK Financial Services Authority's rules).

This information is being disseminated in Hong Kong by Morgan Stanley Asia Limited and is intended for professional investors (as defined in the Securities and Futures Ordinance) and is not directed at the public of Hong Kong.

This information is being disseminated in Singapore by Morgan Stanley Asia (Singapore) Pte. This information has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this information and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of this security may not be circulated or distributed, nor may this security be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. Any offering of this security in Singapore would be through Morgan Stanley Asia (Singapore) Pte, an entity regulated by the Monetary Authority of Singapore.

This information is being disseminated in Japan by Morgan Stanley MUFG Securities Co., Ltd., Any securities referred to herein may not have been and/or will not be registered under the Financial Instruments Exchange Law of Japan (Law No. 25 of 1948, as amended, hereinafter referred to as the "Financial Instruments Exchange Law of Japan"). Such securities may not be offered, sold or transferred, directly or indirectly, to or for the benefit of any resident of Japan unless pursuant to an exemption from the registration requirements of, and otherwise in compliance with the Financial Instruments Exchange Law and other relevant laws and regulations of Japan. As used in this paragraph, "resident of Japan" means any person resident in Japan, including any corporation or other entity organized or engaged in business under the laws of Japan. If you reside in Japan, please contact Morgan Stanley MUFG Securities for further details at +613-5424-5000.

This information is distributed in Australia by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents, and arranges for it to be provided to potential clients. In Australia, this report, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act.

For additional information, research reports and important disclosures see <https://secure.ms.com/servlet/cls>. The trademarks and service marks contained herein are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

This material may not be redistributed without the prior written consent of Morgan Stanley.