Detecting Signals Amidst the Financial Market Noise



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**2Q23** 





# **Inflation Pressures**

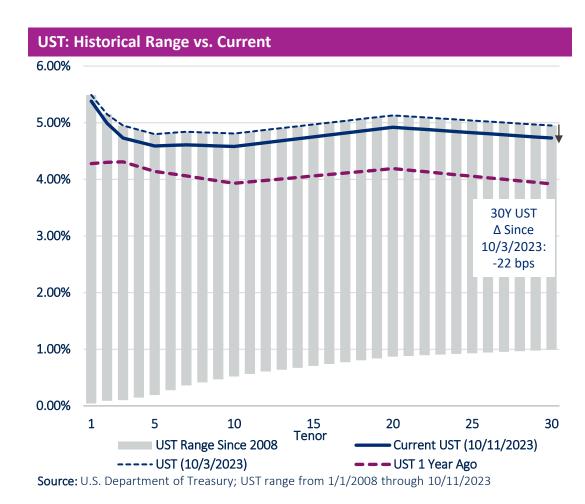
Indicator	Jan-21	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-22	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-23	Feb	Mar	Apr	May	Jun	Jul	Aug
Volume	Volume																															
Unfilled Orders (a)	13.9%	16.7%	20.3%	22.2%	21.9%	20.7%	18.5%	17.8%	15.2%	14.0%	11.0%	10.4%	8.1%	6.7%	4.6%	4.4%	3.5%	2.0%	1.8%	2.1%	2.4%	0.9%	0.5%	0.4%	0.6%	0.3%	0.1%	1.3%	2.3%	1.5%	-0.1%	
Cass Freight Index (a)	-21.7%	-8.1%	29.1%	26.8%	59.0%	12.2%	-0.3%	-10.6%	-14.4%	4.1%	-8.8%	8.4%	-32.4%	-11.1%	-1.6%	39.7%	23.7%	0.0%	22.1%	14.7%	13.2%	-2.6%	-22.0%	-23.4%	-28.9%	-10.9%	-2.1%	7.3%	-0.3%	-2.7%	-7.5%	-7.7%
Taiwan Elect. Product Exports (a)	10.2%	-47.1%	23.5%	6.6%	133.2%	35.7%	39.3%	73.1%	70.5%	-2.4%	20.0%	-7.5%	41.6%	-4.8%	58.0%	37.0%	27.1%	-19.7%	-5.8%	8.4%	-6.2%	-1.3%	-37.6%	-20.4%	-68.0%	-46.8%	-11.5%	134.4%	83.2%	-42.1%	-3.1%	2.2%
Real Goods Consumption (b)	12.3%	9.9%	20.7%	18.9%	16.7%	16.8%	14.9%	14.8%	15.5%	16.8%	16.4%	14.0%	16.7%	15.3%	15.1%	15.3%	14.7%	14.9%	14.6%	14.8%	15.2%	16.1%	14.6%	13.8%	17.1%	16.8%	15.8%	16.5%	16.4%	17.2%	18.3%	
Time																																
ISM Manuf. Supplier Deliveries	68.2	72.0	76.6	75.0	78.8	75.1	72.5	69.5	73.4	75.6	72.2	64.9	64.6	66.1	65.4	67.2	65.7	57.3	55.2	55.1	52.4	46.8	47.2	45.1	45.6	45.2	44.8	44.6	43.5	45.7	46.1	48.6
ISM Serv. Supplier Deliveries	57.8	60.8	61.0	66.1	70.4	68.5	72.0	69.6	68.8	75.7	75.7	63.9	65.7	66.2	63.4	65.1	61.3	61.9	57.8	54.5	53.9	56.2	53.8	48.5	50.0	47.6	45.8	48.6	47.7	47.6	48.1	48.5
Price																																
World Container Index (WCI)	\$5,263	\$5,227	\$4,991	\$4,919	\$5,898	\$7,052	\$8,879	\$9,556	\$10,237	\$9,891	\$9,180	\$9,227	\$9,518	\$9,398	\$8,783	\$7,907	\$7,667	\$7,412	\$6,908	\$6,317	\$4,894	\$3,425	\$2,705	\$2,168	\$2,098	\$1,971	\$1,786	\$1,733	\$1,728	\$1,597	\$1,519	\$1,77 8
PPI Transp. & Ware. of Goods (a)	10.7%	13.0%	16.3%	16.5%	16.9%	14.4%	12.5%	9.6%	11.9%	16.4%	22.5%	19.6%	21.0%	19.5%	35.1%	34.3%	36.5%	15.9%	8.5%	-6.7%	-5.9%	-9.7%	-0.5%	-4.8%	-6.0%					-12.7%		
Dry Van Rate Per Mile (a)	12.2%	-25.4%	10.5%	12.6%	52.0%	-8.4%	-8.6%	-0.2%	41.8%	64.5%	57.1%	54.4%	91.6%	70.1%	-7.2%	-56.2%	-69.7%	-67.0%	-57.5%	-35.7%	-25.6%	-15.2%	-27.0%	-14.4%	14.1%	-9.3%	-48.1%	-66.6%	-52.2%	-4.2%	0.0%	- 14.1%
Inventory																																
Retail Inventory-to-Sales Ratio	1.23	1.26	1.12	1.10	1.11	1.11	1.14	1.14	1.13	1.12	1.13	1.19	1.20	1.20	1.21	1.20	1.23	1.24	1.26	1.27	1.27	1.25	1.27	1.30	1.27	1.28	1.30	1.29	1.30	1.30	1.30	
ISM Manuf. Cons. Inventories	33.1	32.5	29.9	28.4	28.0	30.8	25.0	30.2	31.7	31.7	25.1	31.7	33.0	31.8	34.1	37.1	32.7	35.2	39.5	38.9	41.6	41.6	48.7	48.2	47.4	46.9	48.9	51.3	51.4	46.2	48.7	48.7
Inventory Too Low (d)	5.3%	4.5%	2.5%	7.0%	8.0%	11.0%	12.0%	11.0%	10.0%	9.0%	15.0%	9.0%	7.0%	7.0%	9.0%	6.0%	8.0%	5.0%	2.0%	3.0%	1.0%	0.0%	-2.0%	1.0%	-1.0%	-4.0%	1.0%	-5.0%	-3.0%	-4.0%	-4.0%	-5.0%
Labor																																
Production & Manuf. Posts (b)	26.3%	38.2%	46.8%	63.5%	74.8%	76.7%	84.0%	78.0%	87.3%	92.4%	103.0%	115.3%	102.9%	108.9%	108.3%	96.3%	97.1%	92.9%	91.1%	89.3%	91.1%	87.1%	90.4%	92.5%	82.3%	70.2%	70.9%	64.4%	59.6%	55.6%	57.5%	53.4%
Loading & Stocking Posts (b)	26.3%	38.9%	46.4%	61.7%	72.7%	76.6%	90.2%	72.0%	82.4%	92.4%	106.5%	114.9%	92.9%	97.5%	93.9%	80.7%	84.9%	83.5%	89.3%	74.1%	79.3%	77.8%	79.5%	79.3%	58.6%	48.5%	49.2%	37.9%	36.0%	33.1%	37.5%	29.8%
Jobs Hard to Fill (d)	32.7%	39.6%	42.2%	44.0%	48.0%	46.0%	49.0%	50.0%	51.0%	49.0%	48.0%	49.0%	47.0%	48.0%	47.0%	47.0%	51.0%	50.0%	49.0%	49.0%	46.0%	46.0%	44.0%	41.0%	45.0%	47.0%	43.0%	45.0%	44.0%	42.0%	42.0%	40.0%

Notes: (a) 3-Month Annualized Rate, (b) versus February 2020, (c) Monthly Average, (d) Net% of Firms, Current Month Reflects Monthly Average of Available Data for All Series Sources: U.S. Department of Commerce, Bloomberg Finance L.P., Taiwan Ministry of Finance, Institute for Supply Management (ISM), Drewry, U.S. Department of Labor, National Federation of Independent Business (NFIB), Indeed.com and Wells Fargo Economics as of 10/6/23



4.24%

# 10-Yr Treasuries Hit 16-Year High



4.00% 3.75% 3.36% 3.29% 3.50% 3.25% 3.00% 2.75% 2.50% 2.25% 2.00% 1.75% 1.50% ---30Y MMD

**Tax Exempt Interest Rates (MMD)** 

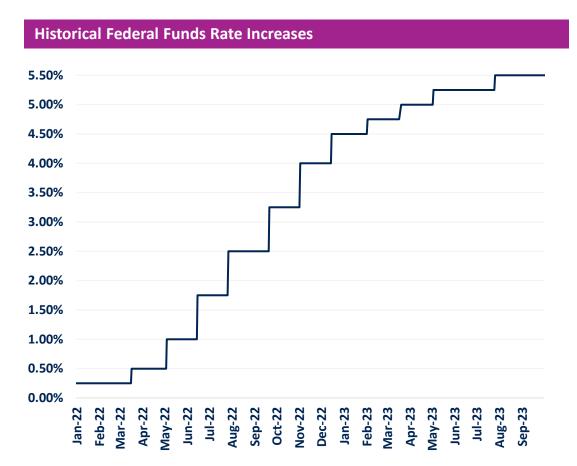
**Source:** Thomson Reuters TM3, as of 10/11/2023

4.50%

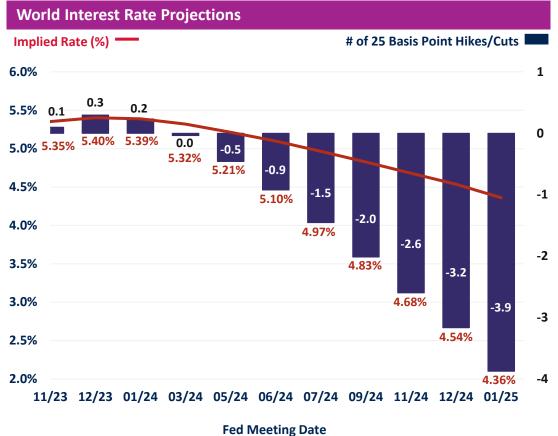
4.25%



# **Interest Rate Movement Snapshot**







Source: Bloomberg World Interest Rate Probabilities as of 10/11/2023





"As is often the case, we are navigating by the stars under cloudy skies."

- Federal Reserve Chairman Jerome Powell

Gaza/Israel Conflict Russia/Ukraine Conflict Global Inflation Banking Crisis

COVID-19 Uncertainty Equity Market Underperformance

US Budget/Debt Ceiling

Student Loan
Payment Resumptions

Chinese Real Estate
Bubble

Employment/Labor Supply

Global Government Borrowing Needs

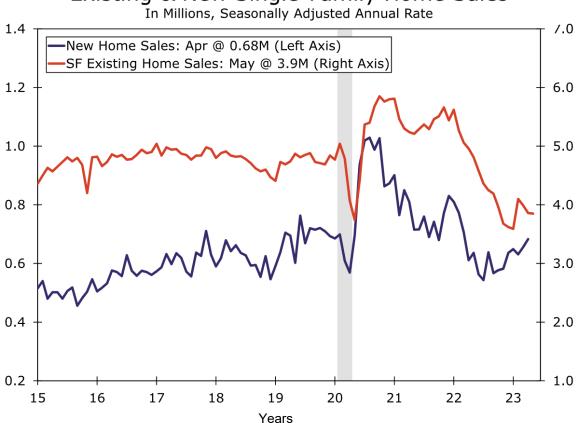
Supply Chain Constraints





# **Higher Mortgage Rates Have Depressed Home Sales**





The Federal Reserve is likely to keep monetary policy in a restrictive stance until inflation is convincingly on the road to their 2% target

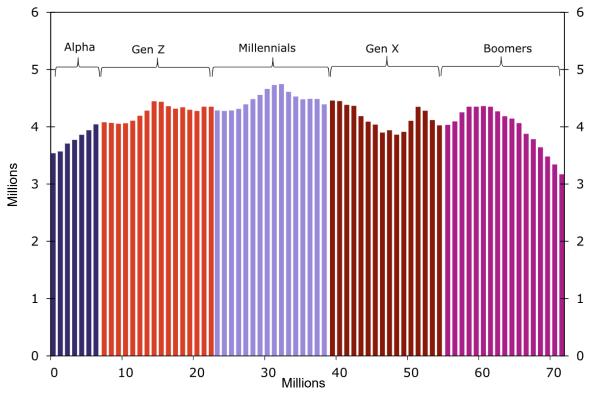
- Mortgage rates are likely to remain elevated in the near-term
- High mortgage rates and deteriorating macroeconomic backdrop means full housing rebound appears far-off
- Affordability conditions remain adverse and are not likely to meaningfully improve in the near-term





# Demographics and Single-Family Shortage Continue to Fuel Apartment Demand

U.S. Adult Population Distribution
Millions of Persons in Age Group, 2021



Source: U.S. Census Bureau and Wells Fargo Economics

There are currently 72.9 million U.S. residents between the age of 20-35 (roughly 22% of the total population)

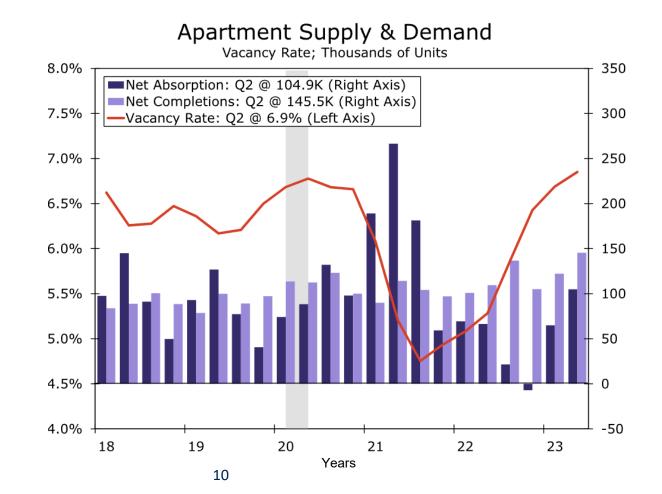
- These "prime-aged" renters are set to enter into a housing market with a significant shortfall of available singlefamily homes
- Rapid rise in mortgage rates removed incentive for sellers to list homes and sluggish single-family construction has resulted in a shortfall of homes
- Freddie Mac estimated that the US faces a housing deficit of approximately four million homes



# Despite Supply-Demand Imbalance, Multifamily Market Benefiting From Constrained Single-Family Market

# Apartment demand has bounced back from a lull in 2022 and been surprisingly resilient so far in 2023

- Rise in rental demand coincides with economic growth and worsening affordability conditions in the single-family market
- Concerns of a supply-demand imbalance in the Multifamily market have begun to materialize
  - The apartment vacancy
     rate rose to 6.9% in 2Q23



**Source:** CoStar Inc. and Wells Fargo Economics

Detecting Signals Amidst the Financial Market Noise:
Trends in Taxable Issuance

Kathy Li, Director

Raymond James, National Housing Group



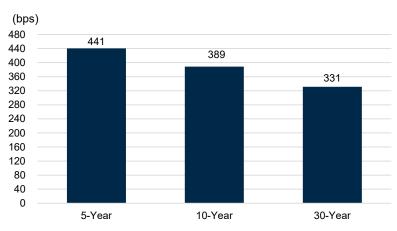


#### TAXABLE MUNICIPAL MARKET CONDITIONS

- Taxable yields:
  - The 30 Year Treasury rate has only been higher than its current rate, 27% of the time since 1997.

#### 5, 10, & 30 Year UST Movement, 2021-2023 YTD

January 4, 2021 – October 9, 2023

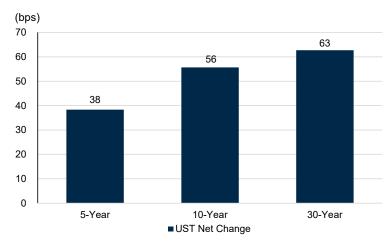


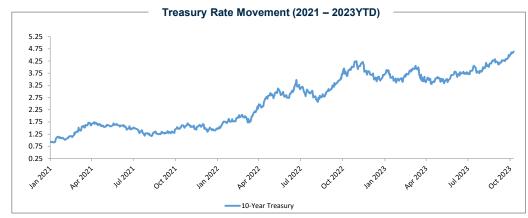
■UST Net Change

UST	5Y	10Y	30Y
Current	4.76%	4.8%	4.97%
2021-2023 YTD Low:	0.35%	0.91%	1.66%
2021-2023 YTD High:	4.8%	4.8%	4.97%
10Y Low:	0.19%	0.51%	0.995%

#### **UST Movement Over the Past Month**

September 7, 2023 – October 9, 2023



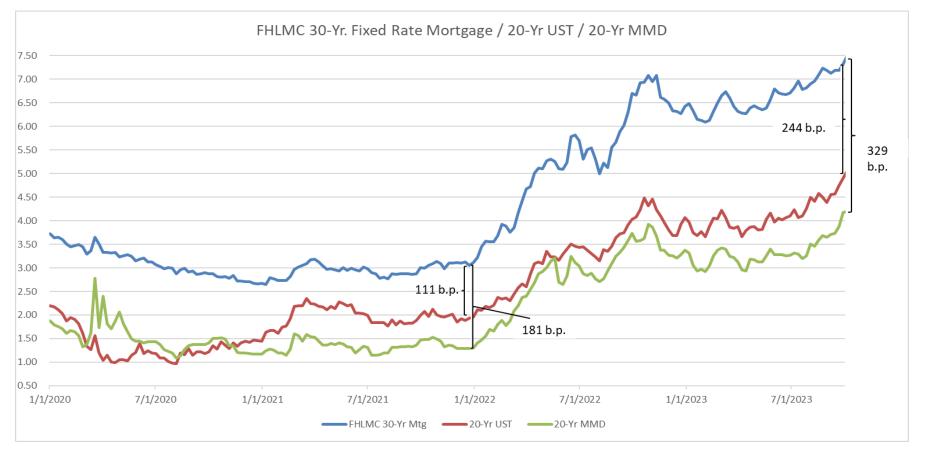


Source: Bloomberg



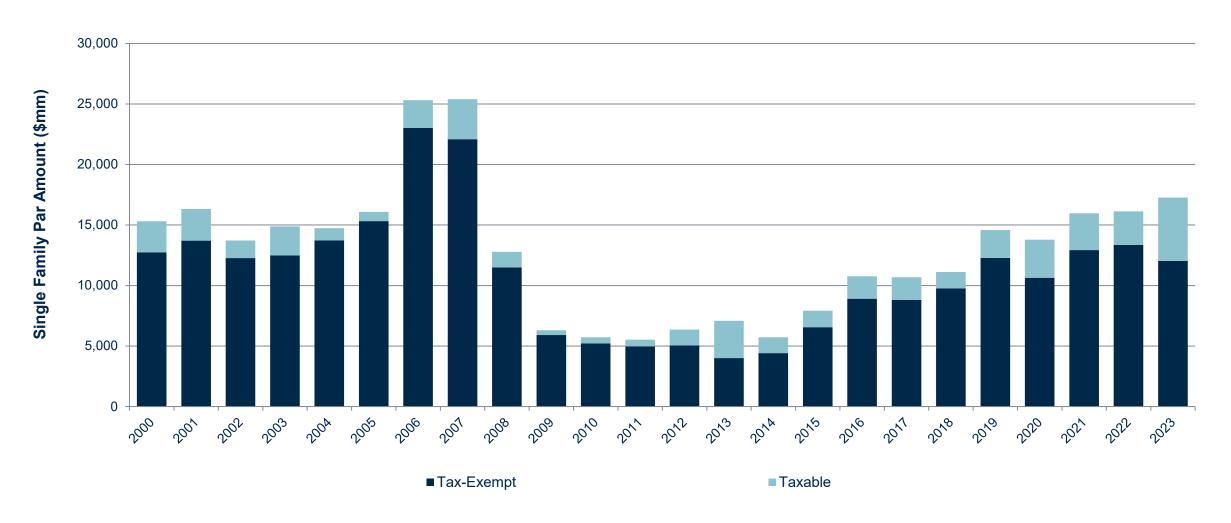
#### DESPITE HIGH SPREADS, BOTH TAXABLE & TAX-EXEMPT MRBs OUTPERFORM TBA/MBS

- 1/1/2022: "Stack" of HFA spread to MMD + reasonable spread to HFA > TBA/MBS mortgage rates
- 10/4/2023: "Stack" of HFA spread to UST + reasonable spread to HFA approx. = TBA/MBS mortgage rates
- 10/4/2023: "Stack" of HFA spread to MMD + reasonable spread to HFA < TBA/MBS mortgage rates





### HFA SINGLE FAMILY BOND ISSUANCE (2000 - 2023\*)



\*Source: Thompson Reuters, 2023 volume based on transactions from 1/1/2023 – 9/30/2023. Includes fixed and variable rate transactions.



#### **RECENT SINGLE FAMILY TAXABLE STATE HFA TRANSACTIONS - 2023**

Recently, the single-family housing market has seen an increase in taxable issues by HFAs due to (i) inefficiencies in the TBA market and/or (ii) volume cap constraints. As of September 30, 2023, approximately 30% of single-family issues have been issued on a taxable basis. Below are several examples, and primary purpose for Taxable approach:

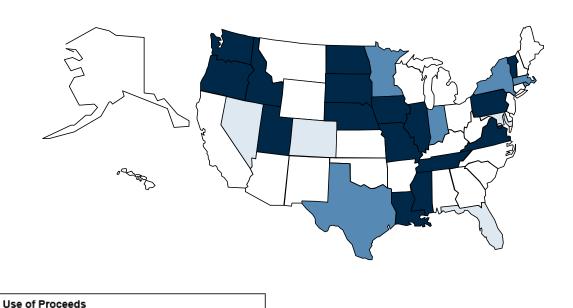
Non-Qualified Mortgage Loans

Volume Cap Constraints

Both Volume Cap & Non-Qualified Mortgage Loans

Non-Q Mortgag (TBA Program	Volume Cap Constraint Driven						
<ul> <li>Colorado HFA</li> </ul>	<ul> <li>Nevada HD</li> </ul>	<ul><li>Colorado HFA</li></ul>					
<ul> <li>Florida HFC</li> </ul>	<ul> <li>North Dakota HFA</li> </ul>	<ul> <li>Florida HFC</li> </ul>					
■ Idaho H&FA	<ul><li>Oregon HCDA</li></ul>	<ul><li>Indiana HCDA</li></ul>					
<ul><li>Illinois HDA</li></ul>	<ul> <li>Pennsylvania HFA</li> </ul>	<ul><li>MassHousing</li></ul>					
<ul><li>lowa FA</li></ul>	<ul> <li>South Dakota HDA</li> </ul>	<ul><li>Maryland CDA</li></ul>					
<ul><li>Louisiana HC</li></ul>	<ul> <li>Tennessee HDA</li> </ul>	<ul><li>Michigan SHDA</li></ul>					
<ul><li>Maryland CDA</li></ul>	<ul><li>Utah HC</li></ul>	<ul><li>Minnesota HFA</li></ul>					
<ul><li>Mississippi HC</li></ul>	<ul><li>Vermont HFA</li></ul>	<ul><li>Nevada HD</li></ul>					
<ul> <li>Missouri HDC</li> </ul>	<ul> <li>Virginia HDA</li> </ul>	<ul><li>Rhode Island</li></ul>					
<ul> <li>Nebraska IFA</li> </ul>	<ul> <li>Washington SHFC</li> </ul>	Housing					
		<ul><li>SONYMA</li></ul>					
		<ul><li>Texas DHCA</li></ul>					

#### **USE OF SINGLE-FAMILY TAXABLE PROCEEDS BY STATE**



Includes taxable transactions from 1/1/2023 - 10/06/2023. Primary use of taxable proceeds determined based on purposes outlined in official statements for each transaction.



#### TRENDS IN TAXABLE BOND STRUCTURES

#### Tax-Exempt and Taxable Structures - Non-Qualified Mortgage Programs

- Taxable proceeds are kept separate for non-qualified programs which may replace funds that had been sourced through the TBA market.
- Issues with smaller percentages of taxable bonds are typically front loaded as serial bonds. As the percent of taxables increase, taxable PAC bonds are added and at times, taxable structures are "parallel" to the tax-exempt series with serials and term bonds.
- In the current market, even 100% taxable series result in a lower mortgage rate than available through the TBA market.

#### Tax-Exempt and Taxable Structures – Stretching Volume Cap for Qualified Mortgage Programs

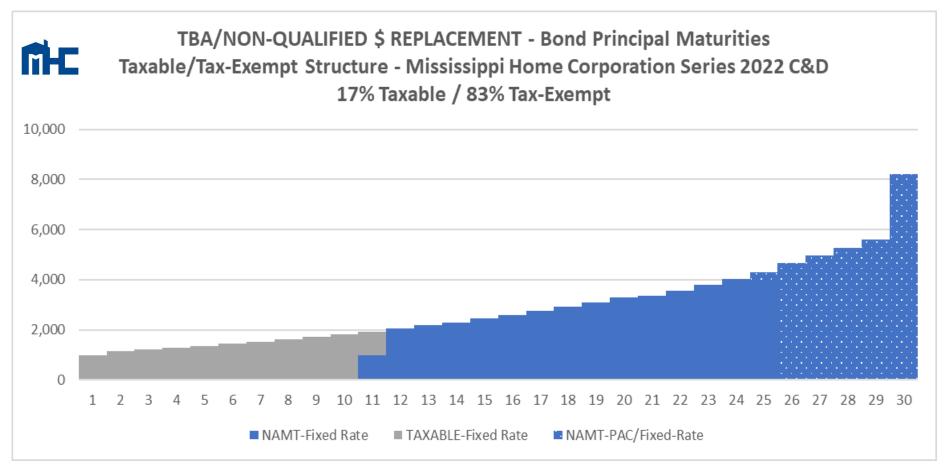
- Taxable proceeds are blended with tax-exempt moneys for qualified first-time homebuyer programs.
- Issues with smaller percentages of taxable bonds are typically front loaded as serial bonds. As the percent of taxables increase, taxable PAC bonds can be added and at times, taxable structures are "parallel" to the tax-exempt series with serials and term bonds.
- For qualified first-time homebuyer programs, blended funds still achieve significantly lower mortgage rates than available elsewhere.

#### **Taxable PACs**

- Mortgage prepayments on all loans can be directed to redeem a taxable PAC until 10-Year Rule constraints require that a portion of the blended qualified loans, or qualified loans made wholly from tax-exempt bonds, must be used to redeem tax-exempt bonds.
- Not a significant source for premium as the taxable PACs are usually done at a 103 dollar price or less.
- Helps to reduce the overall bond yield by approx. 7-9bps compared to a par non-PAC structure.
- Synthetic Taxable PAC Bonds
  - Reduce bond yield significantly up to 100bps compared to a fixed rate taxable structure.
  - No premium will be generated.



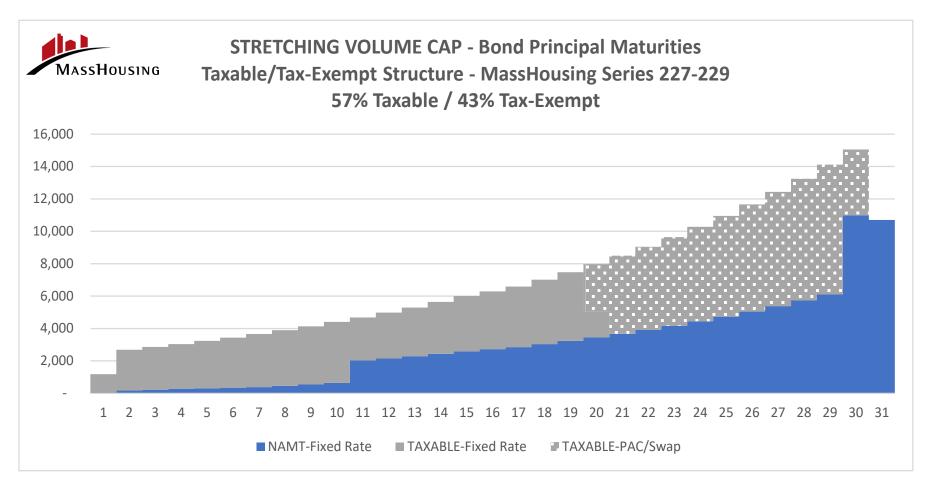
#### GENERATING \$ FOR NON-QUALIFIED PROGRAMS/TBA REPLACEMENT CASE STUDY



- Pricing: 8/3/2022
- \$72,355,000 Fixed-Rate NAMT
- \$15,000,000 Taxable Fixed-Rate
- Separate Acquisition Funds for Taxable Non-Qualified Bond Proceeds and Tax-Exempt Qualified Bond Proceeds
- 30-Year mortgages; non-qualified loan rates were 40bp-50bp higher than rates on qualified mortgage loans, far lower than prevailing TBA rates
- Under 10-Year Rule, qualified mortgage principal can be used to pay down taxables
- Universal Cap constraints? For issuer with large \$ "unattached" qualified loans, but generally, loan rates over the past 10-12 years are lower than 2022 tax plan rates



#### STRETCHING VOLUME CAP CASE STUDY



- Priced: 2/22/2023
- \$95mm Fixed-Rate NAMT
- \$61mm Taxable Fixed-Rate
- \$64mm Taxable Swapped VRDO

Constraints on % of Taxables Under "Blend & Lend"

- High % of taxables increases mortgage rate
- Limits on "front loading" taxables –
   10-Year Rule
- Approach to minimize impact of taxables:
  - Taxable swap rate ~ 4.18% (w/o costs)
  - Contrast with tax-exempt 2042-2053 term bonds of 4.40%-4.95%, and 2042 taxable at 5.623%



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Detecting Signals
Amidst the Financial
Market Noise

October 16, 2023





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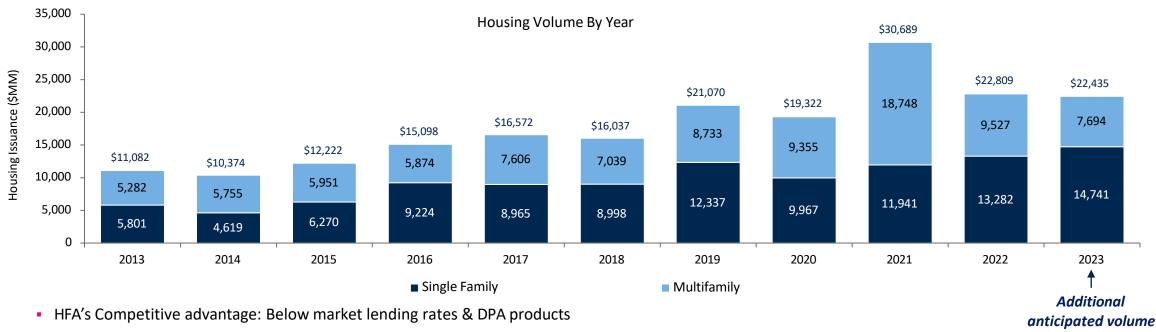
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forthcoming for Q4

### **Investors Asking – Why All the Volume?**

Municipal housing issuance has increased significantly coming out of the Credit Crisis and NIBP years

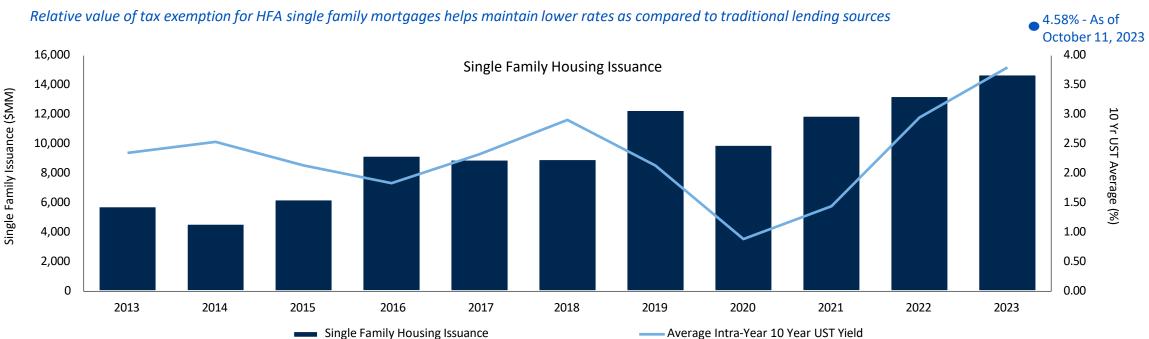


- HFAs have returned to bond funding new production after years of TBA
- Select HFAs and year returned to market and estimated recent volume:
  - IHDA 2016, ~\$1.45 billion in SF Issuance since 2022
  - IHCDA 2016, ~\$749 million in SF Issuance since 2022
  - KHC 2023, ~\$98 million in SF Issuance since 2022
  - NH HFA 2022, ~\$150 million in SF Issuance since 2022
  - NJ HMFA 2018, ~\$500 million in SF Issuance since 2022

- NC HFA 2016, ~\$759 million in SF Issuance since 2022
- OHFA 2018, ~\$230 million in SF Issuance since 2022
- RIH 2016, ~\$746 million in SF Issuance since 2022
- TDHCA ~2017, \$1.45 billion in SF Issuance since 2022



## Though Broadly Still Underweight Housing, Some Investors Feeling Tired



#### **Potential Investor Consideration in the Current Market**

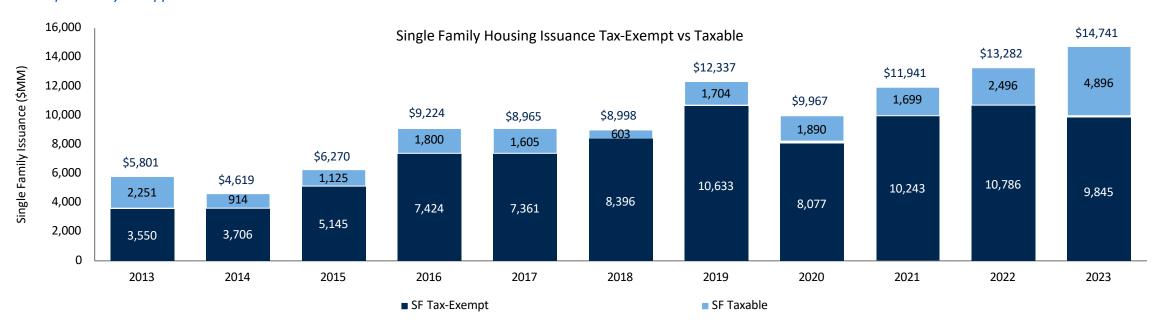
- Increased issuance volume means no need to buy every deal
- Rising interest rate environment can we buy the next deal at similar structure and credit quality, though at a higher yield?
- Mutual funds managing outflows; traditional retail, SMA, insurance companies, hedge funds / arb accounts remain large participants
- While MMD index has risen in concert with broader fixed income markets, credit spreads have largely remained steady
- Some investor fatigue on certain high issuing names





### **The Taxable Housing Bond Market Remains Strong**

A previously untapped market that continues to evolve



- A tale of two markets throughout parts of 2023
- Strong undercurrent of demand for some time, just without any product to buy
- Broad investor base:
  - Traditional tax exempt market participants include mutual funds, insurance companies, SMAs, retail
  - Taxable interest from hedge funds / arb accounts, insurance companies, not-for-profits, unions, governments, retirement funds, etc.
  - Attractive taxable housing bond yields as compared to corporate IG bonds of comparable credit rating
- Taxable PAC bond market now accepting premium structures





### **Ongoing Investor Considerations**

Interest rate volatility and rising rates have caused renewed focus on underlying mortgage collateral

- Resolutions are generally strong and healthy
- Credit upgrades in recent years as seasoned resolutions see whole loan run-off, getting replaced by new MBS
  - Counterparty risks that peaked during financial crisis continue abating
- Focus now on prepayment characteristics of underlying loans
  - Prepayment speed largely slowing
  - DPA structure grant vs. repayment and impact on prepayment speeds
  - Can the homeowner refinance in current yield environment
  - Can homeowner sell house? Is there a new house to afford? Do they want to give up existing historically low mortgage rate?
- Extension risk
  - HFA prepayment characteristics and impact on average lives (both PACs and terms)
  - Lack of optional redemption candidates
- PAC pricing up to approximately 110 in current tax exempt market at expense of higher coupon
- Carrying low coupon bonds at steep discounts impacting NAVs





### **Leaning Into Investor Demand – Structure Into Strength and Away from Weakness**

HFAs are nimble and in many instances can help craft deal structure around current buy-side sentiment

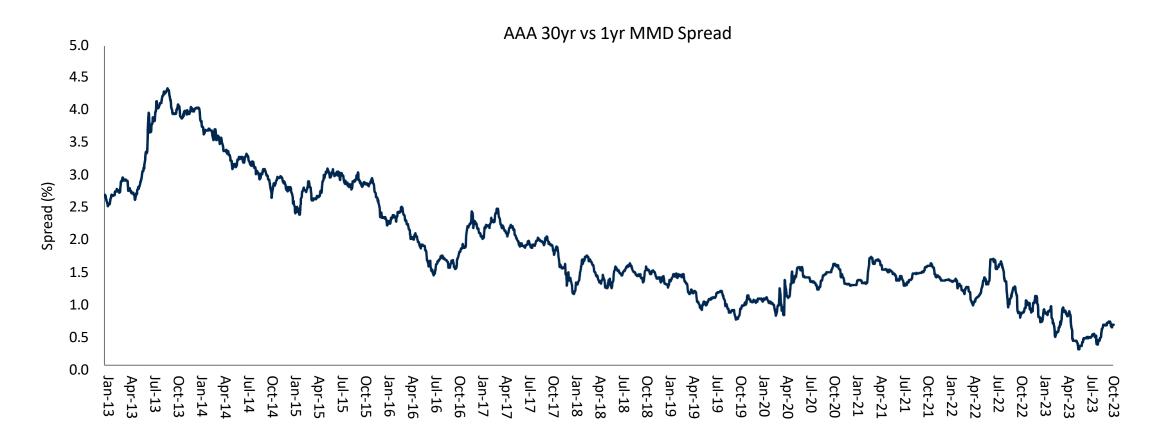
- Potential for lower PAC bands
- Introducing structure premium & discounts
  - Premium lock-out providing defensive position against rising yields
  - Super sinkers providing call protection for premium terms
  - MTEB at discount
- Higher yields can help markets investors benefitting from tax adjusted yields
- Retail strength along serial curve and max yield terms
- Cross-callers and recycler esoteric redemption strategies are getting second look
- Deal size smaller more frequent deals vs. larger offerings at times of market illiquidity or volatility
- Synthetic fixed rate structures to reduce bond yield; eliminating long term bonds



## **Leaning into Market Conditions - Finding Value on a Flattening Yield Curve**

30yr vs 1yr AAA MMD spread by quarter 01/01/2013 - 10/01/2023

- Finding "sweet spot" on yield curve extract relative value need large open resolution with excess parity
- Relative value of PACs and front-loading







## **Leaning Into Market Technicals - Municipal Redemptions**

Top Five Volume States (all sectors) By Total Redemptions

• Can offering be timed for points of enhanced market liquidity?

State	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
California	\$4.1 billion	\$4.5 billion	\$4.0 billion	\$3.4 billion	\$3.5 billion	\$2.3 billion	\$3.5 billion	\$4.8 billion	\$3.1 billion	\$4.3 billion	\$11.7 billion	\$4.1 billion
Texas	\$3.5 billion	\$2.4 billion	\$1.3 billion	\$1.3 billion	\$11.3 billion	\$2.6 billion	\$3.1 billion	\$1.4 billion	\$955 million	\$1.3 billion	\$10.6 billion	\$2.3 billion
New York	\$1.9 billion	\$5.5 billion	\$5.0 billion	\$1.5 billion	\$2.9 billion	\$4.6 billion	\$1.6 billion	\$3.3 billion	\$2.7 billion	\$2.3 billion	\$4.7 billion	\$1.9 billion
Pennsylvania	\$1.0 billion	\$1.2 billion	\$2.1 billion	\$1.0 billion	\$714 million	\$2.0 billion	<u>\$</u> 817 million	\$617 million	\$2.1 billion	\$1.3 billion	\$872 million	\$1.2 billion
Illinois	\$625 million	\$1.6 billion	\$3.1 billion	\$2.8 billion	\$565 million	\$426 million	<u>\$</u> 499 million	\$559 million	\$1.7 billion	\$1.3 billion	\$488 million	\$264 million



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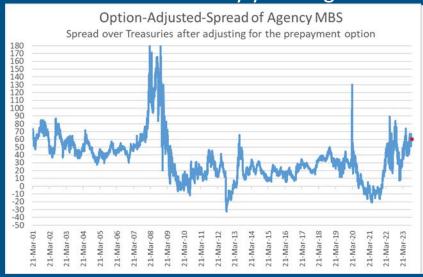
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## Interest Rate Volatility- Impact on Mortgage Yields

- Mortgages yields are currently at a wide spread over Treasuries as a result of extreme interest rate volatility. The
  inverted yield curve has made the "prepayment option" very expensive.
- Simply put, many people (including recent homebuyers) expect that interest rates will be much lower in the next several years. The homeowner will gain from refinancing, while the mortgage investor will lose out.

As the FED normalizes their policies, this option will become less expensive, and mortgage yields will compress
towards Treasury yields again.







The OAS could tighten 20bps

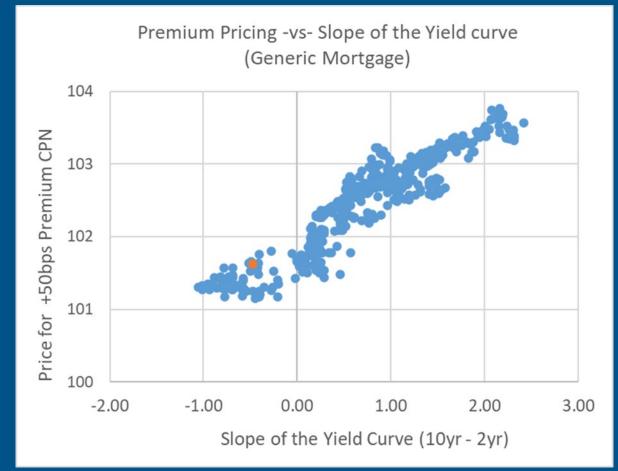
But the real outlier is elevated "option cost"

This could tighten 40-50bps if the regime shifts to an inactive FED.

In aggregate, a shift to a less active FED could tighten mortgage spreads by at least 50-70bps.

## <u>Premium Pricing- Current Market</u>

- The market expectation that interest rates will fall has dampened premium pricing in the mortgage market.
- As option costs are so high, creating an above market coupon only nets marginal additional premium.
- Most homebuyers are actually "buying down" their rate through paying points (the opposite of premium pricing).
- However, mortgages that have strong call protection such as "low loan sizes" or "repayable 2<sup>nd</sup> liens" have a much smaller prepayment option and can still achieve strong premium pricing.
- As the FED normalizes their interest rate policy, prepayment options will become less expensive and premium pricing will greatly improve in all areas (especially for loans with much larger prepayment options such as "high loan sizes").







## 2023 In Review & Looking ahead

- Despite experiencing significant headwinds by way of TBA premium pricing pressure, we still see strong demand amongst investors for bonds with call protection. (Bonds backed by loans with repayable/forgivable and non-resubordinatable 2<sup>nd</sup> liens).
- Furthermore, call protected bonds in specific geographic areas and with various "specified stories" garner significant payups over TBA execution.
- As specified pool demand has continued, HFAs have continued to directly benefit, albeit to a lesser extent than in more robust TBA markets.
- In a normalized market environment, incorporating specified payups (driven by investor demand) into daily
  pricing drives rates lower to borrowers. In current market, incorporating specified payups into daily pricing
  allows down payment assistance to continue to be offered to borrowers.
- Without investor demand, there simply isn't enough premium provided by the TBA market alone to offer down
  payment assistance. Programs solely dependent on premium pricing from the TBA market have struggled to
  post a full suite of DPA options while borrower eligibility at higher rates has also been problematic.
- A reduction in volatility, lower Fed funds rate, or steepening of the yield curve in 2024 would noticeably improve TBA execution.

