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Agency MBS: Play It Again, Sam

Jay Bacow

Co-head of Securitized Products Strategy | Strategist

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We think the mortgage market is closer to fair, though that doesn't mean investors won't have opportunities over the year.

2024 Year-Ahead Outlook | Agency MBS

- We forecast that 2024 will basically play 2023 again as the Fed will continue QT, banks will
 reduce holdings for a while, and mortgage performance will effectively depend on the desire of
 money managers and overseas investors to continue to add to their holdings.
- What's different is that the Fed easing in the second half of the year should strongly improve the technical picture – but the path is rocky.
- Investors should be able to play mortgages from the long and the short side given spread vol, and
 in the interim, we like low payup specs and slight discount G2/FN swaps.

	Index OAS	CC OAS	CC ZV
Current	63	55	165
Target	55	-	-

We currently recommend:

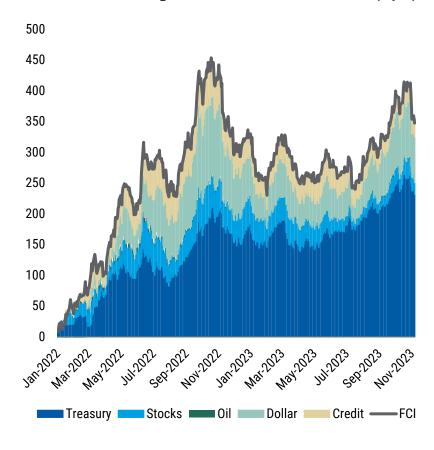
- Neutral mortgage basis
- Long slight discount G2/FN
- Long low payup specs

Economic Forecasts

Macroeconomics & US Housing

Econ Forecasts	2022	2023	2024
Real GDP (4Q/4Q)	0.9	2.5	1.6
CPI (4Q/4Q)	7.1	3.1	1.8
Core PCE (4Q/4Q)	4.8	3.5	2.4
Unemployment Rate	3.6	3.9	4.1
Policy Rate	4.375	5.125	4.125
Housing Forecasts	2022	2023	2024
HPA	6%	+3%	-3%
EHS	-17%	-19%	2.5%
NHS	-17%	5%	7.5%
Macro Forecasts	Spot	2Q24	4Q24
2Y	4.94	4.40	3.70
10Y	4.60	4.20	3.95
S&P	4,380		4,500
USD/JPY	151	142	140
IG Corporates	125		125
HY Corporates	398		475

Cumulative change in financial conditions (bps)



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Morgan Stanley Research forecasts

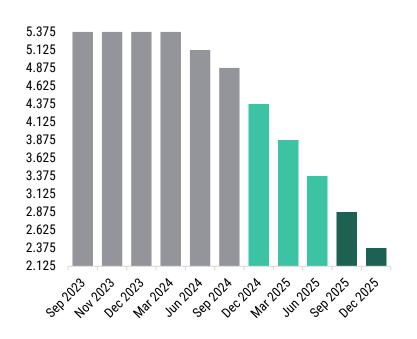
Source: Bureau of Labor Statistics, Morgan Stanley Research

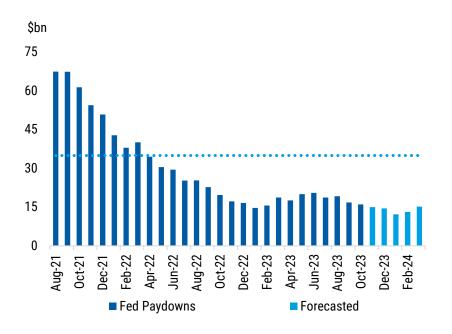
Our base case is the Fed cutting while continuing QT; when QT ends, MBS reinvestments go into bills – a negative for MBS

Macroeconomics and US housing

Fed expected to cut once, in Jun 2024, then cut every meeting from Sep 2024 onwards

Fed paydowns are expected to continue to come in below the \$35 billion caps

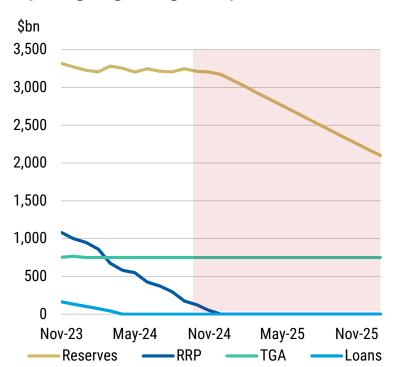




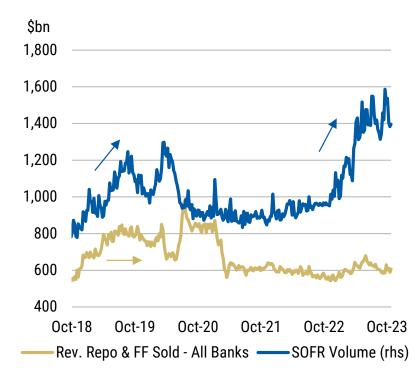
Obstacles to QT remain: reserve scarcity, hard landing, and financial stability, though path to reserve scarcity some time away

Macroeconomics and US housing

We think RRP at ~\$500-750bn in April 2024 will trigger QT discussion, with UST tapering beginning in Sep 2024



Bank willingness to lend excess reserves will become crucial for funding conditions



Source: Fed H.4.1 release, Fed H.8 release, Morgan Stanley Research

14%

12%

10%

As rates come down throughout the year, we would expect affordability to improve and for-sale inventory to increase

Macroeconomics and US housing

What various mortgage rates would imply for affordability, assuming home prices and household incomes remain constant

Monthly Payment as % of Income

30%

28%

Affordability at 8%

Affordability at 7%

Affordability at 6%

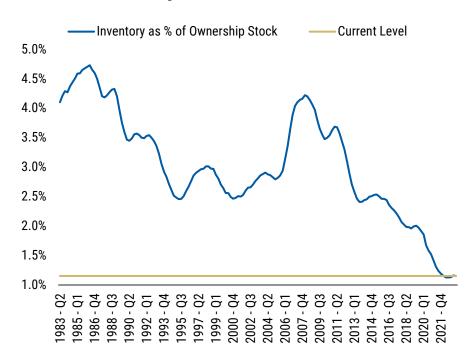
24%

20%

18%

16%

Existing inventory will go up from all-time lows with amortization and seasoning, but still constrained by lock-in effect



Source: US Census Bureau, NAR, Freddie Mac, Morgan Stanley Research

1999

2001 2003 2004 2006 2008 2017 2017 2017 2017 2021

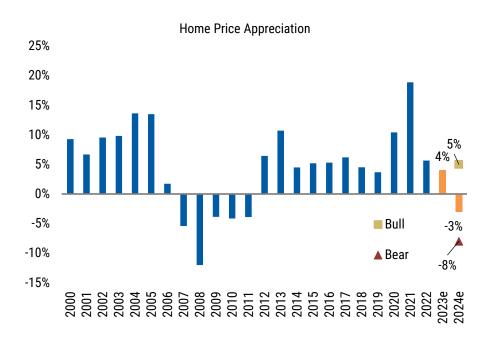
Source: NAR, US Census Bureau, Morgan Stanley Research

In our view, the transition off a historic low in listings is going to lead prices down YoY despite increases in transaction volumes

Macroeconomics and US housing

We think EHS are poised to show modest gains next year of +2.5% and that NHS outperform with +7.5%

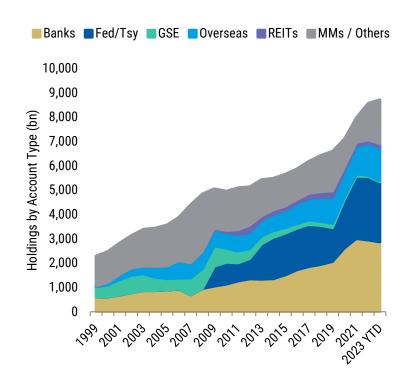
We expect home price decreases to be minimal; we expect inventory increases to moderate to reflect the fact that homeowners do not need to sell

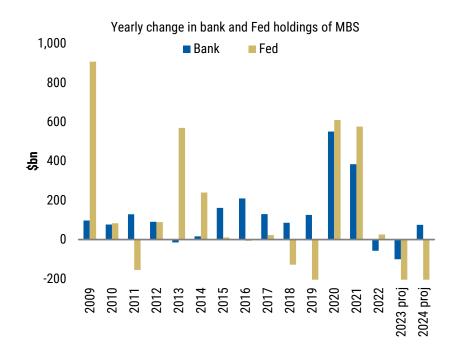


It's a new regime – the largest holders of MBS have stepped away Supply and demand

Banks and the Fed each own nearly a third of the outstanding MBS market

Since the GFC, 2023 is likely to be the first year when banks *and* the Fed have reduced MBS holdings





We think there are four requirements that need to be met for banks to return to the mortgage market

Supply and demand

- Conviction that the next move from the Fed is a cut, not a hike (could be met by EOY)
- More clarity around deposit durations (our banking analysts estimate six months after last hike)
- An increase in NIM
- 4. More clarity around regulatory guidelines

We think bank demand will come in Ginnies, CMOs, and slight discount instead of par coupon TBA, but likely not until 2H24.

Banks earn 78bp of additional yield on current coupon mortgages vs. deploying money in excess reserves

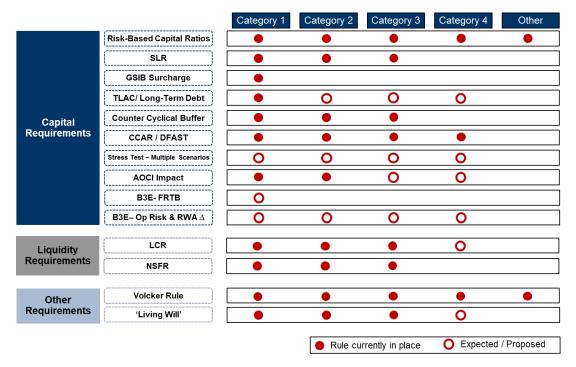


Source: Bloomberg, Morgan Stanley Research

Regulation uncertainty will continue to impact bank balance sheets

Supply and demand

- 2024 proposed regulatory changes include Basel III endgame, which increases RWAs for the GSIBs but has seen strong pushback from the industry.
- The reversal of the AOCI opt-out provision to reduce capital at the regionals, which has seen less pushback.
- Discussions about changes to the liquidity treatment for assets in HTM and the calculations for LCR



Source: Federal Reserve, FDIC, BIS, Morgan Stanley Research estimates

Basel III Endgame – Ioan risk weights to vary on LTV

Supply and demand

- Updated comment period: January 16, 2024
- Phase-in period: Mid-2025 to mid-2028
- Applies to all Category I to IV banks
- On average, banks' RWAs will increase by 19%
 - Category I and II: RWA ↑ 25%
 - Category III and IV: RWA ↑ 6%
- RWA increase comes primarily from a new standardized RWA category called Operational Risk and higher Market Risk RWA from trading business

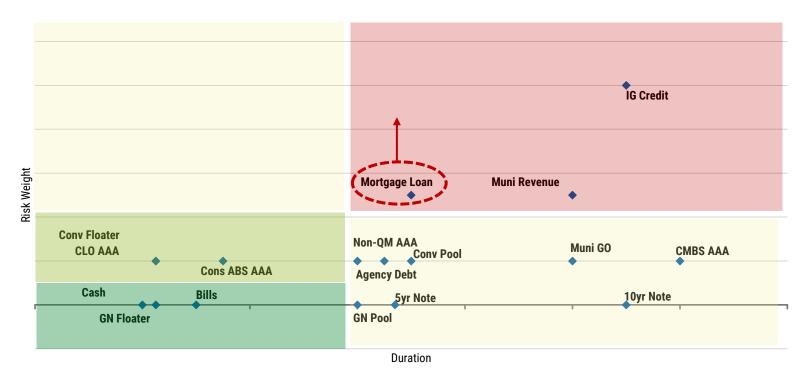
Proposed risk weights for mortgage loans not dependent on cash flows:

LTV	Proposed	Δ
LTV ≤ 50%	40%	-10%
50% < LTV ≤ 60%	45%	-5%
60% < LTV ≤ 80%	50%	0%
80% < LTV ≤ 90%	60%	+10%
90% < LTV ≤ 100%	70%	+20%
LTV > 100%	90%	+40%

As an asset's risk weight and duration increase, it makes less sense for a bank to hold it

Supply and demand

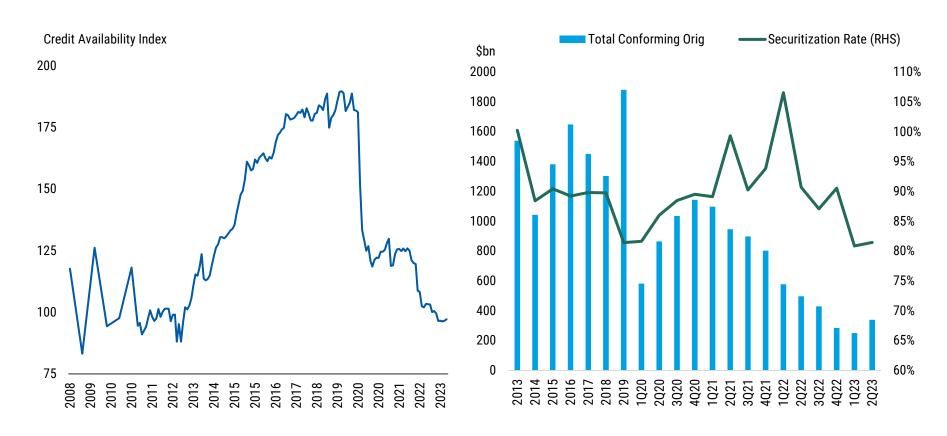
Given changes in bank demand, we expect longer-duration and higher-RWA assets to see less sponsorship, while shorter-duration assets should see more sponsorship



Endgame is positive for G2/FN; conventional supply could increase Supply and demand

Mortgage credit availability remains tight

Agency MBS securitization rate may increase



Source: MBA, Bloomberg Source: IMF, eMBS

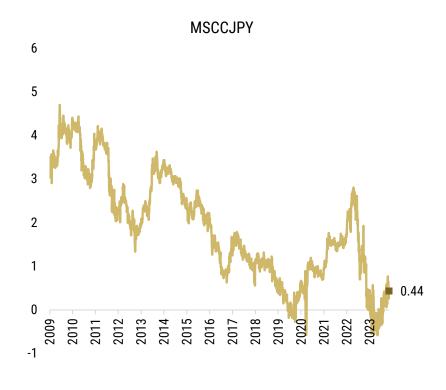
Market expects about -100bp reduction in FX-hedging costs by 2024 YE for Japanese investors, while our strategists expect -150bp

Supply and demand

Market value of Asia agency holdings

\$bn 350 300 250 100 Japan Taiwan

CC FX-hedged yield for Japanese investors



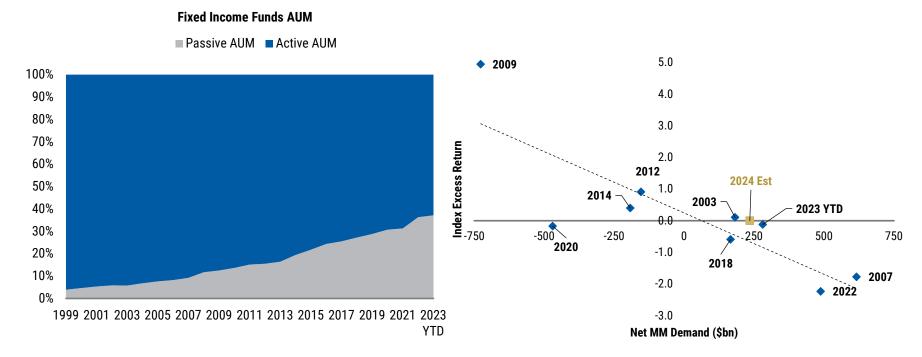
Source: Treasury, Morgan Stanley Research

Money managers will need to become overweight MBS

Supply and demand

Passive AUM has increased, which is good for index demand assuming inflows, but means active investors will need to take a larger overweight

Historically, large changes in money manager demand have been negatively correlated with MBS index performance



Net issuance forecast to be \$300 billion for end-2024

Supply and demand

Historical supply/demand breakdown by investor type (\$bn)

	All mortgages									Ginnie only			
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 FY	2024 Est	2023 FY Ginnie	2024 Ginnie Est
Gross Issuance	923	1,251	1,472	1,304	1,171	1,532	3,161	3,484	1,701	1,000	1,050	500	450
Net Issuance	69	163	229	315	281	224	506	868	539	250	300	175	180
Demand													
GSEs	-46	-42	-43	-5	-15	0	-61	-26	-37	-2	0	0	0
Overseas	44	31	107	62	90	76	-30	102	167	150	175	75	88
Fed +Treasury	247	11	-6	24	-128	-217	610	577	27	-220	-210	-55	-53
Banks	11	177	220	140	70	86	522	326	-57	-100	75	100	150
REITs	8	-18	-1	40	21	36	-101	-22	2	25	25	0	0
Money Managers/ Others	-208	5	-48	48	196	198	-435	-89	437	397	235	55	-5
Net Demand ex Fed/Tsy/GSE	-132	195	278	296	423	441	-42	317	550	472	510	230	233

Source: Treasury, Federal Reserve, Fannie Mae, Freddie Mac, REIT and bank company filings, Morgan Stanley Research forecasts

Trade recommendations

Investable ideas

- 1. Investors should **trade the range on the index, roughly 50-65 OAS**; we believe the lack of forced buyers likely means that absent a regime change, swings in valuations will be modulated by active investors.
- 2. The narrative for the end of the year is better than the narrative for the beginning if the forwards are realized, and investors may try to position in advance of that, but the near-term technicals may make that difficult.
- 3. While mortgages at times will look cheap to IG credit, the lack of roll specialness, challenge in realizing model OAS, poor historical returns making it difficult to raise money, and high spread vol will keep mortgages cheap to credit.
- 4. G2/FN swaps should be well supported from a technical perspective, particularly if affordability eases and housing activity increases, bringing more conventional supply to the market. We like owning slight discount Ginnies given how narrow the box swaps are.
- 5. It will be difficult for rolls to trade very special, and thus investors that are **long low payup pools vs TBA** may see returns that look attractive if they can be leveraged.
- 6. Based on our forecast of faster turnover and a rally to the forwards, we think **owning belly and lower coupons should outperform premiums.**

Given reliance on active investor demand, we think investors should trade the range on the index

Investable ideas

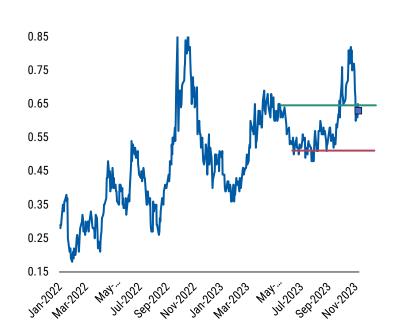
Generally, we think investors should target longs in the context of 65 index OAS and shorts in the context of 50 index OAS, roughly the range post-regional bank crisis While we think MBS excess returns are compelling, finding buyers is challenging when historical excess return vol has been higher on MBS (i.e., credit carry/vol > MBS carry/vol)

Credit OAS/realized vol.

ig average

MBS OAS/ realized vol. -

mbs average



Source: Bloomberg, Morgan Stanley Research; Note: Updated as of Nov 8, 2023.

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We think belly and lower coupons should outperform premiums; G2/FN swaps should be well supported from a technical perspective

Investable ideas

Discount prepays have been correlated with HPA for the 25 largest states, which likely indicates increased cash-out behavior and higher home sale activity.

24M HPA

y = 0.06x + 0.02

R² = 0.56

FL

30%

CA

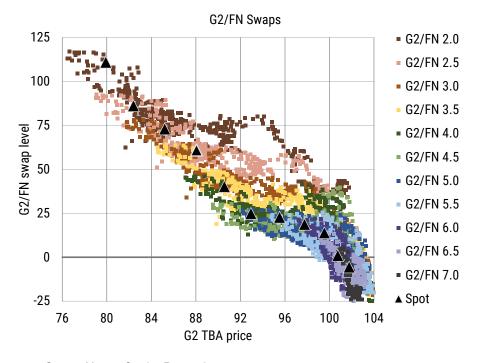
Ty

10%

1 2 3 4 5 6

Turnover CPR

Our preference is to own Ginnies in 5.0s and 5.5s, which we think should see bank demand without as many headwinds from supply

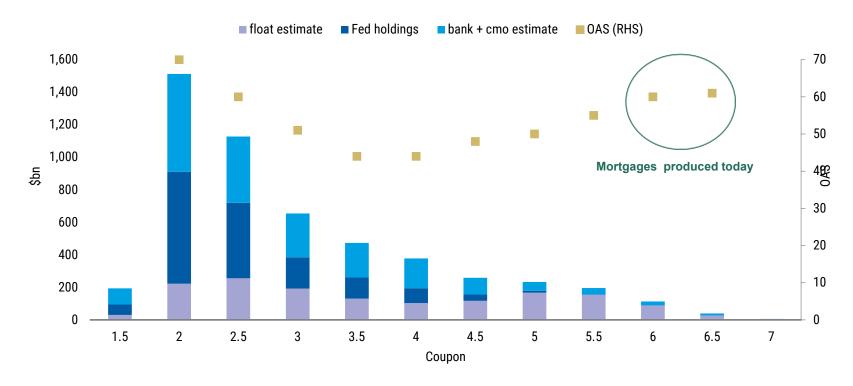


Source: Morgan Stanley Research, eMBS, uses 12-24 WALA non-specs, 3-5% OTM

Source: Morgan Stanley Research

Bifurcation between deep discounts and production mortgages Investable ideas

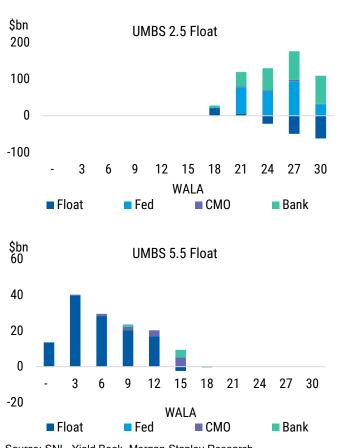
Based on our forecast of faster turnover and a rally to the forwards, we prefer belly and lower coupons.

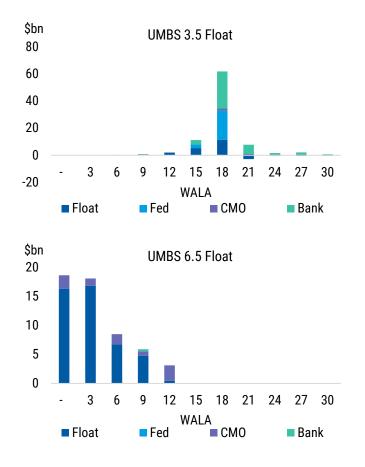


Source: Yield Book, Bloomberg, Morgan Stanley Research; Note: Updated as of Nov 8, 2023.

Float estimated to be quite low in discounts due to bank and Fed Investable ideas

Indexed demand and lack of supply after FDIC sales reduce catalysts for discount widening





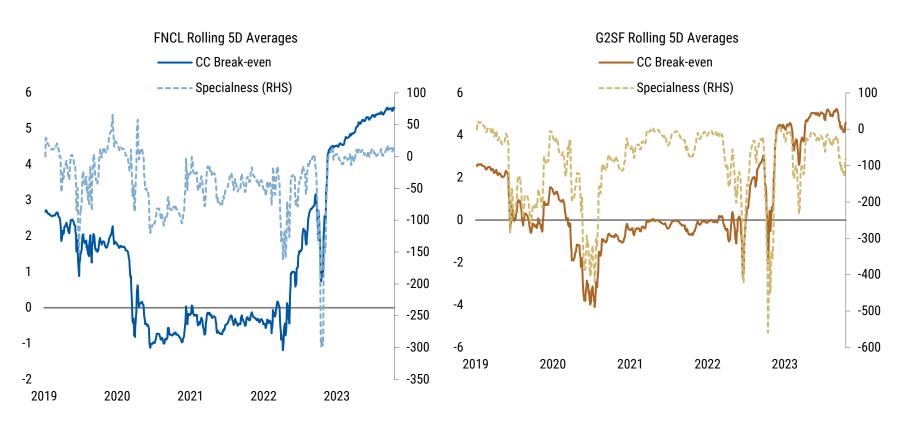
Source: SNL, Yield Book, Morgan Stanley Research

Locally, it may be challenging for specialness to improve

Investable ideas

Conventional current-coupon implied funding and specialness

Ginnie current-coupon implied funding and specialness



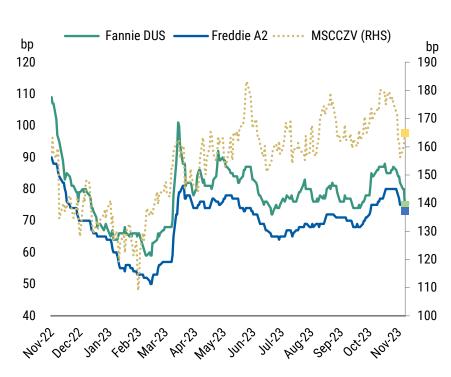
Source: Morgan Stanley Research

Source: Morgan Stanley Research

Worse valuations in multifamily are balanced by positive supply technicals into next year

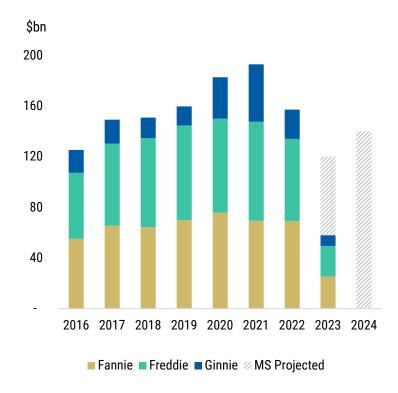
Investable ideas

ACMBS has remained fairly rich to singlefamily throughout 2023



Source: Morgan Stanley Trading Desk; Morgan Stanley Research; Note: Updated as of Nov 8, 2023

Low issuance, no Fed run-off, and less FDIC supply provide a positive technical



Source: Fannie Mae, Freddie Mac, Bloomberg, Morgan Stanley Research estimates

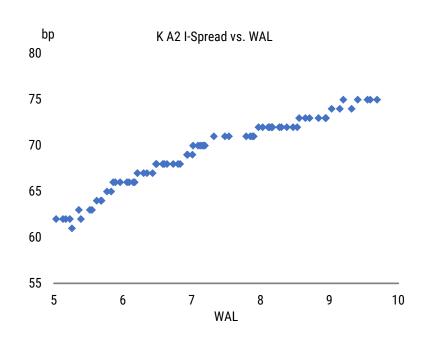
Multifamily experiences lower spread volatility historically; we also expect the term structure premium to steepen next year

Investable ideas

Agency CMBS has exhibited significantly lower spread volatility than Agency MBS over the past five years

Standard Deviations								
		y CMBS family)	Agency MBS (Single-Family)					
Year	10/9.5 DUS I- A2 I-		Current Coupon OAS	Current Coupon ZV	SF MBS Index OAS			
2018	2.7	2.3	2.4	2.9	1.5			
2019	2.4	2.3	7.3	5.4	3.0			
2020	7.6	5.5	15.9	15.1	14.7			
2021	2.7	2.7	4.6	4.8	4.1			
2022	4.5	4.2	10.1	10.0	6.8			
2023 YTD	4.8	3.3	8.1	8.0	5.1			

The ACMBS term structure premium has been fairly flat; expect steepening out again as Fed normalizes policy



Source: Morgan Stanley Research, Bloomberg, Yieldbook

Source: Morgan Stanley Research

However, finding demand for agency CMBS may be challenging – preventing meaningful tightening

Investable ideas

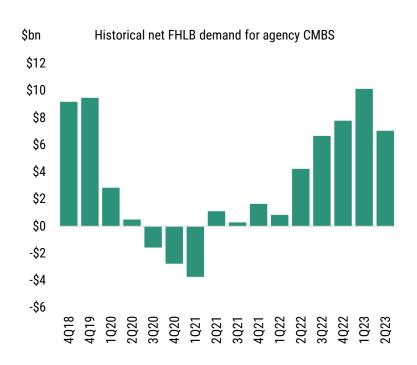
US banks hold ~45% (\$460bn) of the market; demand likely on hold until deposit durations, regulatory changes more certain

\$bn Historical net bank demand for agency CMBS

120
100
80
60
40
20
-20
-40
2015 2016 2017 2018 2019 2020 2021 2022* 2023 20**

Source: SNL, Morgan Stanley Research; Note: *Began including "Structured Financial Products: Other Collateral" with Agency CMBS given re-categorization by some banks; **includes failed regional banks

FHLBs hold another ~13% (\$130bn), but the recent FHFA review may result in lower advances and thus lower ACMBS demand

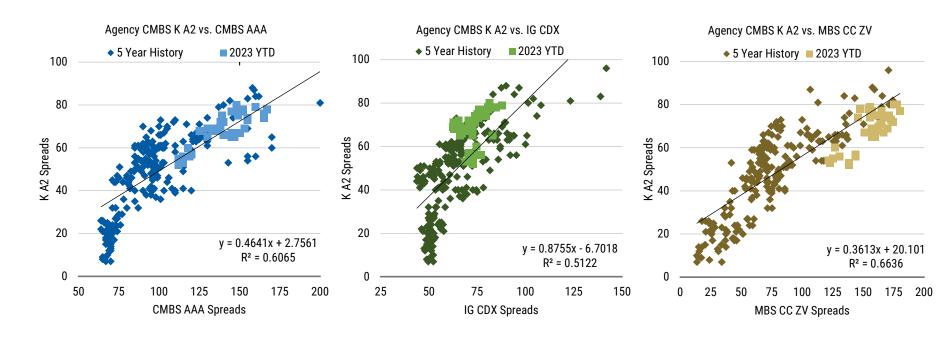


Source: Morgan Stanley Research, FHLBs

We expect agency multifamily to follow the herd tighter, moving in sympathy with single-family

Investable ideas

Using Freddie K A2 I-spreads as a benchmark, we think that agency CMBS will tighten from 75bp to 65bp – but view the product more from a carry perspective next year.

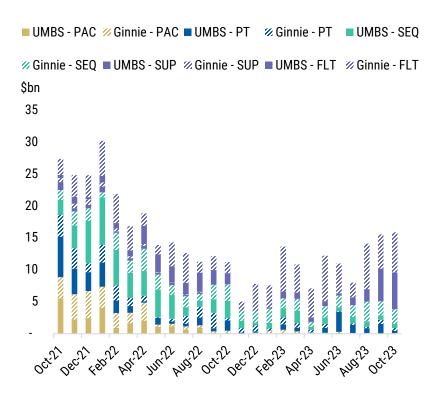


Source: Bloomberg, Morgan Stanley Research

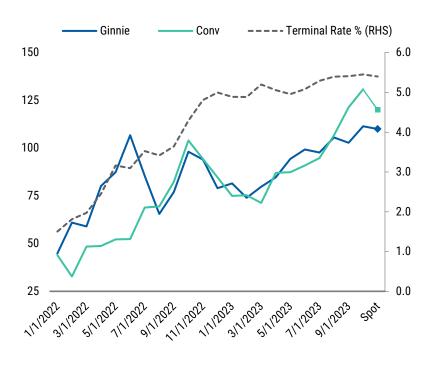
CMO floater performance remains volatile with the basis

Investable ideas

Floater issuance increased as investor demand for front-end products grew



Average DMs had previously reached ~120bp to cover increased cap risk and volatility



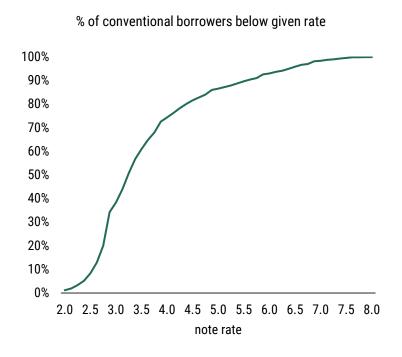
Source: Bloomberg, Morgan Stanley Research

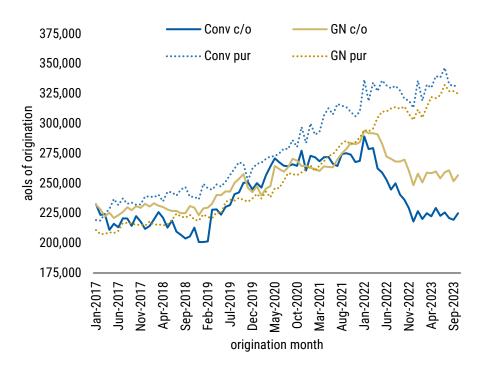
Source: Bloomberg, Morgan Stanley Research

Our focus has been on turnover, but we expect the universe of mortgages with rates over 7% to increase to ~12% by YE 2024 Prepays outlook

Over 98% of the conventional fixed rate universe has a mortgage rate below 7%, and 74% has a rate below 4%

Cash-out loan size plateauing while purchase loan size increasing, indicative of a slowdown in cash-out behavior





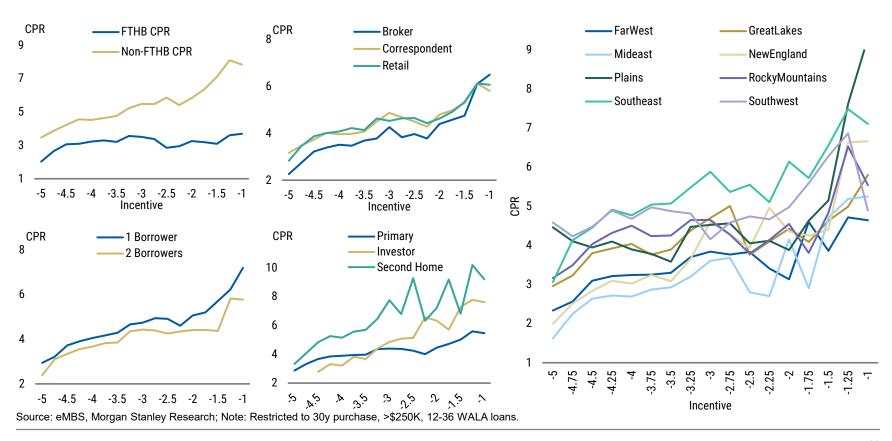
Source: eMBS, Morgan Stanley Research

Source: eMBS, Morgan Stanley Research; Note 12-36 WALA.

Alternative characteristics can be considered in turnover, though pools may be difficult to source

Prepays outlook

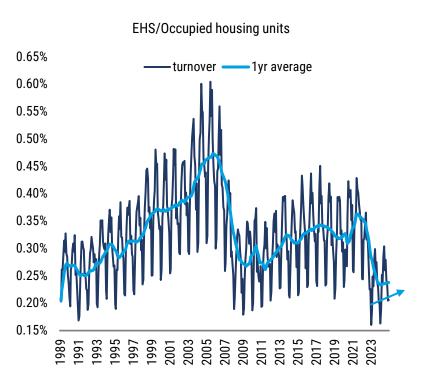
Investors seeking out fast turnover speeds should avoid first-time home buyer, broker channel, and Mideast loans; instead, look for second homes, single-borrower, and Southeast loans



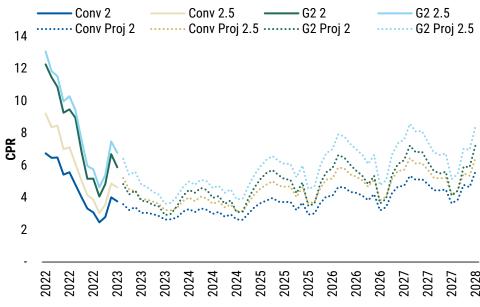
Mobility has likely reached a bottom, and we expect a pick-up next year given an increase in EHS and continued seasoning

Prepays outlook

Decline in EHS/occupied housing turnover at lowest levels since 2001



Projected turnover per Yield Book looks reasonable to us



Source: Yield Book projections, Morgan Stanley Research; Note: Uses universe for Source: NAR, US Census Bureau, Morgan Stanley Research historical speeds, generic pool with same WALA as universe for projected.

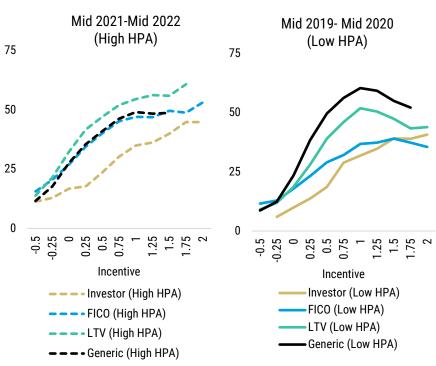
Seasoned borrowers with high realized HPA have extension protection and less call protection; vice versa for newer borrowers Prepays outlook

FICO stories provide *extension* protection in high HPA periods, while investor loans provide slight extension protection for OTM loans

Beg 2020-Mid 2021 Beg 2022-Beg 2023 (High HPA) (Low HPA) 12 12 10 8 6 Incentive Incentive Investor (Low HPA) ---- Investor (High HPA) FICO (Low HPA) --- FICO (High HPA) ---- LTV (High HPA) LTV (Low HPA) Generic (Low HPA) --- Generic (High HPA)

Source: Morgan Stanley Research, eMBS; Note: Restricted to 12-24 WALA, ex-NY, >\$250K loan size. low FICO defined as < 700, high LTV defined as \ge 95 LTV.

Investor stories appear to offer significant call protection in both low and high HPA periods

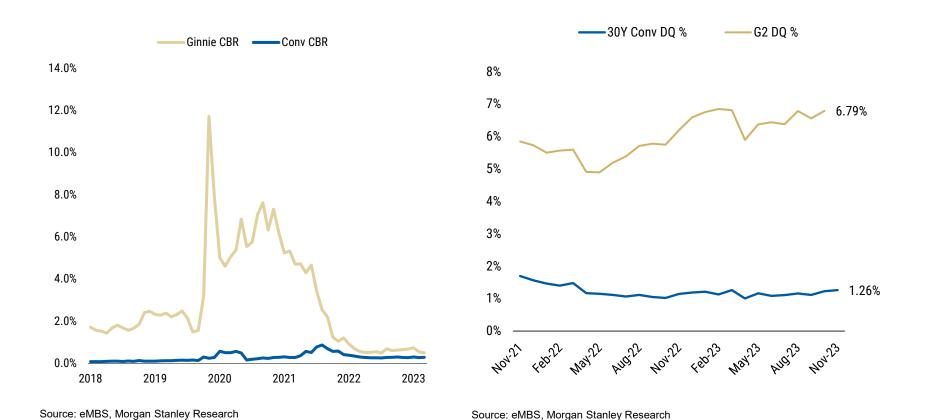


Source: Morgan Stanley Research, eMBS; Note: Restricted to 12-24 WALA, ex-NY, >\$250K loan size. low FICO defined as < 700, high LTV defined as ≥ 95 LTV.

Buyouts have remained low, despite elevated Ginnie delinquencies Prepays outlook

Conventional CBR at 0.3, Ginnie CBR at 0.5; loss-mitigation strategies likely prevent pick-up

Ginnie delinquencies have risen to 6.8%, while conventionals remain low, at 1.3%



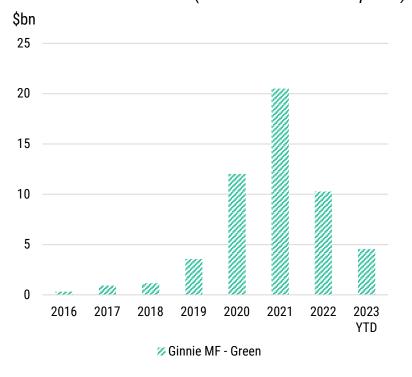
Agency Market – ESG Opportunities

ESG in Agency MBS and Agency CMBS

Conventional ESG Issuance



Ginnie ESG Issuance (lack of concentrated pools)



Source: eMBS, Morgan Stanley Research

Source: eMBS, Morgan Stanley Research

ESG and Prepays

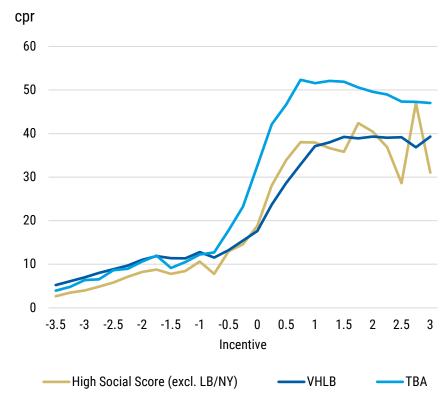
ESG in Agency MBS and Agency CMBS

GSE Social Index components

Dimensions	Criteria
Income	Low Income Borrowers
Borrower	Underserved minorities
	First-time homebuyers
Property	Low-Income Areas
	Minority Tract
	High Needs Rural
	Designated Disaster Area
	Manufactured Housing

Source: Fannie Mae

Historical s-curves show high social scores pools with call protection akin to VHLB specs



Source: Morgan Stanley Research, Note: Using 2021-2023 Data, High Social Score pool defined as > 2 SDS, \geq 95 SCS, excluding loan balance and spec stores; TBA defined as > 275K, ex-NY, < 2 SDS, >95 SCS pools;

Live trades – rationale and risks

Trade	Entry Date	Rationale	Risks
Long G2/FN 5 and 5.5 swaps	11/12/2023	Support from bank demand, low box swaps, attractive starting valuations, easy for banks to hedge	Heavy Ginnie supply in aggregate, not all banks buy discount Ginnies
Long seasoned and 20yr pools vs TBA	10/6/2023	Underperformed bear steepening, attractive carry/spread valuations, lack of supply	Curve/model risk, rolls go special, outflows
Long 200k and higher spec 5.0 vs TBA (switched to 5.0s on 10/27)	9/22/2023	Pick OAS, similar ZV, near deliverable floor vs TBA	Rolls go special
Long low payup production coupon for investors looking for pool exposure (inv, FICO, social)	8/4/2023	Credit stories do well in world of low HPA, cheaper play vs roll trading poorly	Roll goes special, supply

Source: Morgan Stanley Research

Morgan Stanley agency MBS team

Meet the Team



Jay Bacow
Strategist
Co-Head of SPG Strategy
Morgan Stanley & Co. LLC
Phone: +1 212 761-2647

Jay.Bacow@morganstanley.com

Biography

Jay Bacow is a Managing Director and co-head of US Securitized Products Research with James Egan. His focus is on all securities guaranteed by the GSEs, including single-family MBS, agency multifamily, and agency debt. He is currently *Institutional Investor's* first overall ranked analyst in Agency RMBS and Agency CMO & Derivatives categories. Prior to joining Morgan Stanley in 2016, Jay was a portfolio manager on the Agency Mortgage team at Goldman Sachs Asset Management, managing interest rate, mortgage basis, coupon stack, specified pool, CMO, and agency derivative risk. He holds a bachelor's degree in physics from the Massachusetts Institute of Technology.



Zuri Zhao
Strategist
Morgan Stanley MUFG Securities Co., LTD.
Phone: +81 3 6836-5466
Zuri.Zhao@morganstanleymufg.com



Janie Xue
Strategist
Morgan Stanley & Co. LLC
Phone: +1 212 761-6051
Janie.Xue@morganstanley.com

Disclosure section

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(as of October 31, 2023)

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	Coverage Uni	iverse	Other Material Investment Banking Clients (IBC) Other Material Investores Clients (N				
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1337	37%	270	43%	20%	594	39%
Equal-weight/Hold	1664	46%	299	47%	18%	700	46%
Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	588	16%	61	10%	10%	220	15%
Total	3,592		630			1515	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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Morgan Stanley

The Americas

1585 Broadway New York, NY 10036-8293 United States +1 212 761 4000

Europe

20 Bank Street, Canary Wharf London E14 4AD United Kingdom +44 (0)20 7425 8000

Japan

1-9-7 Otemachi, Chiyoda-ku Tokyo 100-8104 Japan +81 (0) 3 6836 5000

Asia/Pacific

1 Austin Road West Kowloon Hong Kong +852 2848 5200