Q1 2023
Market Update

PHOENIX
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PHOENIX Corporate Overview

PHOENIX provides clients with an unparalleled level of service, depth of knowledge and experience in all facets of MSR and Whole Loan transactions and valuations.

Our knowledge base and expertise extend across the industry and include solutions for servicing QC/audits, loan surveillance, loan due diligence, REO disposition.

25+ Years of Experience

Managed
$1.5+ Trillion
in MSR Transactions

Over 250 Clients Nationwide

Provide MSR valuations for
75%
of the Top 20 banks and servicers

PHOENIX Business Lines

Trading	Mortgage Services	Analytics
MSR & Whole Loan Sale, Purchase and Advisory Services	Asset Mgmt., Servicing/Loan QC & Component Services	MSR & Whole Loan Analytics, Valuations and Advisory Services
MSR Brokerage	Advisory	MSR Valuation
Sell-Side Representation	Business Process Review & Fulfillment	Mark-to-Market
Buy-Side Representation	RFP Management	Retain vs Release Grids
Comprehensive Transaction Support	Default Servicing/REO	Acquisition Analysis
LOI/Purchase & Sale Agreement Review	Servicing Oversight	Economic Valuation
Whole Loan Trading	Surveillance	MSR Accounting
Principal Acquisitions	Loan Level Due Diligence	MSR Asset Management
Loan Sale Advisory	Mortgage & Servicing QC	Whole Loan Valuation
	Asset Management	Bulk Sale Tax Analysis

Recent Mortgage Headlines

Mortgage Bankers Continued to be Challenged by Low Origination Volume Compared to YoY Q1 2022

Rising mortgage rates through Q1 2023, leavened by some time periods of rate reductions and/or rate stability, continued the 2022 trend and removed refinance incentives for homeowners with low-interest rate existing mortgage loans. Low existing housing sale volumes continued as a trend in Q1 2023 which crimped volumes of mortgage origination to finance the purchase of homes.

Federal Reserve Lowers the Trajectory of Fed Funds Rate Increases in Q1 2023

After four successive hikes of the Fed Funds Rate of 75 basis points in H2 2022, the result of the December 2022 FOMC meeting was an increase of only 50 basis points. In Q1 2023, the increases were only 25 basis points in February and 25 basis points in March.

A Solid but Reduced Volume and Cadence of Bulk MSR Offerings Came to Market in Q1 2023 Compared to Q4 2022

If H2 2022 was a flood of supply of MSR bulk offerings brought to market, Q1 2023 was a turn toward a more traditional cadence and volume. Bidder participation, across the spectrum of product types, remained stout.

Private Capital Was Raised for Investment in MSR

Demand and capacity for MSR and excess strip acquisitions appeared to increase through Q1 2023. Multiple private capital market participants successfully raised money for investment in the space and continue to do so.

Recent Mortgage Headlines

High Profile Bank Failures/Asset Sales Gripped the Headlines

Silicon Valley Bank, Signature Bank, and, in April, First Republic Bank, all found themselves in terminal financial situations and required rescue, sale, and/or dissolution. Concerns about deposit outflows potentially causing low coupon mortgages to be sold at a loss were prominent discussions in the marketplace. Substantial government actions, particularly through examples of risk sharing and guarantees, like those extended to JP Morgan Chase which purchased assets of First Republic, appear to have prevented contagion, for now.

Link to Source

Some Mortgage Companies Made Strategic Acquisitions While Some Shut Down

Guild Mortgage acquired Cherry Creek Mortgage and made other firm and team acquisitions to bolster its origination footprint. Union Home and American Pacific did so as well. A few others ceased the operation of business channels or whole companies as their business models could no longer be sustained in this low origination volume environment.

Link to Source

Link to Source

Recent Mortgage Headlines

Scratch and Dent Whole Loan Trading Volume Declined

Private capital raised billions at the end of 2022 and Q1 2023 to position themselves to purchase scratch and dent residential mortgage whole loans, considering the growing rate of Agency and investor repurchase claims and other opportunities. However, the sale volumes of these assets have been lower than expected, likely driven by note rates of the loans to be repurchased being materially lower than those currently being originated. This has materially impaired the price these assets trade at, which has led to fewer sales. While it's still early days, perhaps an increasing percentage of repurchase claims are resulting in non-repurchase resolutions. Also, Fannie paused their regular cadence of RPL sales in January which also exacerbated the challenges for the sector because it removes scale for securitization and activity.

Fannie and Freddie New LLPA

Announced in Q1 2023 and then implemented May 1st, the new fees roiled the origination industry as impacts were projected, with winners being loans to low-income borrowers with credit scores below 680 and first-time homebuyers at the expense of loans to borrowers with good but not great income and credit. This has caused originators to retool their lead sourcing and operations, while analysis of the impact of these changes will be watched carefully for its impact on whole loan and MSR economics such as default rates and prepayment speeds going forward.

Link to Source

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Recent Mortgage Headlines

FHFA MSR Valuation Advisory Bulletin

The FHFA issued a bulletin in January, effective April 1st, that Fannie Mae and Freddie Mac should have their own processes to evaluate the reasonableness of seller/servicer MSR values used to manage the agencies counterparty credit risk. Attention and focus on MSR values and the differences between fair value, economic value, and trade prices is increasingly under analysis by investors and lenders to origination businesses as the mortgage banking industry navigates this period of low origination volume.

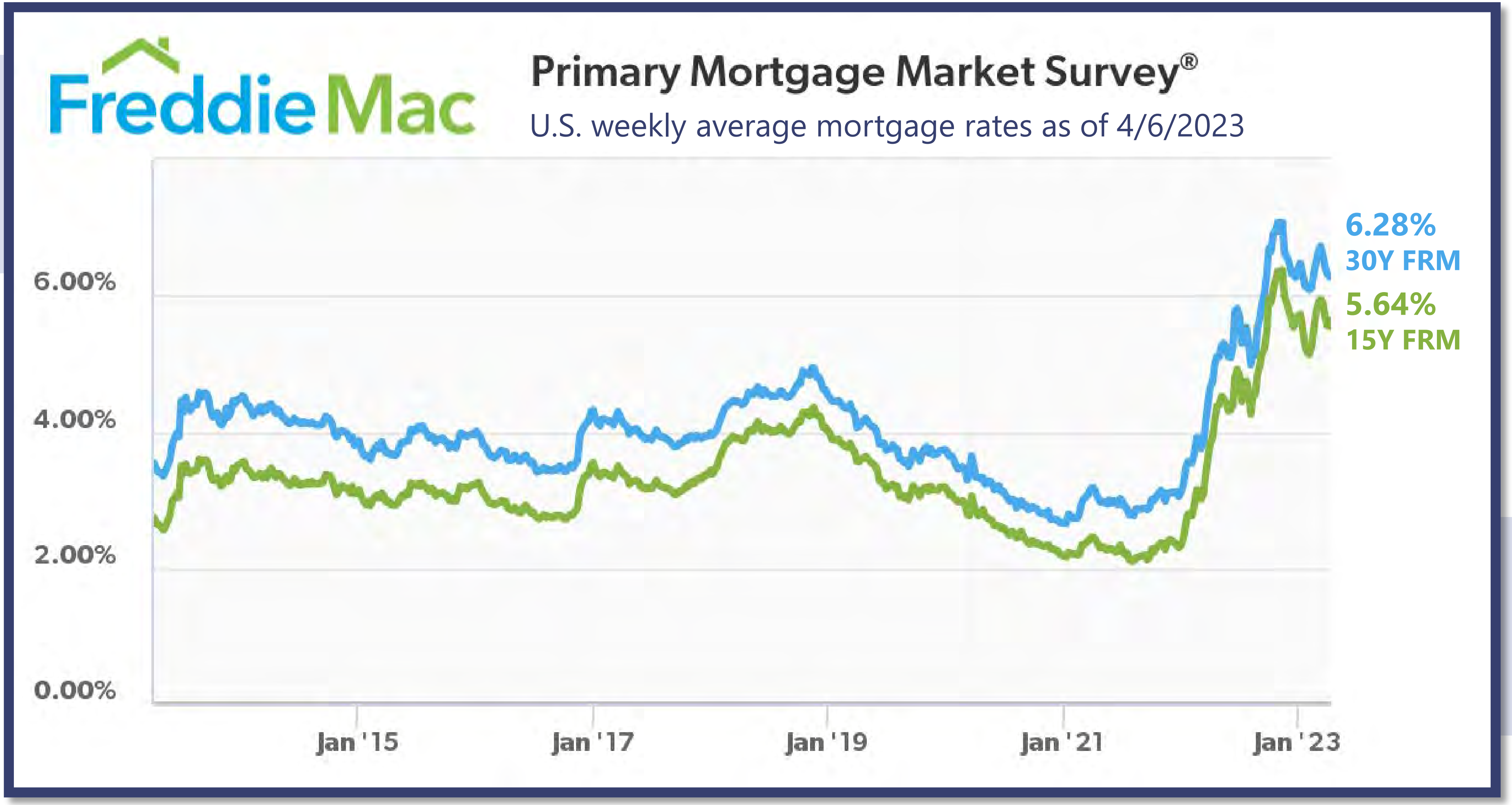
Link to Source

MSR Sales by Wells Fargo Were Moderate and Did Not Swamp the Market with Supply

Wells Fargo came to the MSR market in Q1 2023 with a limited bulk offering and executed a sale without impacting the supply/demand balance of the market.

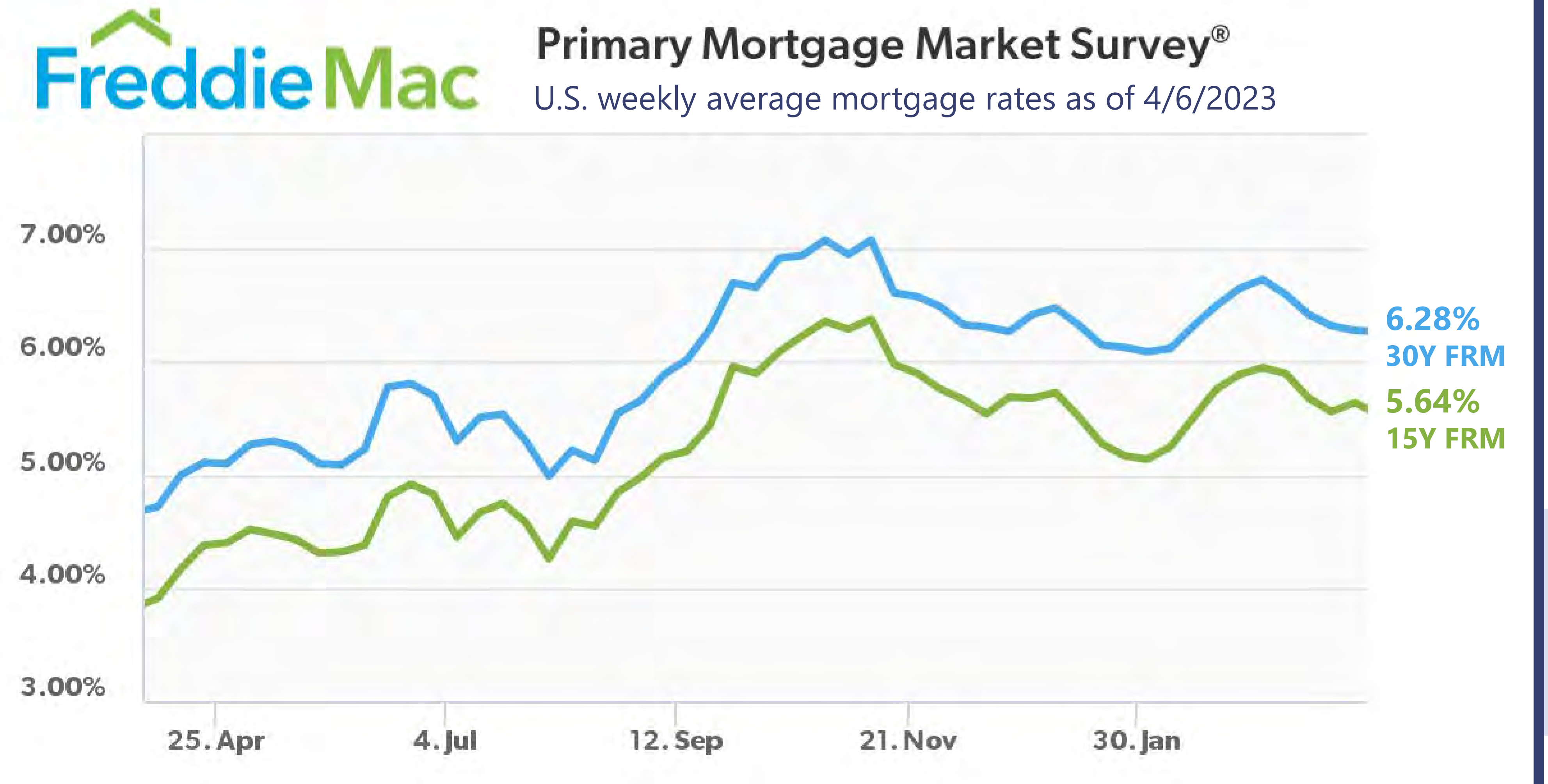
MSR Macro Backdrop

Ten Year View on Mortgage Rates



Source: Freddie Mac Primary Mortgage Market Survey®

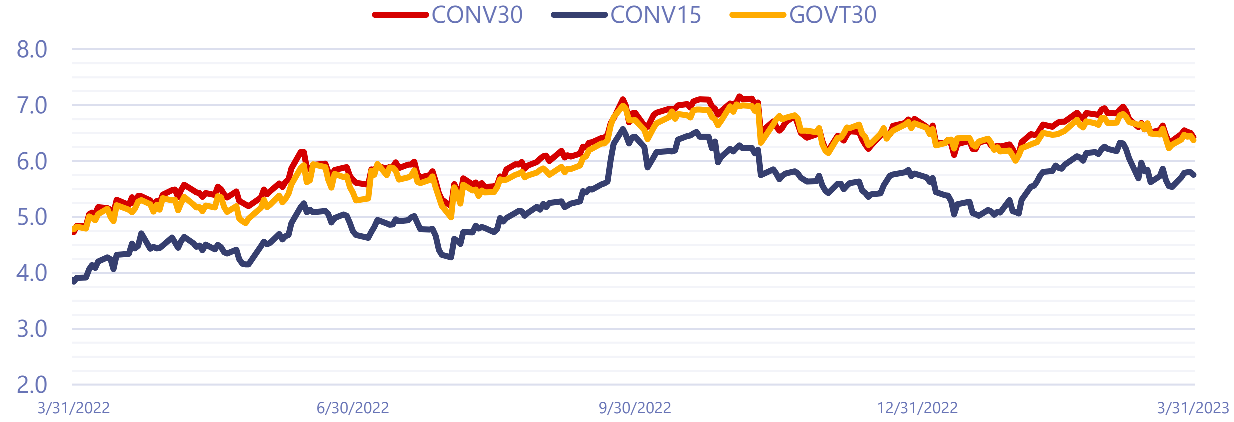
One Year View on Mortgage Rates



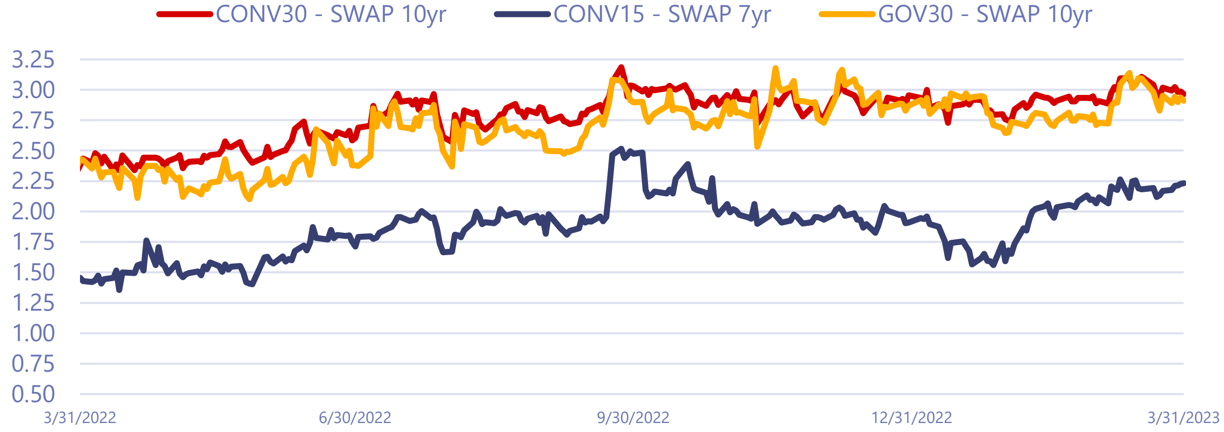
Source: Freddie Mac Primary Mortgage Market Survey®

Rate History

PHOENIX Mortgage Par Rates (%)

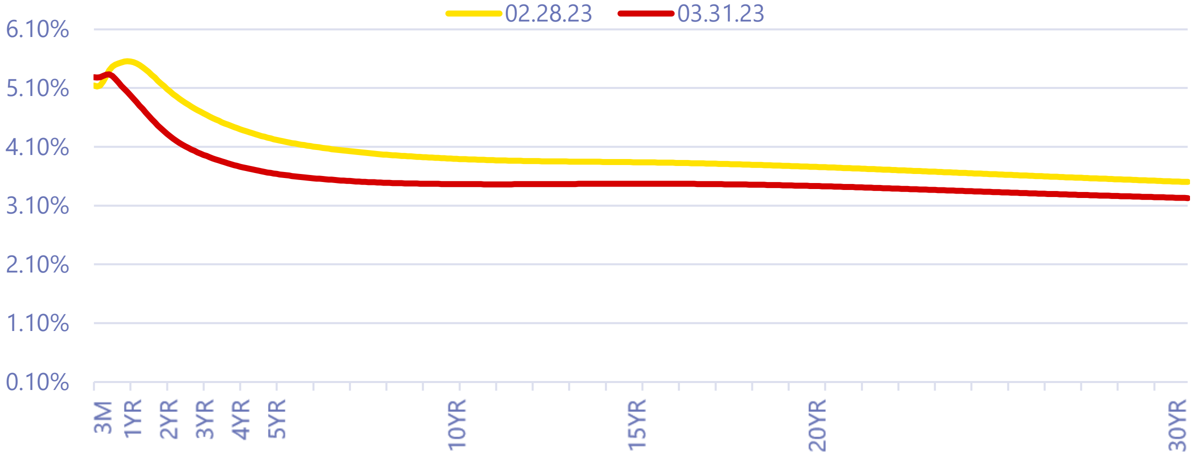


Mortgage Par Spread over SWAP Rates (%)



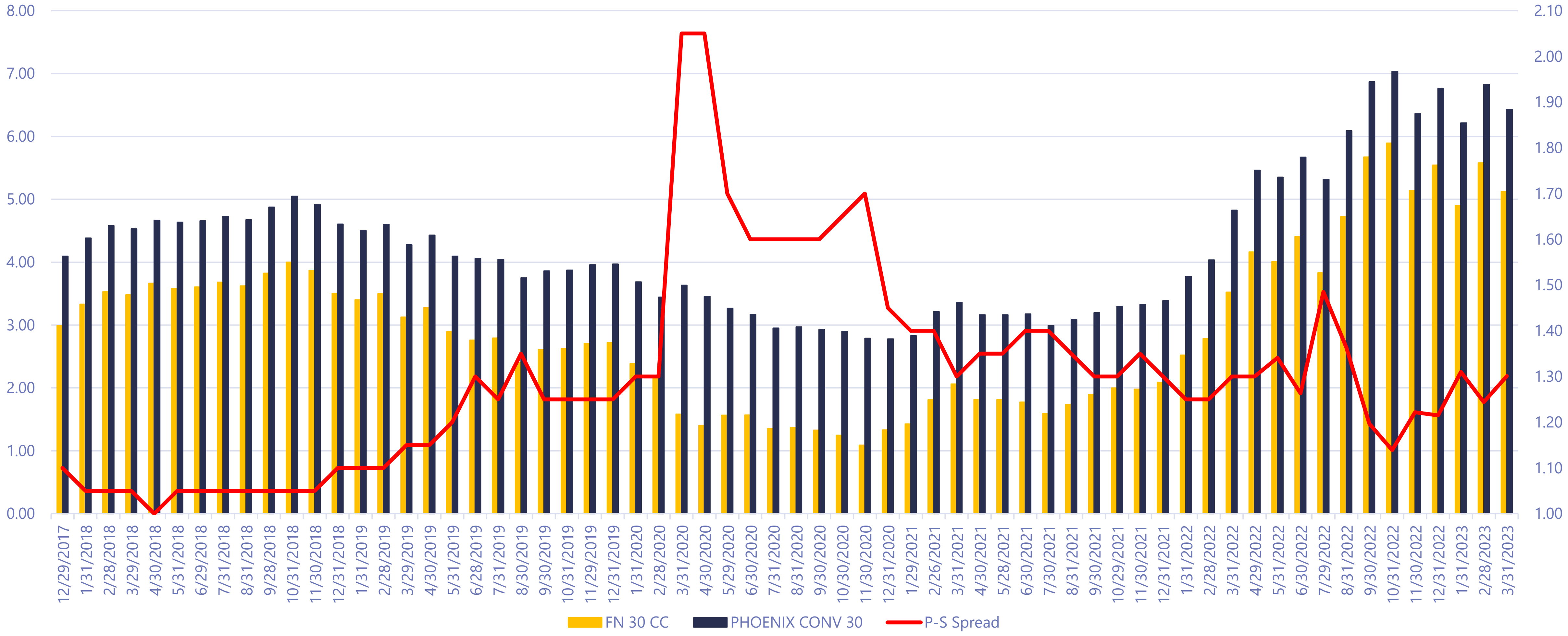
2yr and 10yr SWAP Spread

Yield Curve Comparison



Source: Thomson Reuters and PHOENIX

Primary Secondary Spread Tracking

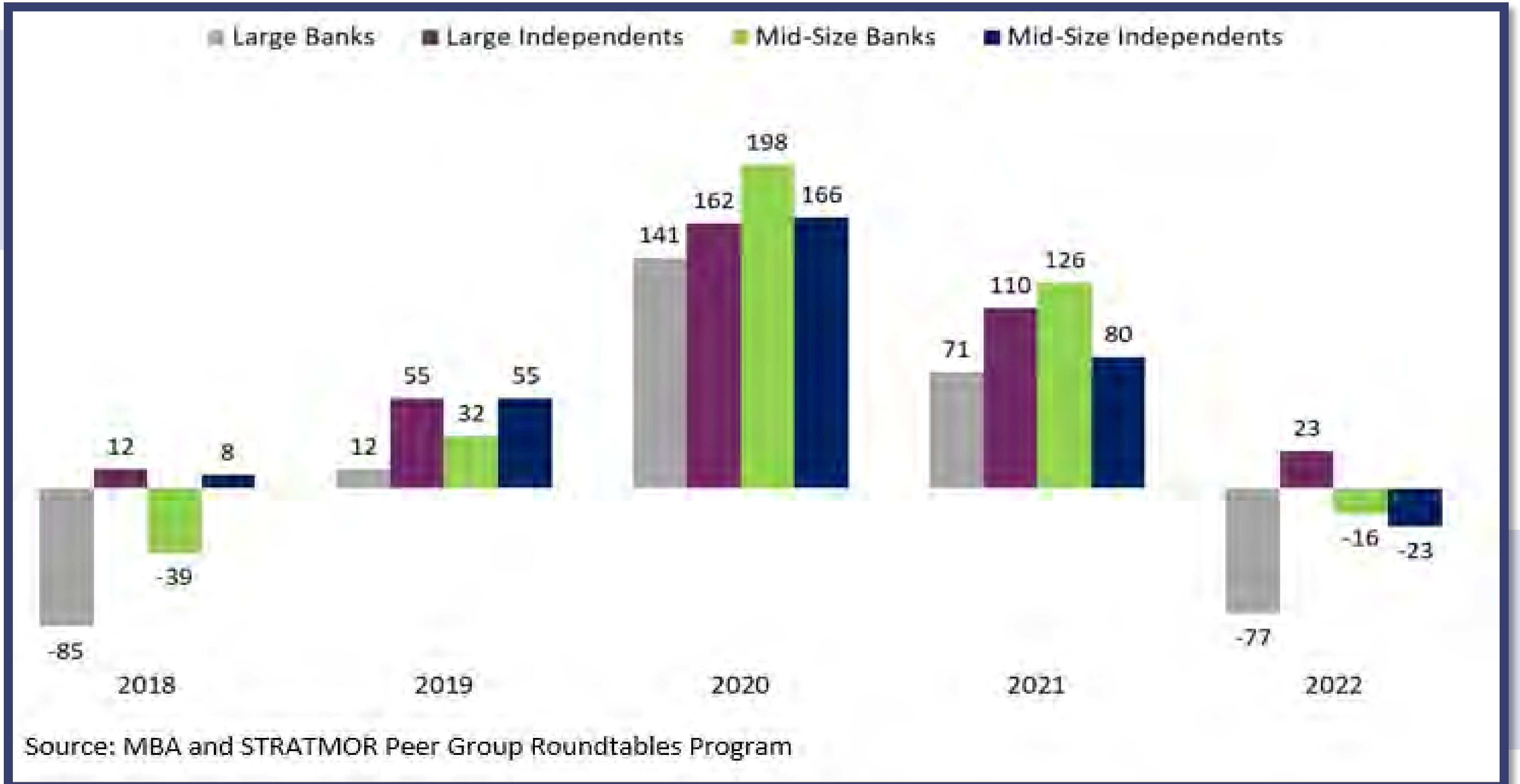


Reported Origination Volumes

Company	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q4 2022 to Q3 2023 Change (in $B)	Q4 2022 to Q4 2021 Change (in $B)	Q4 2022 to Q3 2022 Percentage Volume Change	Q4 2022 to Q4 2021 Percentage Volume Change
Wells Fargo	48.10	37.90	34.1	21.5	14.60	-6.90	-33.50	-20.23%	-69.65%
Fifth Third	4.30	3.50	4.30	4.00	2.30	-1.70	-2.00	-39.53%	-46.51%
Flagstar + NYCBC	15.27	11.74	12.96	10.66	4.50	-6.17	-10.78	-47.57%	-70.57%
Bank of America	23.00	16.35	14.50	8.7	5.20	-3.50	-17.80	-24.14%	-77.39%
PNC	6.60	5.10	4.80	3.10	2.10	-1.00	-4.50	-20.83%	-68.18%
Chase	48.20	24.70	21.90	12.10	6.70	-5.40	-41.50	-24.66%	-86.10%
US Bank	25.20	16.60	13.90	15.60	11.20	-4.40	-14.00	-31.65%	-55.56%
Sub Total	170.67	115.89	106.46	75.66	46.60	-29.07	-124.08	-38.42%	-72.70%
MBA Originations	893	689	678	480	398				
Total Percentage	19.11%	16.82%	15.70%	15,76%	11.71%				

- For the above companies:
  - Volumes are down (-38.42%) in Q4 2022 compared to Q3 2022.
  - Volumes are down (-72.70%) in Q4 2022 compared to Q4 2021.

Net Production Income by Peer Group



MSR Market Update

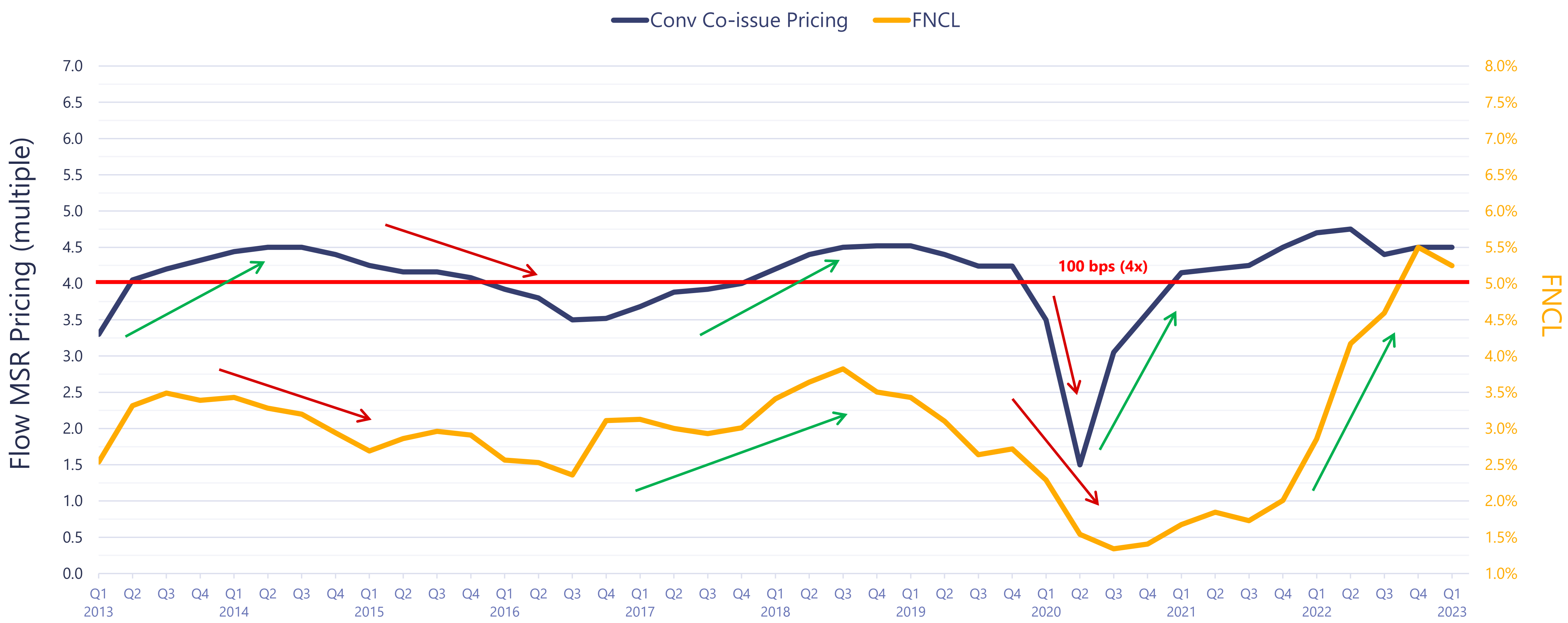
Bulk MSR Market Overview

- The MSR bulk market continued to see robust activity in Q1 2023 in terms of overall deal volume and especially deal size.
- Both Conventional and Government pools have been actively traded, there is a healthy mix of Conventional & Government offerings this quarter.
- Newer vintage Conventional pricing ranges from high 4x to low 5x depending on size and portfolio characteristics. Larger packages paired with low WAC (>$7B, <3.25%) are attracting the best pricing.
- New vintage Government pricing ranges from mid 3x to low 4x depending on FHA/VA mix and delinquency profile. Seasoned, more delinquent pools are trading in the low 2x to low 3x range depending on delinquency severity.

Co-Issue/PIIT MSR Market Overview

- Conventional pricing ranges from a mid 4x to low 5x for fixed 30 product at par.
- Government pricing ranges from low 3x to mid 3x for at par product depending on note type (FHA/VA) and servicing strip.
- While much of the trade activity has been focused on bulk transactions, the Buy-Side appetite for Co-issue remains robust.
- Total Government PIIT volume gained market share but continues to lag total conventional Co-issue volume. Total PIIT volume nearly overtook total FHLMC volume in Q1, while FNMA volume is double that of PIIT or FHLMC deliveries.
- With reduced origination volume, February saw the lowest total Co-issue volume per month in the last four years.

Historic Conventional MSR Market Pricing (FRM 30yr at Par)
as of Q1 2023



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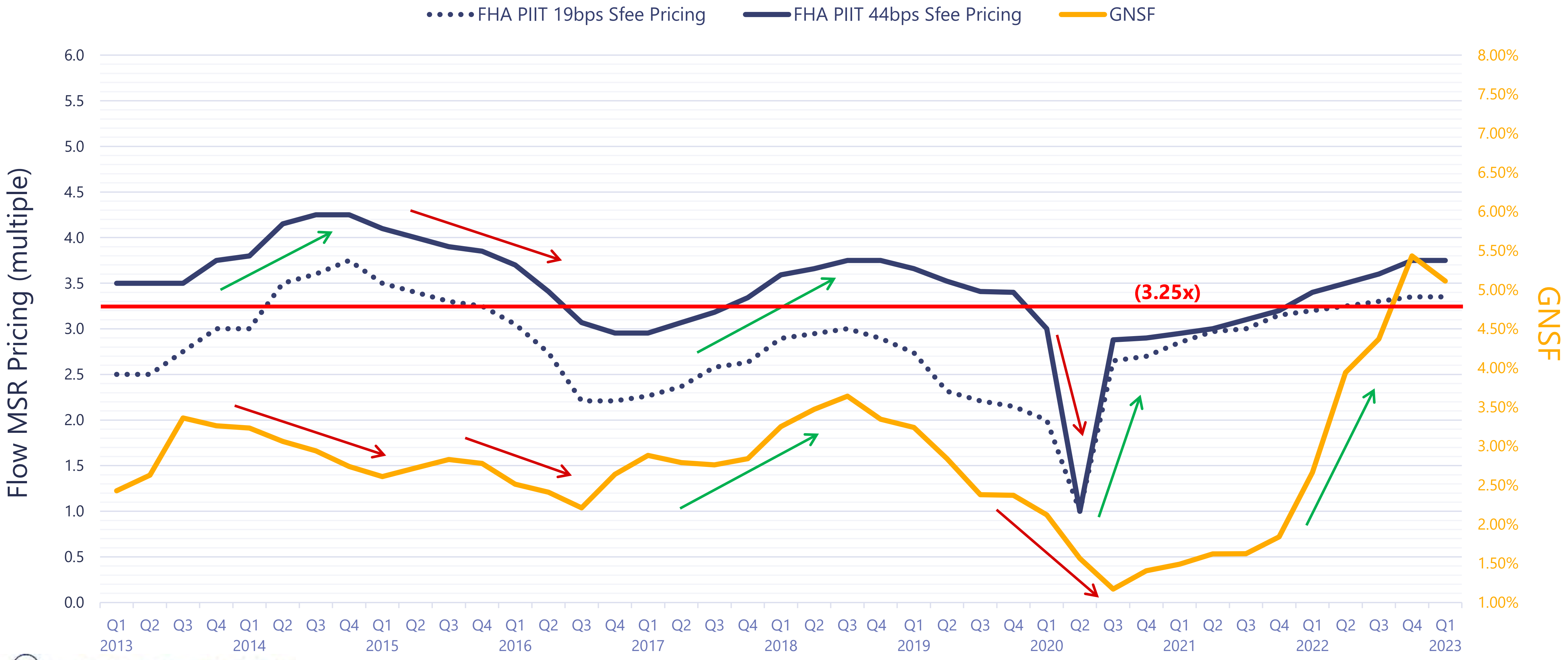
Historic FHA MSR Flow Pricing (Fixed 30yr at Par)

as of Q1 2023



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Whole Loan Market Update

Whole Loan Trends

- Continued turmoil in the banking industry has opened more room for scrutiny with regards to how institutions mark whole loans on their balance sheets. This is particularly impactful for banks with lower capital cushions and heightened deposit outflows. Declines in other more liquid fixed income assets typically held by banks given the steep rate increases beginning Q1 2022 have helped fuel the fire; as attempts to minimize realized losses have become more complicated.

- Both non-agency and investor product have continued to see heightened demand, particularly with non-traditional institutions such as investment funds, PE firms, and REITs. This includes single-family rental and fix-and-flip loans, both of which have experienced significant growth in the non-agency space. DSCRs continue to be a popular underwriting alternative for investor loans helping to fuel overall credit expansion. A sustained pause in GSE NPL/RPL sales have also helped fuel the growth in these areas with no clear indication behind the intent of future sales.

- Economic & recessionary concerns continue to be high on the radar as investors search for additional sources of fragility across the market, particularly in the banking sector. This has contributed to liquidity issues, lower risk tolerances, and increased counterparty scrutiny. Many market participants remain on the sideline until they can observe more distinct indications of market health.

- Home prices have begun to stabilize helping mitigate concerns of increased future losses; particularly for portfolios with higher delinquencies. This also stands to benefit the health of the HELOC & closed-end second lien markets given the impact of borrower equity in evaluating the risk of these products.

Whole Loan Scratch & Dent

Scratch & dent pricing has continued to improve, albeit slowly, since the lows seen in mid to late 2022. While there are more buyers competing for the product, the high cost of financing and more liquid alternatives have kept pricing at conservative levels. We have also observed the spread between small (1 to 10 loans) and large offerings ($20mm and up) increasing to historical highs as institutional buyers focus on the efficiency of buying in bulk. There continues to be a lack of liquidity in the lowest coupon stacks of <3%.

Mid/High 70s to 80s

Seasoned performing S&D loans primarily trading in the mid 70s to mid 80s. More recently originated loans with higher note rates and minor defects fetching bids mid 80s into the 90s.

Uninsured government loans are trending in the low to mid 70s.

Whole Loan EBO

GNMA early buyout activity remains depressed vs historic 2021 & 2022 levels, as well as when compared to long term trends. There is limited economic incentive for a servicer to buyout given current TBA levels. Pools that have come to market are being driven by the seller's need to improve GNMA servicing portfolio metrics, cease & recoup advances, or to exit the asset entirely.

Mid 80s to Mid 90s

Mid 80s+ pricing for seasoned portfolios with typical product mix, WAC and FB/FC/BK. Low 90s for more attractive pools.

Low to mid 90s for newly 90-day SDQ.

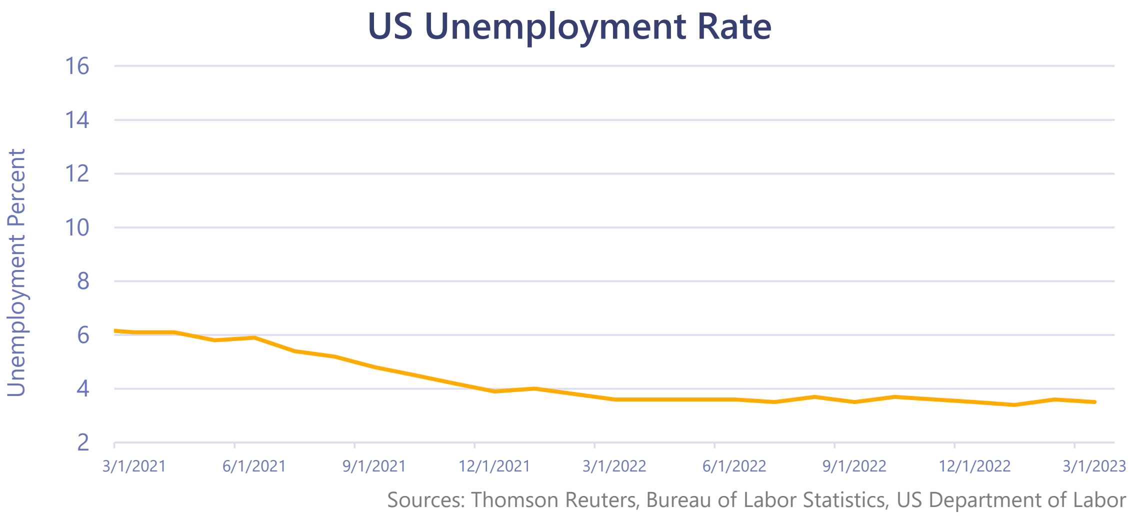
Appendix

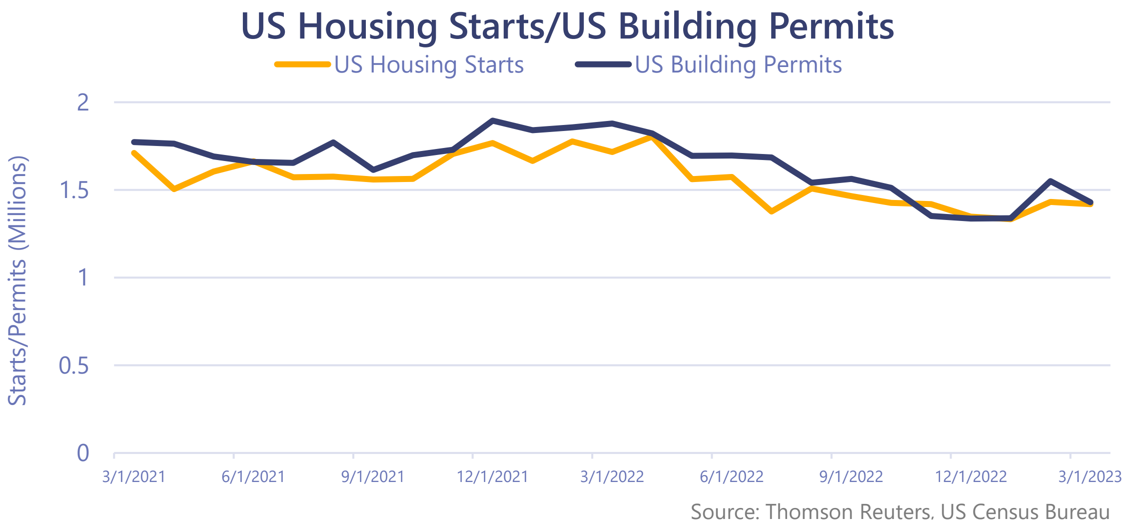
Macro-Economic Indicators

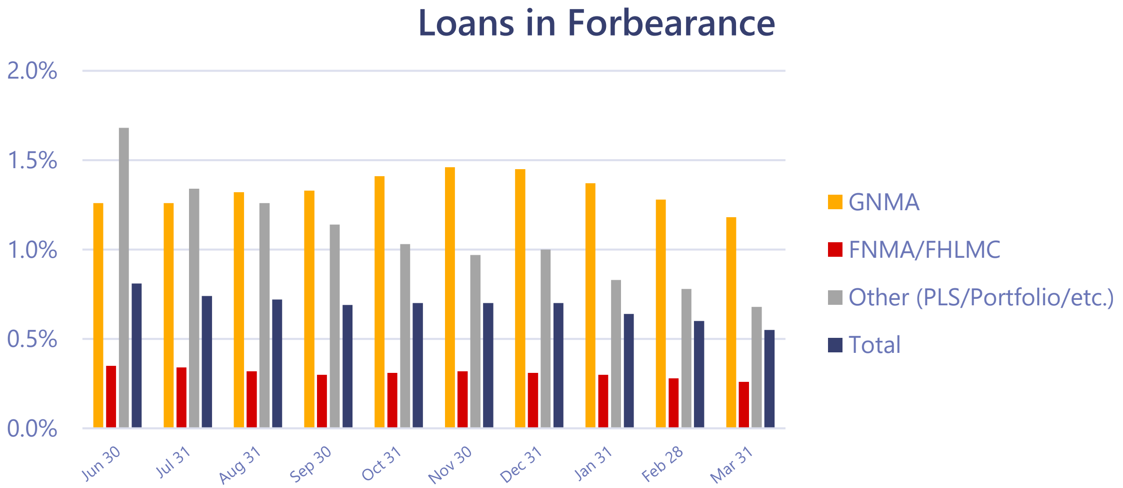
Summary

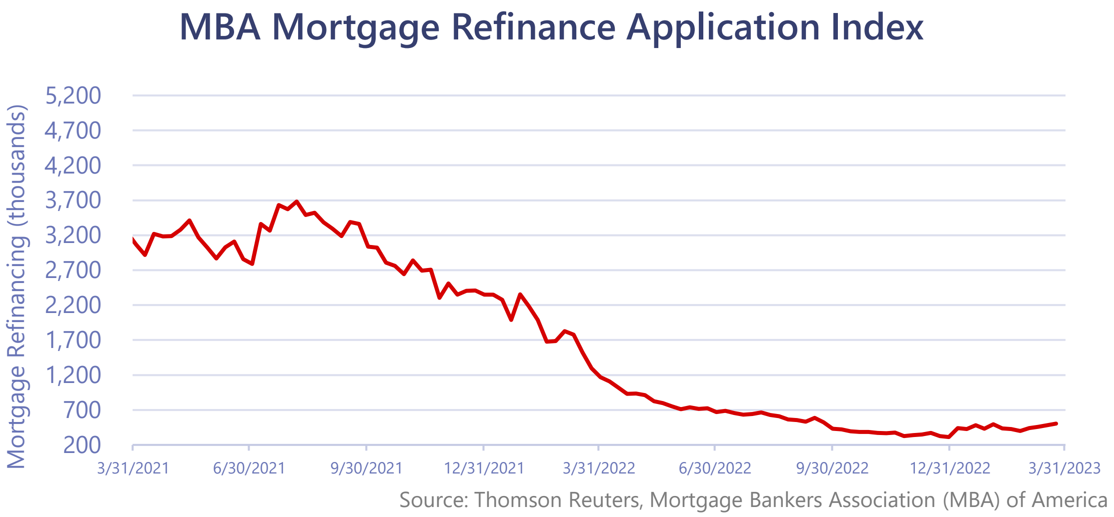
- Nonfarm payroll employment increased by 236,000 as the unemployment rate fell to 3.5% in March.
- The Federal Reserve increased the federal funds rate by 25 bps again, bringing the benchmark rate to a range of 4.75% to 5%.
- The MBA Mortgage Refinance Application Index's weekly readings increased in March with a reading of 477, which is up from 400 recorded in the last week of February.
- Preliminary US housing starts are estimated to be lower month-over-month with 1,420,000 housing starts estimated in March.
- The total number of loans in forbearance, tracked by the MBA's Monthly Loan Monitoring Survey, decreased month-over-month from 0.60% to 0.55%.

Macro-Economic Indicators







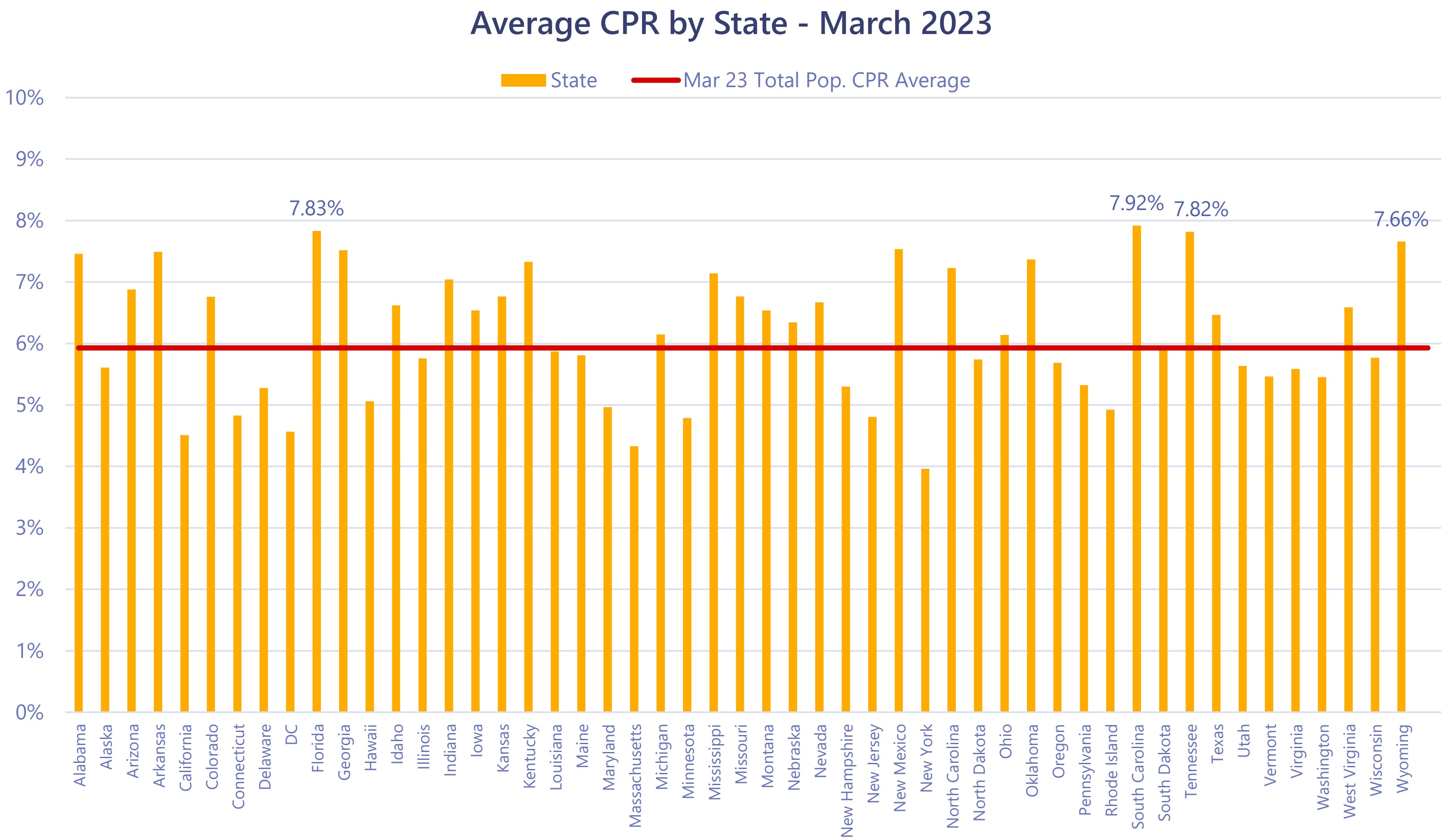


Prepayment Speed Trends

Summary

- Quarter-over-quarter, national CPR speeds increased to 5.93% in March from December's 4.86%.
- The national average prepayment speed for fixed-rate GNMA and GSE loans was 5.93% in March, a 175 bps increase from February's rate of 4.18%.
- Over the month, the CONV 30-year CPRs increased by 1.64% while CONV 15-year CPRs increased by 2.25%. FHA rose by 1.64%, while VA speeds grew by 2.03%.
- Prepayment speeds continue to trend upward.

Prepayment Speed Trends



GSE and GNMA fixed rate product only

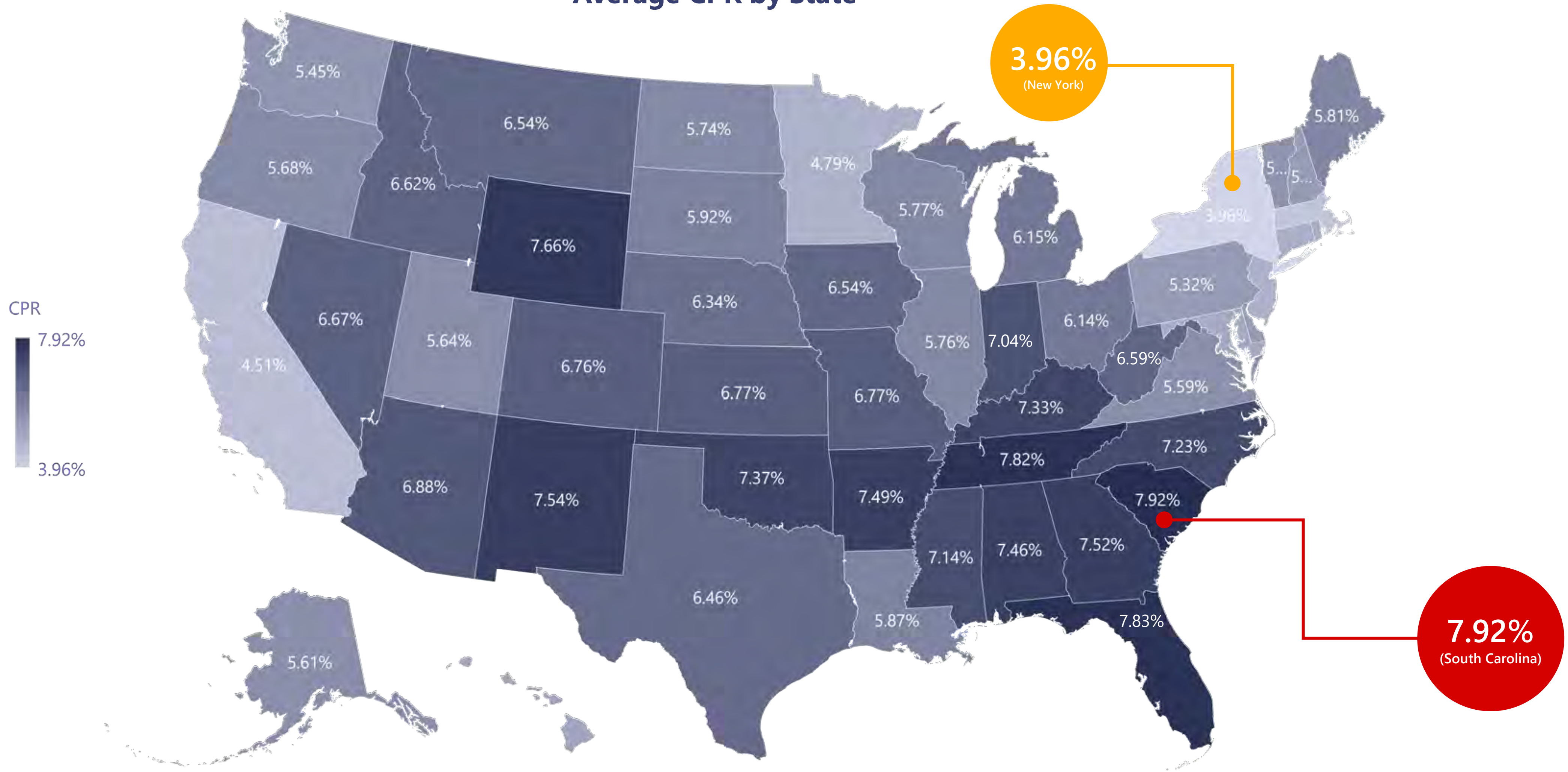
Source: Black Knight McDash

Analysis

- South Carolina was the fastest prepaying state at 7.92%, closely followed by Florida (7.83%), Tennessee (7.82%), Wyoming (7.66%), and New Mexico (7.54%).
- In March, the slowest prepaying state was New York at 3.96%.
- The Middle Atlantic region shows the slowest prepayment speeds on average, with a rate of 4.56% among PA, NY, and NJ. The East South-Central region had the highest prepayment speed at 7.38%.

Prepayment Speed Trends (cont.)

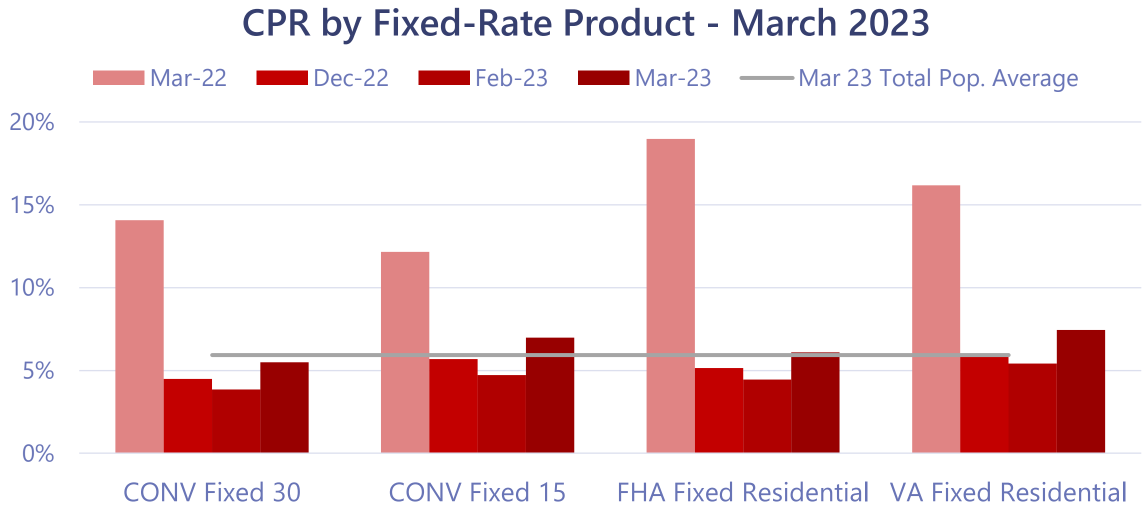
Average CPR by State

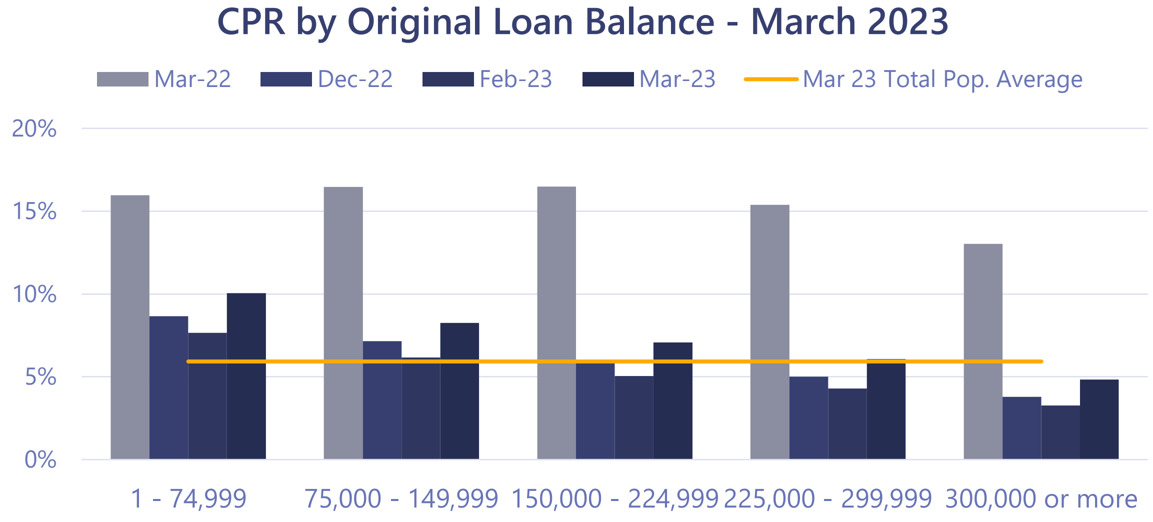


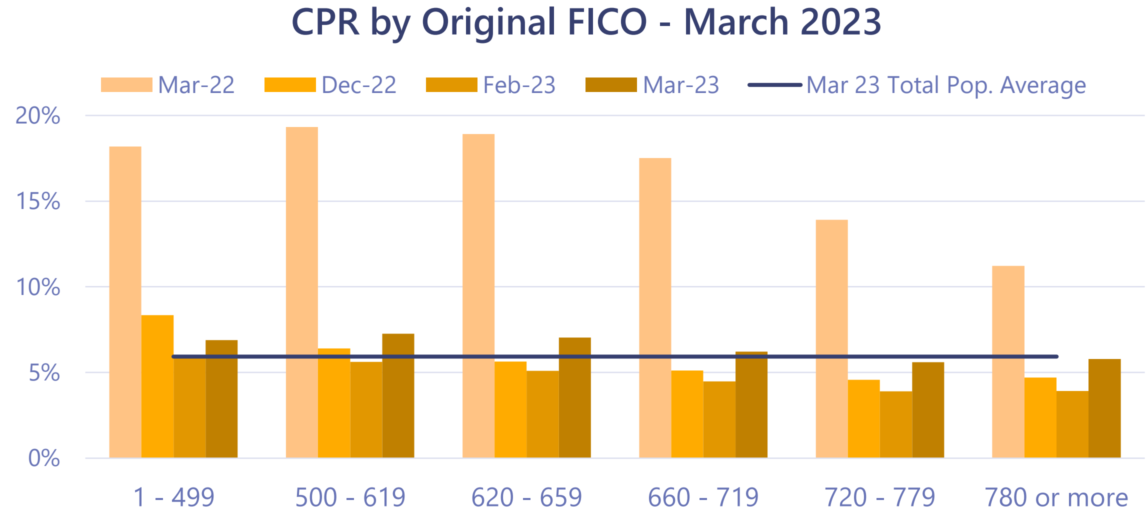
GSE and GNMA fixed rate product only

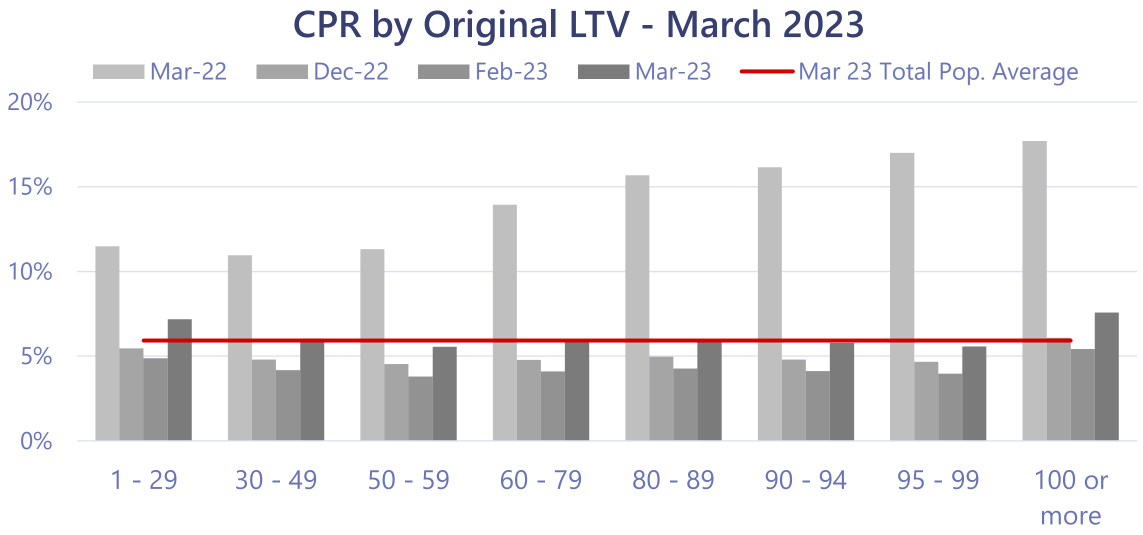
Source: Black Knight McDash

Prepayment Speed Trends (cont.)









All graphs use GSE and GNMA fixed rate product only. Source: Black Knight McDash

Delinquency Trends

Summary

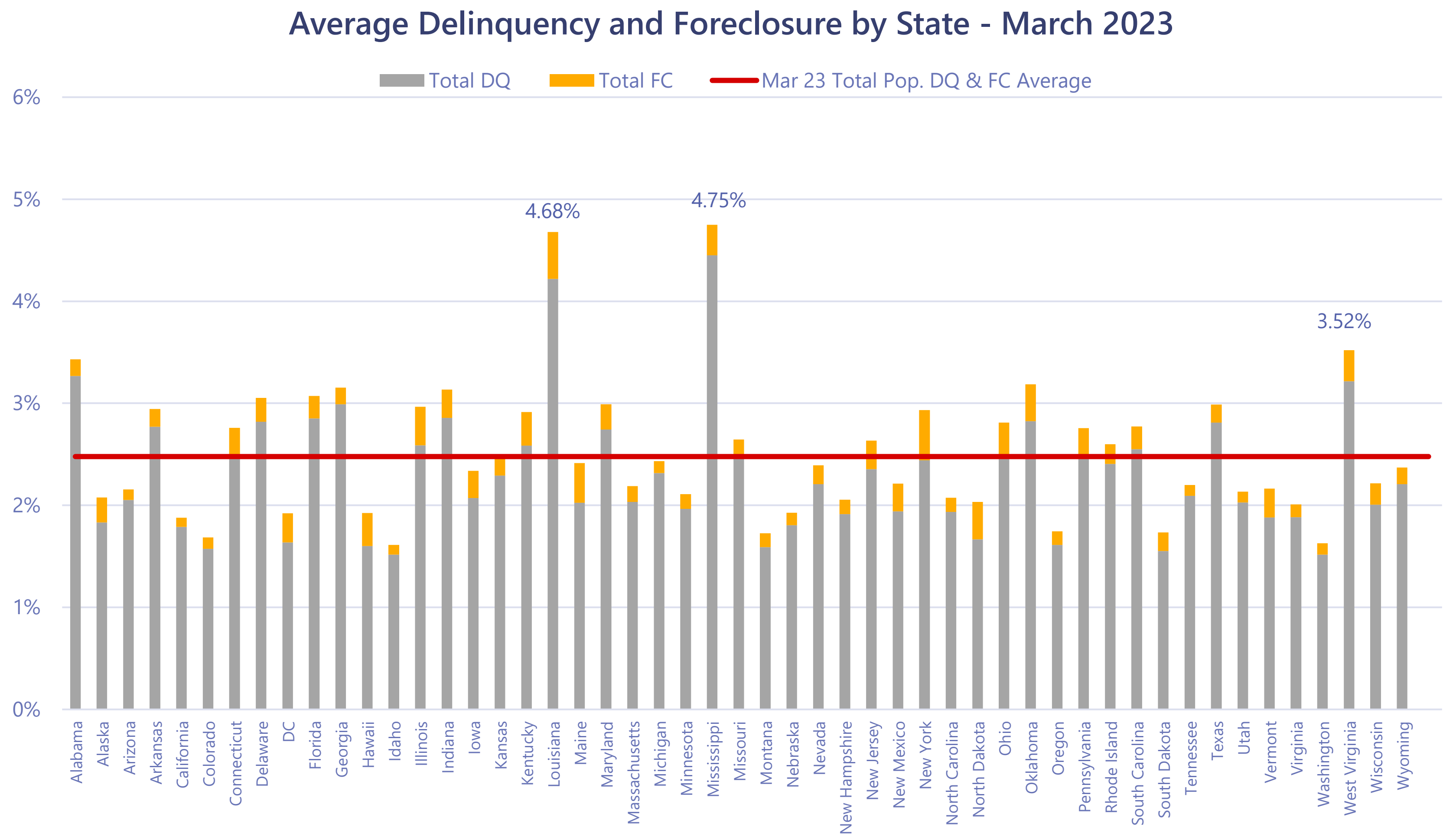
- The national delinquency and foreclosure rate went down to 2.48% a decrease of 42 bps compared to last month. This new value is 6 bps higher than the 2.42% national average delinquency and foreclosure rate from March 2022.
- CONV 30-year loans', CONV 15-year loans', VA loans' and FHA loans' delinquency and foreclosure rates went down month-over-month.

NOTE: Non-paying loans in forbearance are counted as delinquent in our data source.

Total delinquencies down

42 bps

Delinquency Trends



GSE and GNMA fixed rate product only

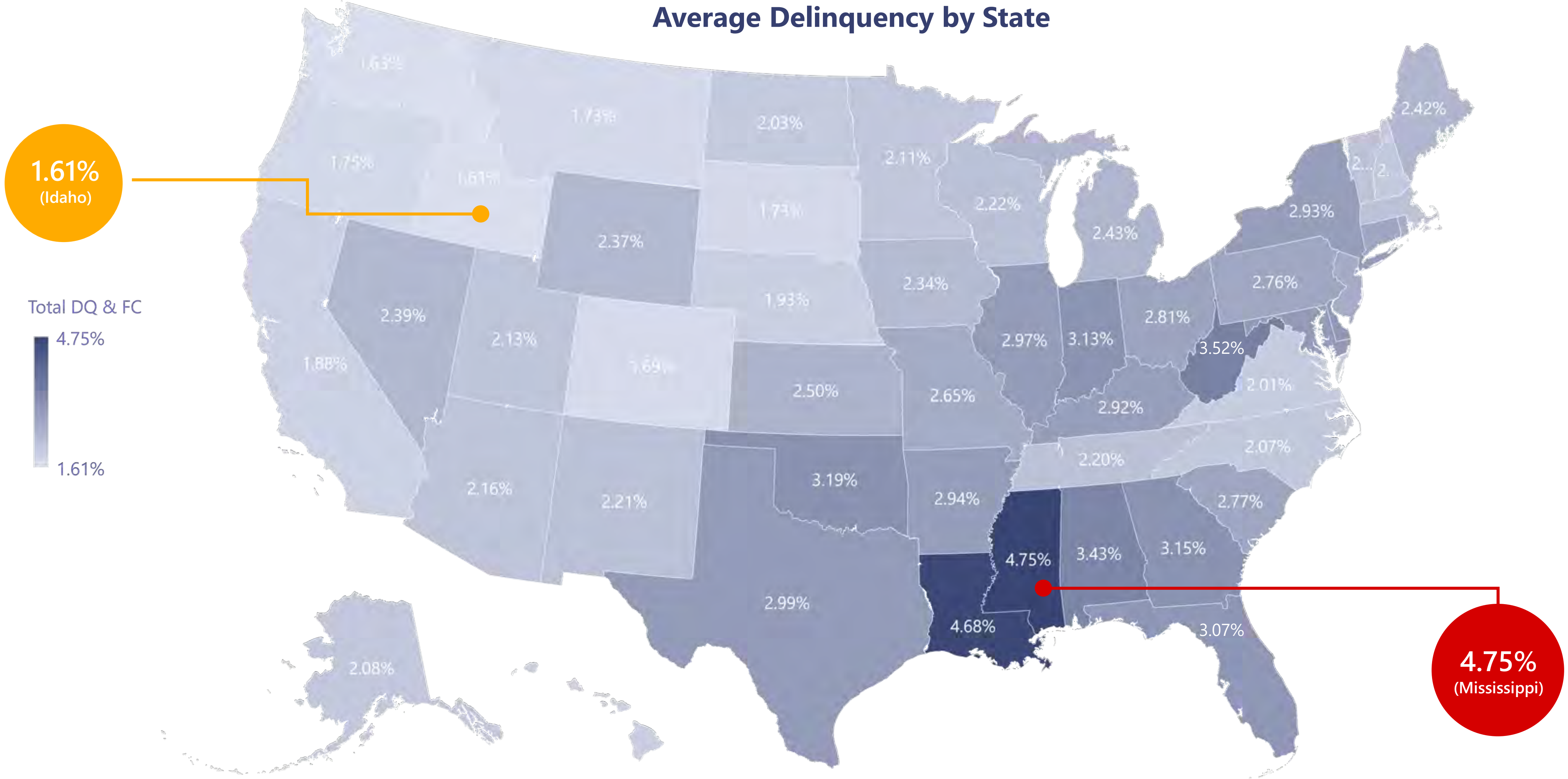
Source: Black Knight McDash

Analysis

- Idaho was the best-performing state, where delinquency and foreclosure rates are 1.51%, 38 bps lower than February month-end.
- The nation's most delinquent state is Mississippi with a 4.75% delinquency and foreclosure rate 59 bps lower than February month-end.
- Compared to March 2022, New York had the nation's largest decrease, moving from 3.52% to 2.93% (-58 bps).
- Regionally, the West South Central region of TX, OK, AR, and LA have the highest delinquency rate (3.45%), and the East South Central states of KY, TN, MS, and AL are close behind at 3.27%.

Delinquency Trends (cont.)

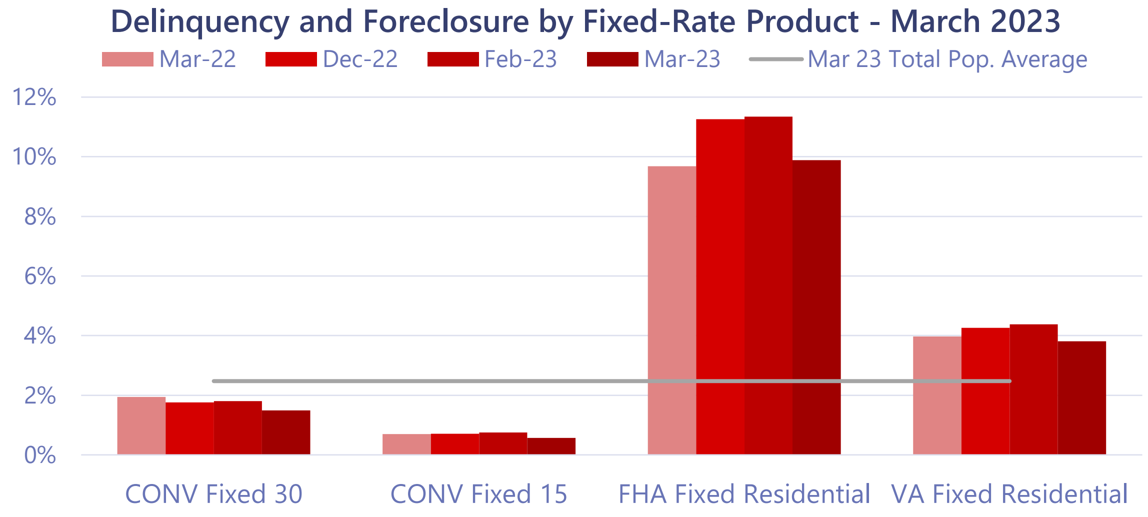
Average Delinquency by State

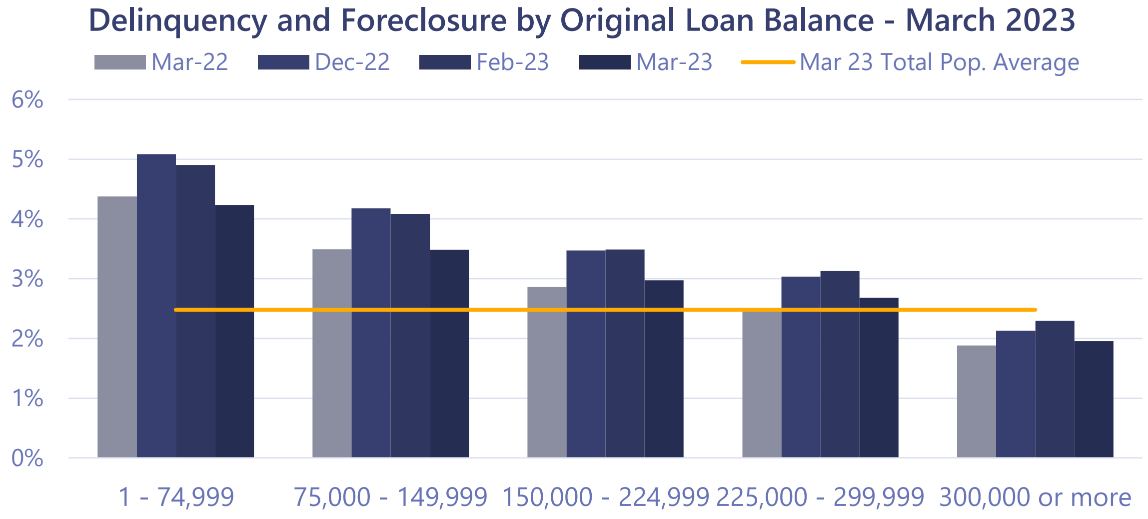


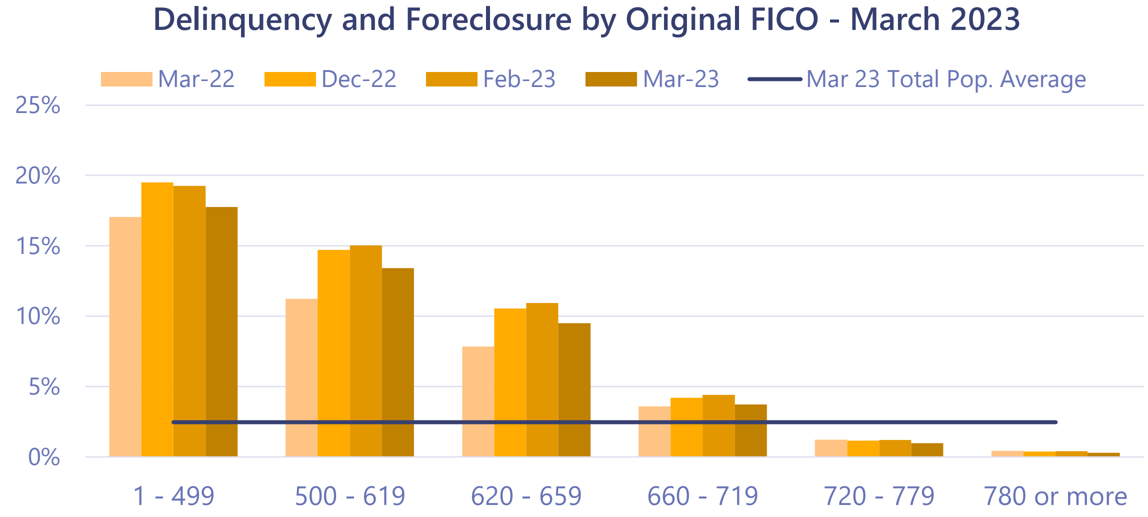
GSE and GNMA fixed rate product only

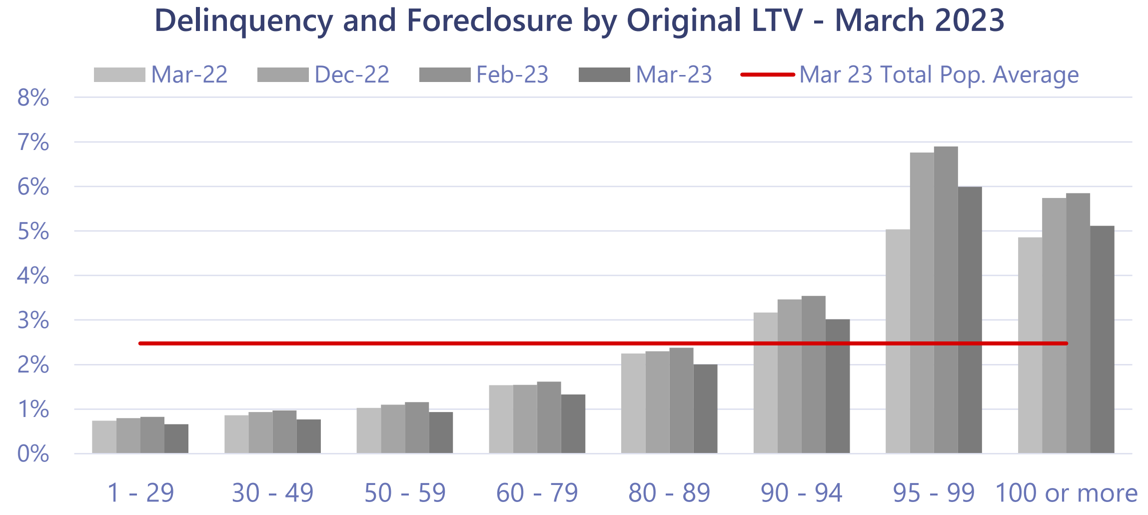
Source: Black Knight McDash

Delinquency Trends (cont.)









All graphs use GSE and GNMA fixed rate product only. Source: Black Knight McDash

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