Outlook for US Mortgage Finance Sector

Whalen Global Advisors LLC

June 2023

Housing Sector Credit Trends

- The Case-Shiller index rose 41% from January 2020 through May 2022. Since mid-2022, *average* home prices have fallen less than 5%. Home prices have remained relatively stable through the first year of Fed interest rate tightening, but signs of stress and future credit problems abound as bond yields head higher.

- Despite the increase in home prices, the *average* loan-to-value (LTV) for all loans in Q4 2022 was 91% and DTI was 41%. The *average* LTV on GNMA loans was 97% and DTI was 44% both according to Ginnie Mae. The average coupon rate for all 1-4 family loans is about 3% vs 6.5% for current production loans.

- Although loan defaults on all 1-4s remain low by historical standards, delinquency in low FICO, high LTV FHA loans are in the mid-teens and climbing. There is literally no equity behind most FHA loans at this level of home prices, thus a decline in asset values portends future losses.

Ginnie Mae Serious Delinquency

GNMA Issuer | April 2023	Current Balance	% Deliquent	% CPR	% Current
MASSACHUSETTS HOUSING	$110,405,181	20.77	10	79.23
AMCAPMORTGAGE	$305,930,006	15.15	2.5	84.85
MTGESOLUTIONS	$3,246,037,946	14.97	7.9	85.03
AMERICAN FINANCIAL RESOURCES	$279,909,738	14.9	5.4	85.1
ESSEX MORTGAGE	$7,852,559,998	13.52	4	86.48
IDAHO HOUSING AND FINANCE ASSN	$15,052,705,661	13.05	4.1	86.95
RUSHMORE LOAN MANAGEMENT SERVICES	$1,056,605,841	12.41	5.3	87.59
BSIFINANCIALSERVICES	$8,474,482,718	12.37	5.6	87.63
ROYAL PACIFIC FUNDING CORPORATION	$2,119,961,412	12.07	4.4	87.93
NATIONS DIRECT MORTGAGE	$3,630,442,252	12.05	5.9	87.95
COLORADO HOUSING AND FINANCE AUTHORITY	$7,434,017,493	11.84	5.6	88.16
ALABAMA HOUSING FINANCE AUTHORITY	$3,854,235,374	11.73	5.5	88.27
NEW MEXICO MORTGAGE FINANCE AUTHORITY	$1,694,779,706	11.08	3.7	88.92
TOWNE MORTGAGE CO	$2,494,272,310	10.9	6.2	89.1
CARDINAL FINANCIAL COMPANY	$10,169,488,482	10.66	6.1	89.34
SUPREME LENDING	$2,669,563,815	10.59	5.9	89.41
CROSSCOUNTRYMORTGAGE	$18,830,968,039	10.39	5.4	89.61
LANDHOMEFINANCIALSER	$1,746,394,684	10.22	5.7	89.78
RHODE ISLAND HOUSING AND MORTGAGE FINANCE CORP	$1,621,652,671	9.88	3.1	90.12
RUOFFMTGECOMPANY,INC	$1,952,165,596	9.76	5.8	90.24
EMBRACE HOME LOANS	$1,344,770,565	9.7	4.5	90.3
EQUITYPRIMEMTGELLC	$2,395,089,684	9.59	5.4	90.41
FLAT BRANCH MORTGAGE	$1,698,587,510	9.31	6	90.69
MIDFIRST BANK	$10,538,279,160	9.2	6.7	90.8
THE MONEY SOURCE	$20,518,178,082	8.87	5.9	91.13
GATEWAY MORTGAGE	$3,477,641,752	8.83	6.9	91.17

Source: Ginnie Mae

Long-Term Interest Rates: 10s & 30s



Mortgage Rates Rising



Agency GN | Settle G0 | View Performance

G2MA TBAs	Bid	Ask	Chg	SOFR	Treas	2yr	5yr	7yr	10yr	30yr
G2SF 2.0	83-29+	05	- 09 3/4	+ 01 1/8	+ 01 3/8	+ 02 3/8	+ 06 1/4	+ 06 7/8	+ 02 3/4	+ 00 5/8
G2SF 2.5	86-22+	27+	- 10+	+ 00+	+ 00 3/4	+ 01+	+ 05 1/4	+ 05 7/8	+ 01 7/8	- 00 1/4
G2SF 3.0	89-17+	21+	- 11+	- 00 1/4	+ 00	+ 00 1/8	+ 03+	+ 04 1/8	+ 00+	- 01 3/8
G2SF 3.5	92-14	17+	- 11 3/4	- 01 1/8	- 00 7/8	- 01 1/8	+ 01 7/8	+ 02 3/8	- 00 3/4	- 02+
G2SF 4.0	95-01	03	- 10	- 01+	- 01 1/8	- 01 3/4	+ 01	+ 01 3/8	- 01 3/8	- 02 7/8
G2SF 4.5	97-03	06	- 09+	- 01 7/8	- 01 5/8	- 02 1/4	+ 00	+ 00 3/8	- 02	- 03 1/4
G2SF 5.0	98-25	28	- 04 3/4	+ 01 7/8	+ 02 1/4	+ 01+	+ 03 3/8	+ 03 5/8	+ 01 3/4	+ 00 5/8
G2SF 5.5	99-30+	00+	- 04	+ 01 3/8	+ 01 5/8	+ 00 7/8	+ 02+	+ 02 3/4	+ 01 1/8	+ 00 1/4
G2SF 6.0	100-28+	31	- 02	+ 03 3/8	+ 03 5/8	+ 02 7/8	+ 04 3/8	+ 04 5/8	+ 03	+ 02 1/4
G2SF 6.5	101-25+	29	- 03	+ 01 7/8	+ 02	+ 01 3/8	+ 02 5/8	+ 02 3/4	+ 01+	+ 00 3/4
GNMA TBAs										
GNSF 2.0	84-19+	29	-1-02+	+ 11	+ 11	+ 12 1/8	+ 16	+ 16 5/8	+ 12 5/8	+ 10 3/8
GNSF 2.5	86-24	25	- 07+	+ 02 7/8	+ 02 7/8	+ 03 3/8	+ 06 3/4	+ 07 3/8	+ 03 3/4	+ 01 7/8
GNSF 3.0	89-19+	20+	- 08 3/4	+ 01 3/4	+ 01 7/8	+ 02 1/8	+ 05+	+ 06	+ 02+	+ 00+
GNSF 3.5	92-17	18	- 08	+ 02 1/4	+ 02 3/8	+ 02 1/4	+ 05 3/8	+ 06	+ 02+	+ 00 5/8
GNSF 4.0	95-00	00+	- 08	+ 02 1/4	+ 02 3/8	+ 01 7/8	+ 05	+ 05 5/8	+ 02 1/4	+ 00+
GNSF 4.5	94-24	13	-2-05 1/4	-1-28 3/4	-1-28 5/8	-1-29 5/8	-1-27 1/8	-1-26 3/4	-1-29 3/8	-1-30 3/4

Treasury | FNMA | to Govt/Swap Spread | SOFR Rates

Tsy	Price	Chg	Yld	Chg	/Govt	Chg	/Swap	Chg	Swap	Chg	Sprd	Chg
2y	99-06+	-0-03	4.31	.05	-3.03	2.00	-13.01	.43	4.51	.06	19.88	.88
3y	99-00+	-0-06	3.98	.07	-.41	.80	-8.02	-.28	4.13	.07	14.24	.25
5y	98-27+	-0-10	3.75	.07	27.13	.06	-18.21	.05	3.83	.06	7.02	.65
10y	97-10+	-0-13+	3.70	.05	23.06	.25	13.65	.39	3.71	.06	.16	.92
30y	94-11	-0-24	3.95	.04	.00	.00	.00	-.01	3.53	.04	-42.18	.15

Source: Bloomberg LP (5/19/2023)

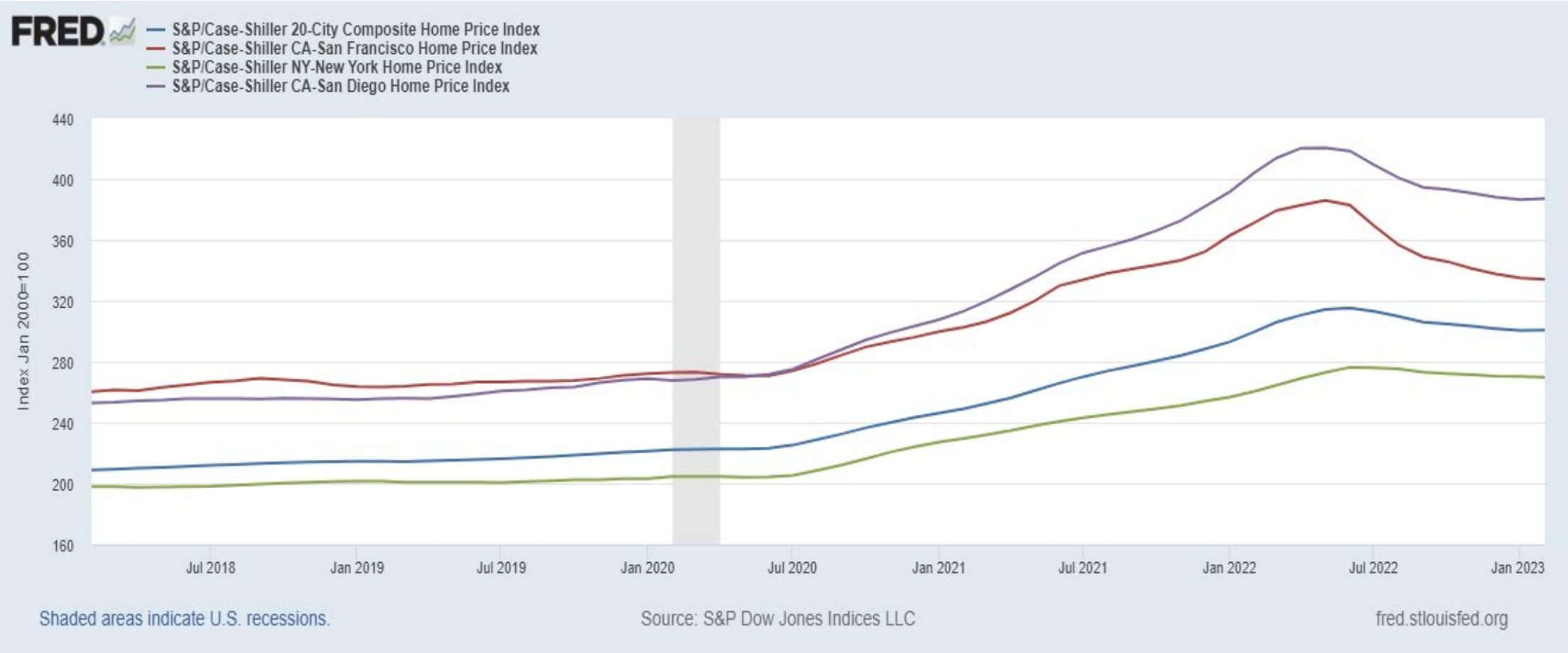
Rate Move Drives Repurchase Claims

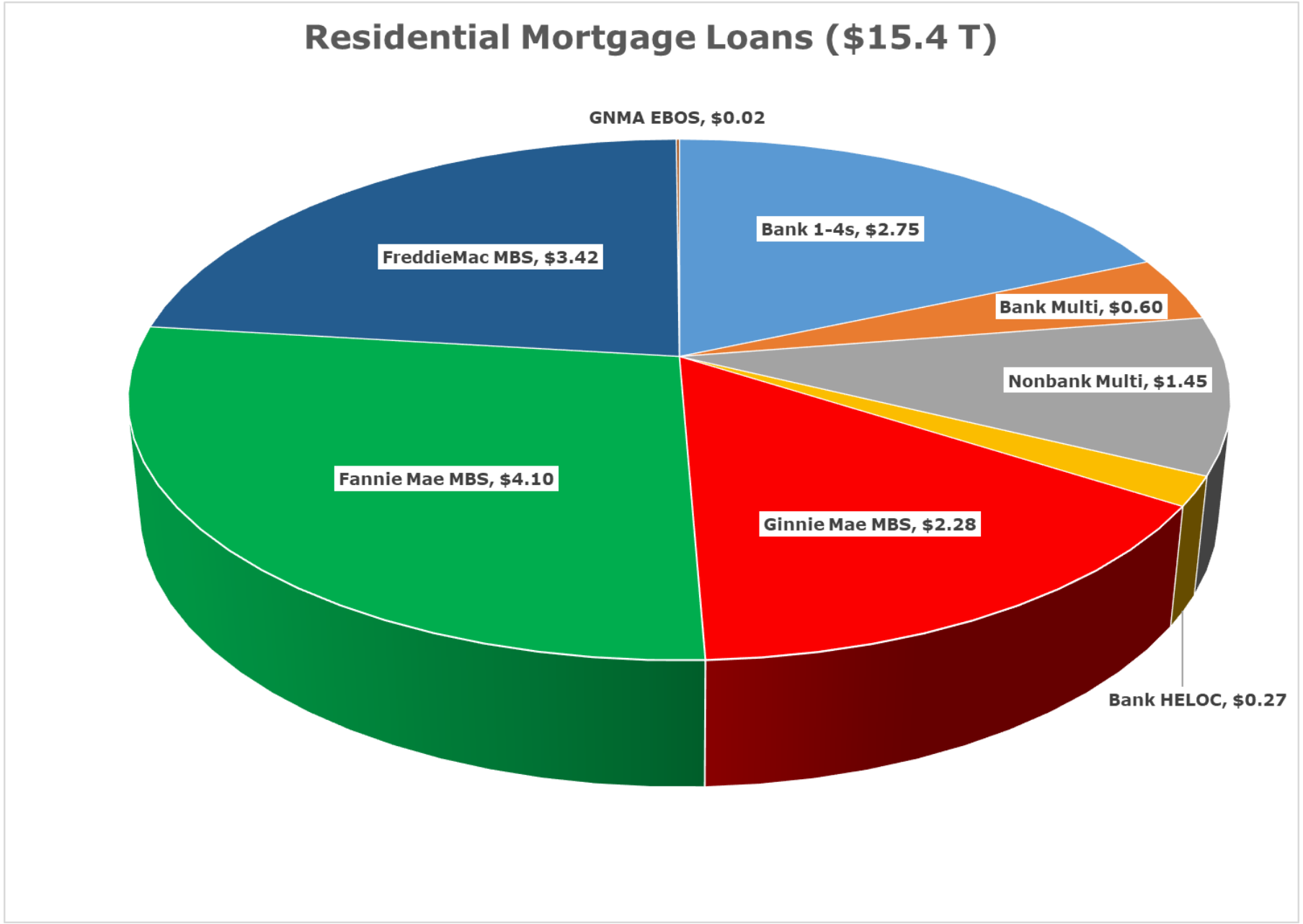
- The sharp upward move in mortgage interest rates over the past year has led to a massive increase in loan repurchase claims by the GSEs. These loans are typically performing but have a bogus "defect" alleged by the GSEs in order to avoid loss on the loan.

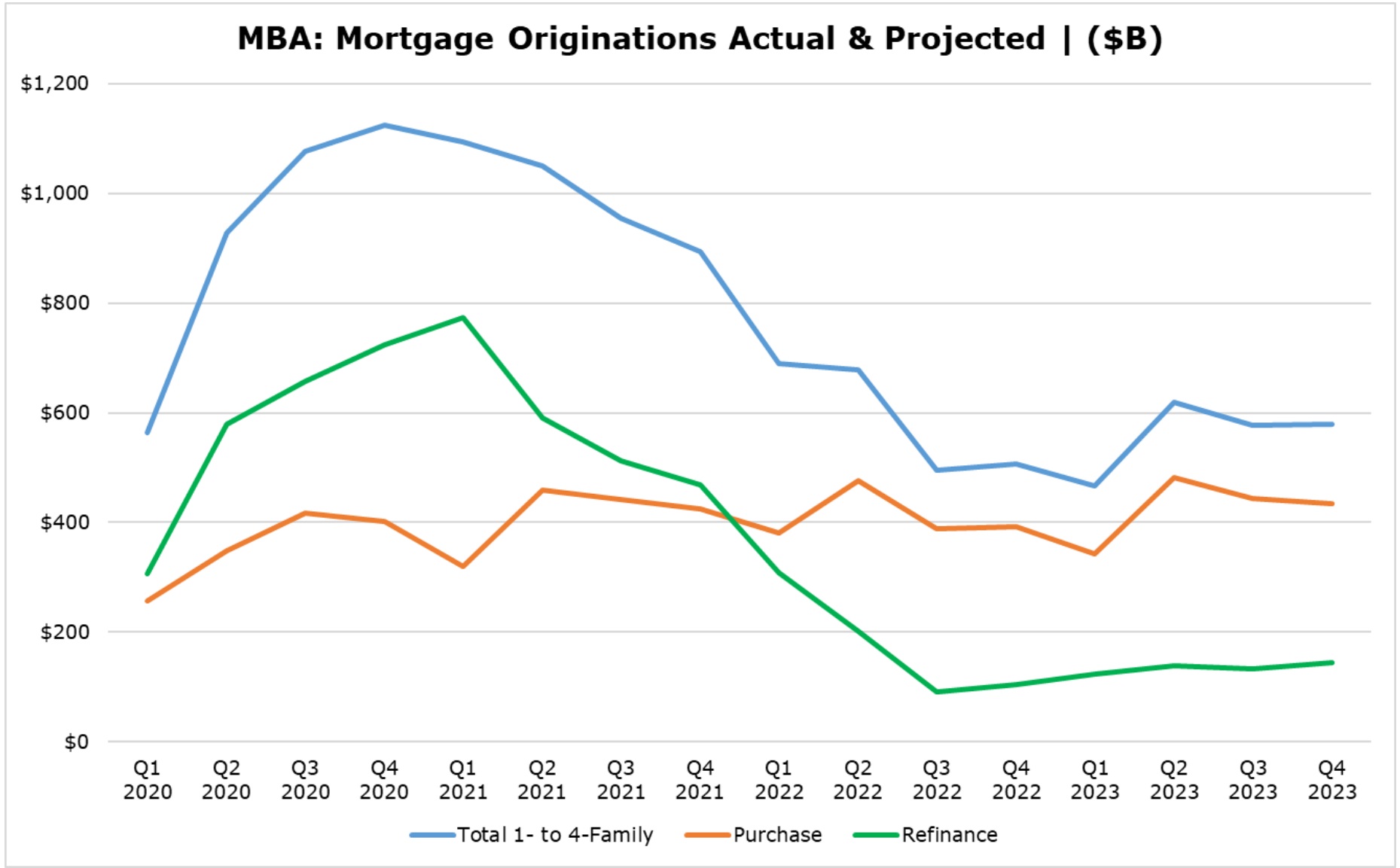
- Lenders forced to repurchase 2020-2021 era loans are facing losses of 30% of the value of each loan, according to the Community Home Lenders of America. That represents an average loss of about $100,000 on a $335,000 loan, according to CHLA.

- In March, CHLA estimates a $70,000 loss on a $300,000 mortgage. Historically, a loss on a repurchase would be around $20,000, CHLA reports. The GSE loans subject to repurchase demands are trading in the low 80s vs current production loans at par.

Average Home Prices Down 5% YOY



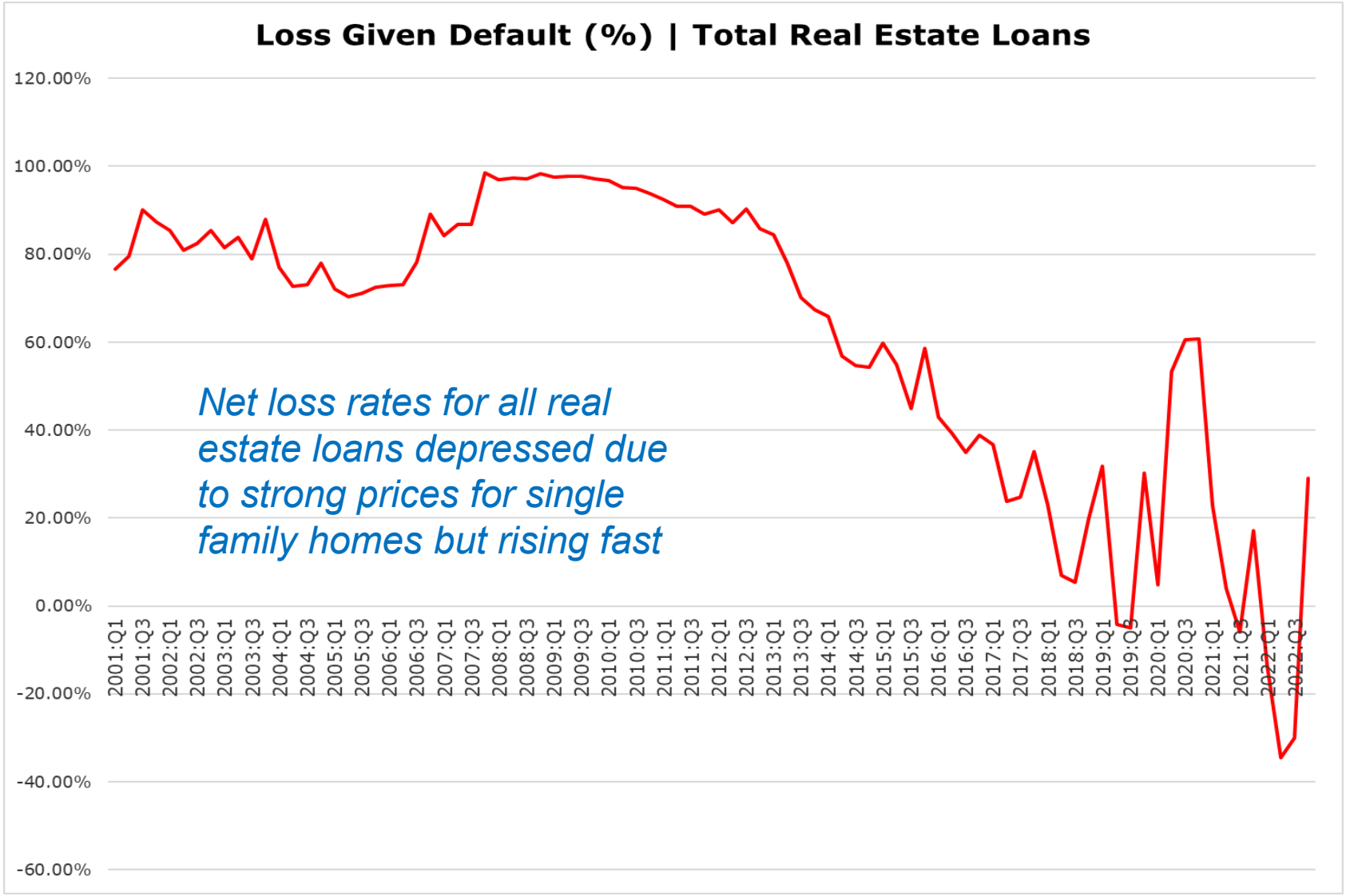

Residential Mortgage Loans ($15.4 T)
GNMA EBOS, $0.02
Bank 1-4s, $2.75
FreddieMac MBS, $3.42
Bank Multi, $0.60
Nonbank Multi, $1.45
Fannie Mae MBS, $4.10
Ginnie Mae MBS, $2.28
Bank HELOC, $0.27


MBA: Mortgage Originations Actual & Projected | ($B)
$1,200
$1,000
$800
$600
$400
$200
$0
Q1 2020
Q2 2020
Q3 2020
Q4 2020
Q1 2021
Q2 2021
Q3 2021
Q4 2021
Q1 2022
Q2 2022
Q3 2022
Q4 2022
Q1 2023
Q2 2023
Q3 2023
Q4 2023
Total 1- to 4-Family
Purchase
Refinance

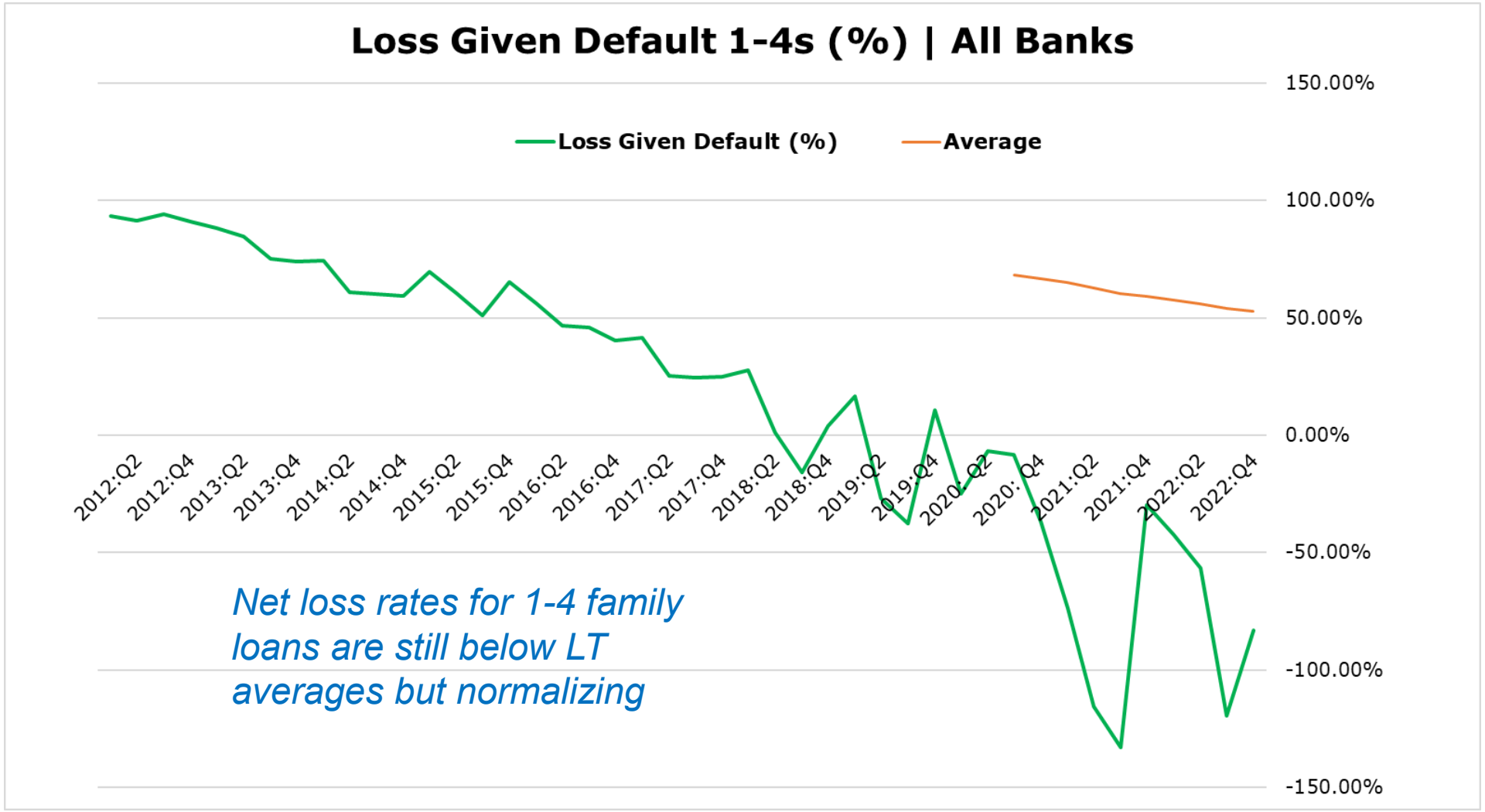
Delinquency Rates 1-4 Family Assets

Delinquency Rates | 1-4s	Total Loans	Conventional	FHA	VA	Bank Owned
2022 Q4	3.96%	2.78%	10.61%	4.16%	1.39%
2021 Q4	4.65%	3.58%	10.76%	5.24%	2.04%
2020 Q4	6.73%	5.09%	14.65%	7.29%	2.50%
2019 Q4	3.77%	2.82%	8.38%	3.64%	1.76%
2018 Q4	4.06%	3.19%	8.65%	3.71%	2.05%
2009 Q4	9.47%	6.73%	13.57%	7.41%	7.75%

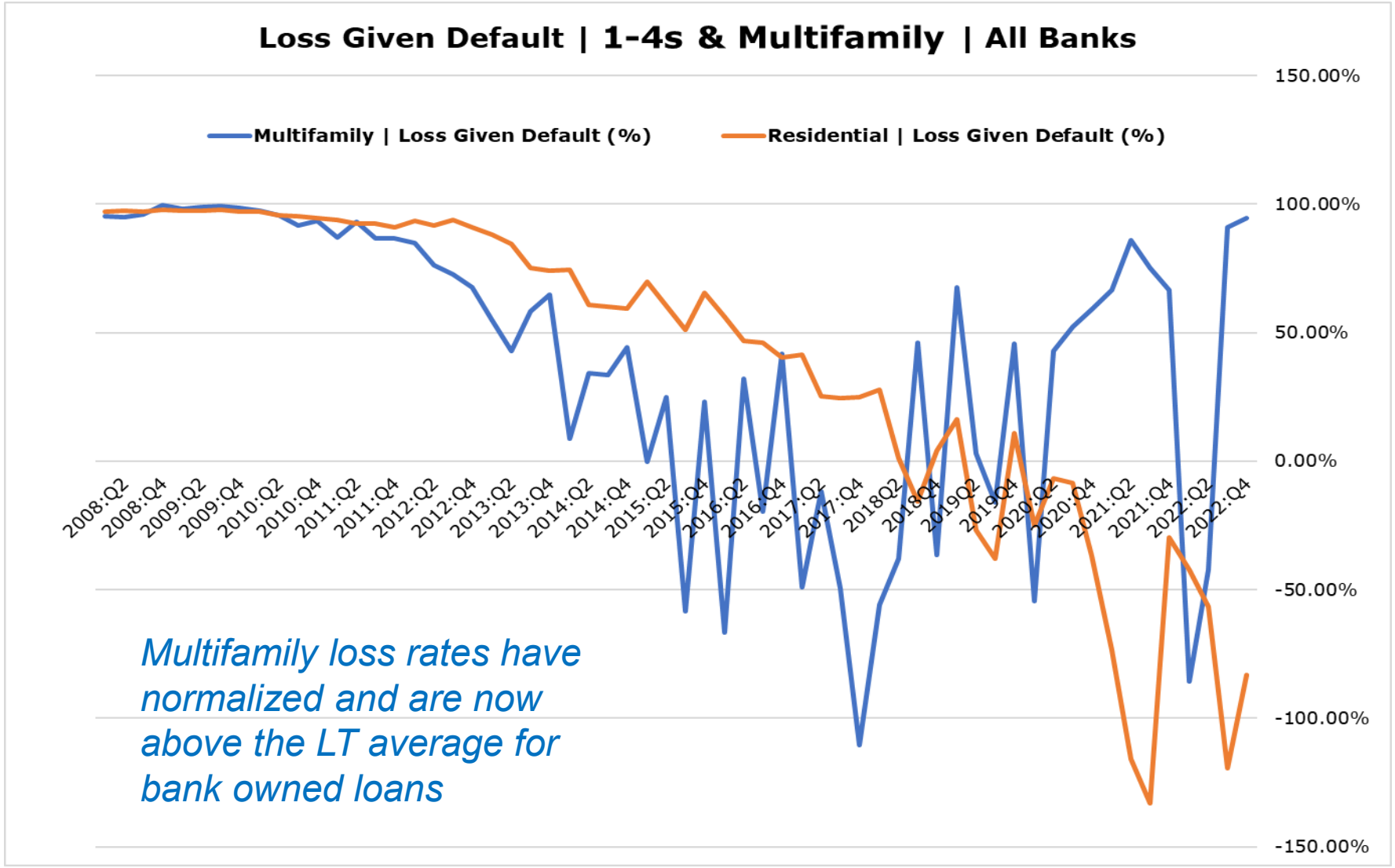
Source: MBA, FDIC



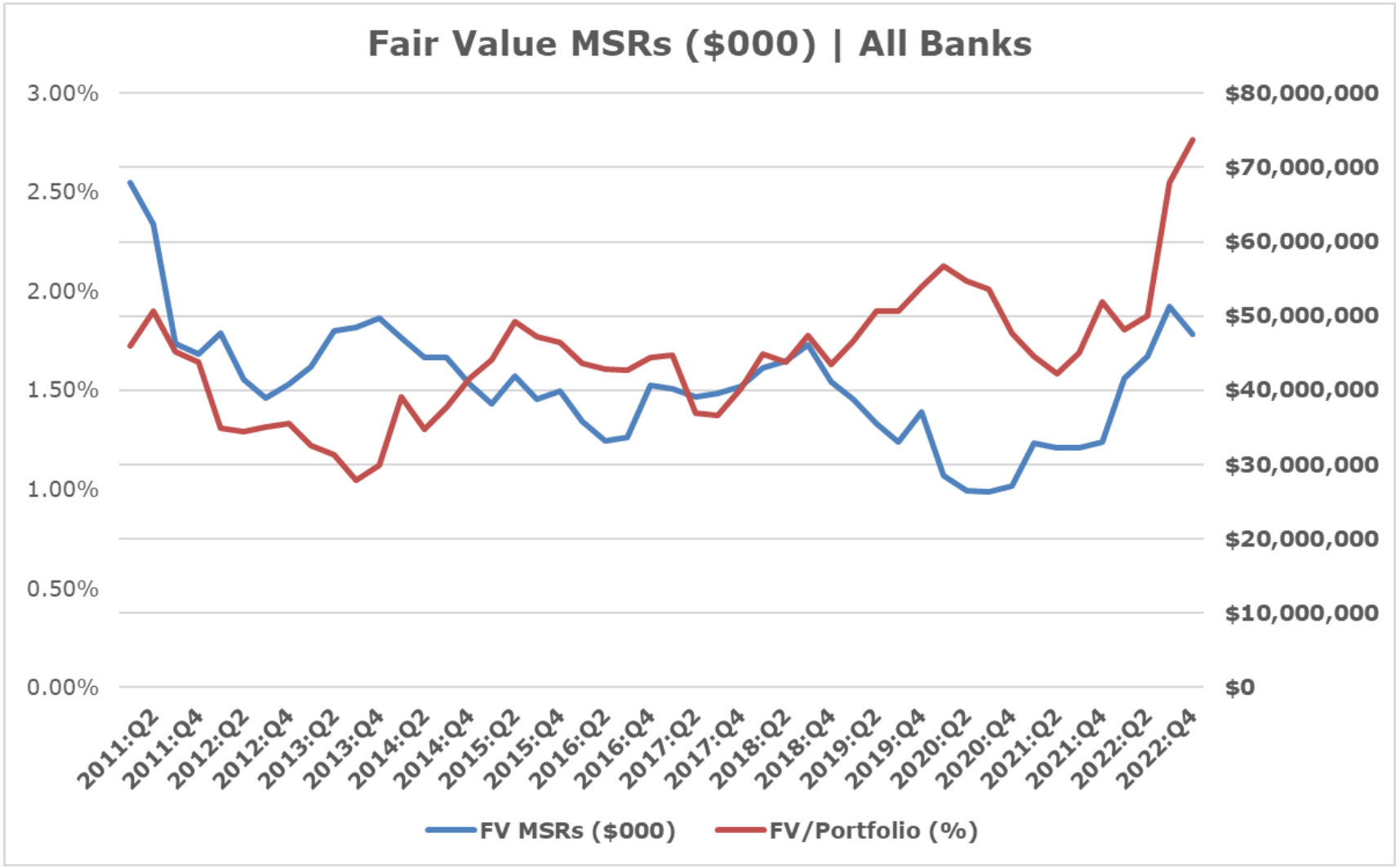
Source: FDIC/WGA LLC



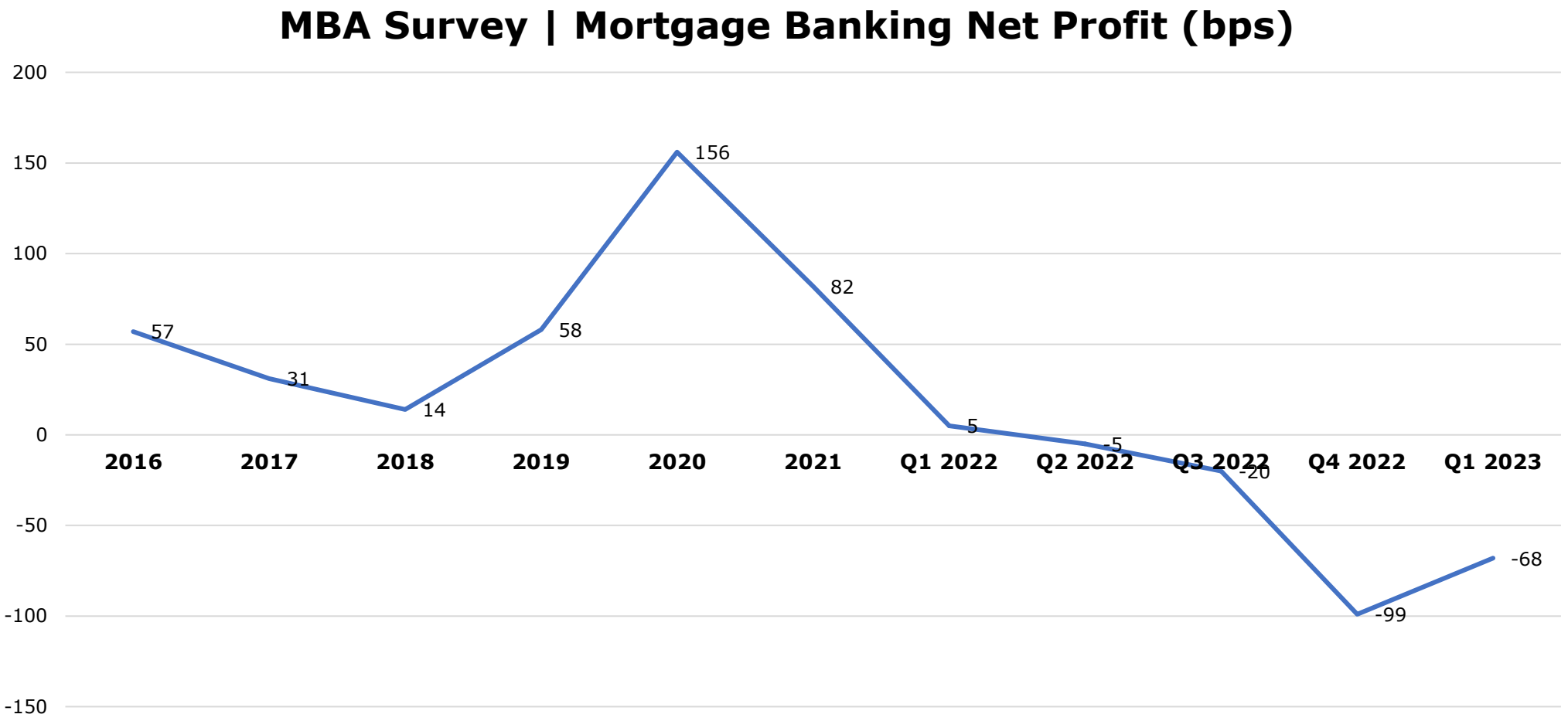
Source: FDIC/WGA LLC



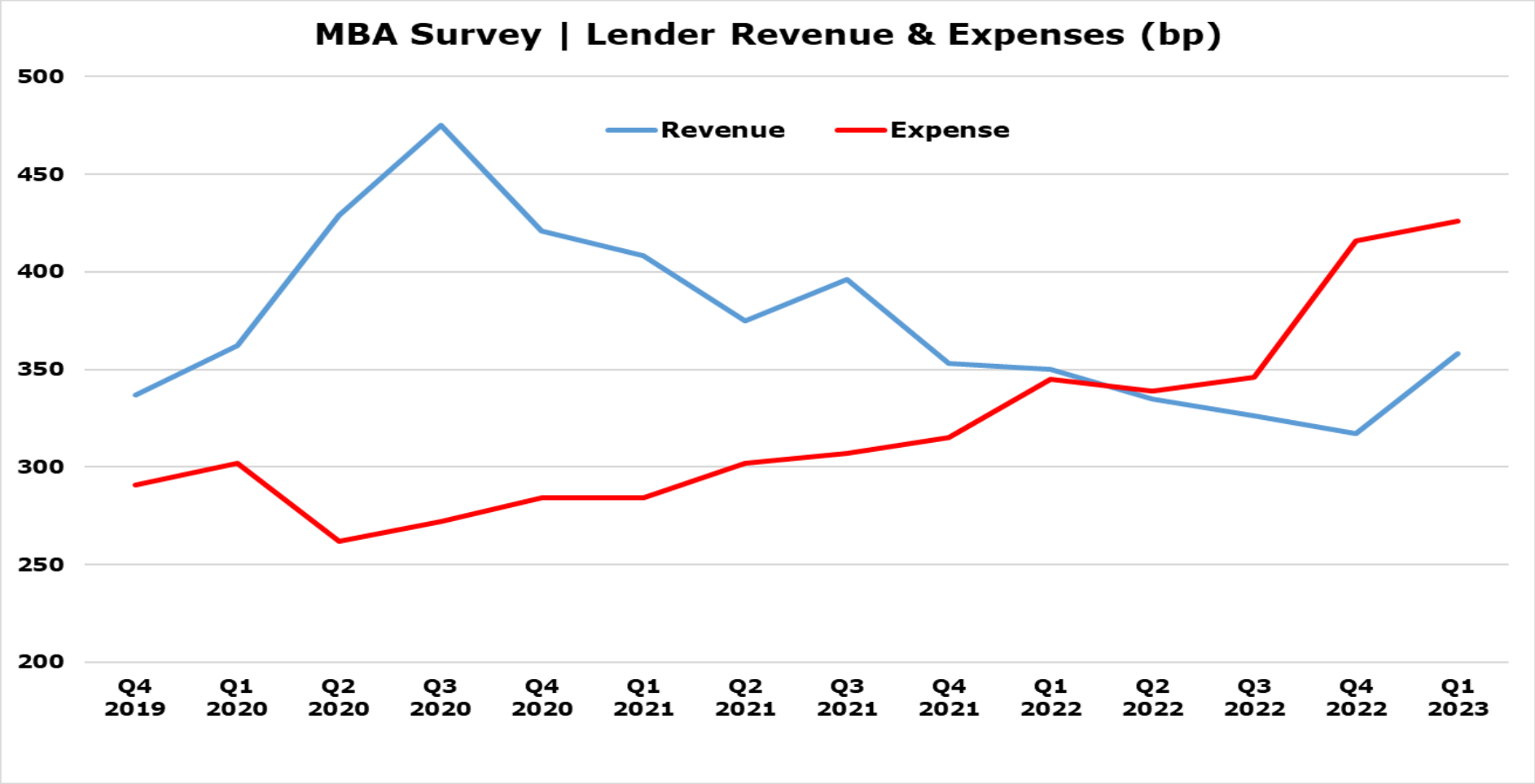
Source: FDIC/WGA LLC


Fair Value MSRs ($000) | All Banks
3.00%
2.50%
2.00%
1.50%
1.00%
0.50%
0.00%
$80,000,000
$70,000,000
$60,000,000
$50,000,000
$40,000,000
$30,000,000
$20,000,000
$10,000,000
$0
2011:Q2
2011:Q4
2012:Q2
2012:Q4
2013:Q2
2013:Q4
2014:Q2
2014:Q4
2015:Q2
2015:Q4
2016:Q2
2016:Q4
2017:Q2
2017:Q4
2018:Q2
2018:Q4
2019:Q2
2019:Q4
2020:Q2
2020:Q4
2021:Q2
2021:Q4
2022:Q2
2022:Q4
FV MSRs ($000)
FV/Portfolio (%)

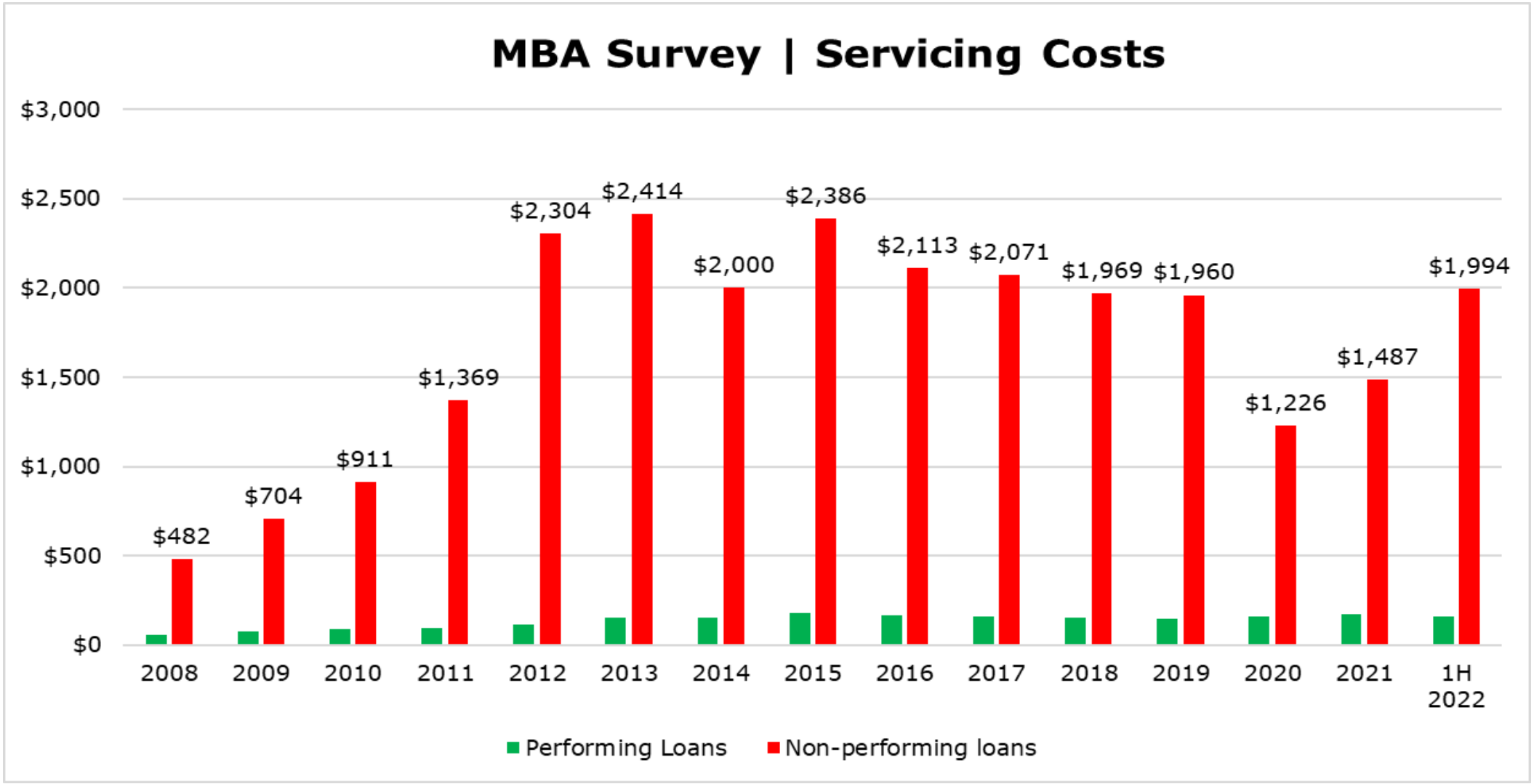
Source: FDIC



Source: MBA's Quarterly Performance Report for IMBs



Source: MBA's Quarterly Performance Report for IMBs



Source: MBA's Servicing Operations Study and Forum (SOSF) through 2021; PGR for 1H2022

Mortgage Finance Peers

- Our mortgage surveillance group shows some surprising and also not surprising results. Independent mortgage banks don't have retained portfolios of loans or securities, so they missed the mark-to-market wave affecting banks. Volumes are weak, but some IMBs are outperforming

- PennyMac (PFSI), United Wholesale (UWMC) and Arch Capital (ACGL) lead the group. Western Alliance Bank (WAL) and its AmeriHome unit is the most volatile stock with a beta over 2. Legacy payments giant Fiserve (FISV) is up double digits

- Guild Mortgage (GHLD) and Mr. Cooper (COOP) are also in the black in terms of one-year returns and both are well-placed for a market rebound. Even legacy servicer Ocwen Financial (OCN) managed a double digit return YOY

Symbol	Beta 6M	One Month	One Year
ACGL	0.74	5.00	67.41
PFSI	1.24	2.54	40.02
UWMC	0.94	4.66	30.87
FISV	0.99	2.76	27.46
OCN	1.10	8.16	19.55
ICE	0.95	0.42	13.41
GHLD	0.86	2.54	11.75
MLNK	0.97	13.56	9.62
ESNT	1.09	8.44	9.58
COOP	1.17	6.51	7.42
FAF	1.05	1.39	4.93
RKT	1.28	8.62	7.79
FNF	1.04	1.44	8.98
LADR	1.04	5.51	11.19
EFC	1.00	3.05	14.06
NYMT	1.19	1.48	14.47
MFA	1.11	7.38	17.99
AGNC	0.99	7.40	20.82
BKI	0.77	0.97	22.09
PMT	1.01	0.58	22.71
RITM	1.04	2.79	22.88
NLY	1.05	0.00	23.37
FMCC	0.55	4.32	32.49
FNMA	0.47	4.40	32.89
LDI	1.55	7.10	34.25
TWO	1.02	10.99	37.70
RWT	1.14	14.83	39.42
FOA	0.87	19.53	43.33
AOMR	1.06	2.27	44.26
CIM	1.17	10.73	46.01
WAL	2.84	11.92	51.96
BLND	1.71	37.36	67.42

Source: Bloomberg 5/19/2023

Housing Finance Outlook

- Home prices are rising in half of US markets and falling in the other half. Lack of supply is holding up *average* home prices due to strength in southern markets, while high-cost blue states and deteriorating urban areas are weakening after post-COVID “pop” in buyer demand.

- Eventual Fed rate ease may create modest upward move in home prices, but getting 1-4 loan coupon rates to 5.5% as many lenders believe requires that MBS rates move down 150bp into the mid-4s. Sales of MBS from FDIC and banks generally may force mortgage rates higher into 7% range in 2023.

- Likely scenario is for LT rates to rise through 2023 and home prices to weaken gradually as default rates normalize. When Fed eventually drops benchmark rates, investors in higher coupon loans & MBS face exponential risk of spread compression, margin calls and prepayments. Equity investors will likely see strong returns from the survivors of the lending famine of 2023.

WGA

Whalen Global Advisors

P.O. Box 8903
Briarcliff Manor, NY 10510-8903
o: 1-914-923-0720
e: chris@rcwhalen.com

www.theinstitutionalriskanalyst.com

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