

United States

# The Mortgage Analyst

Credit Strategy Research

## Spotlight on the VA

### VA mortgages are becoming a growing share of Ginnie Mae pools

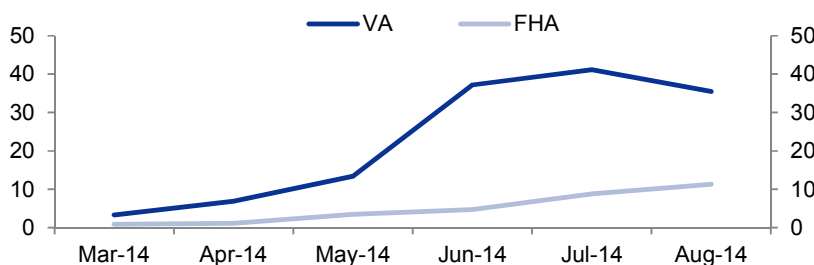
Ginnie Mae pools comprise mortgages insured or guaranteed by a US government agency: principally the Federal Housing Administration (FHA) and the Veterans Administration (VA). Since 2008, the share of Ginnie Mae mortgages insured by VA has increased from 14% to 38%, and to over 50% for some large Ginnie Mae II pools. The trend is not driven by an increase in the number of veterans eligible for the VA loan program, but rather is connected to the large increase in FHA mortgage insurance premiums, along with reductions in FHA loan limits.

### VA borrowers are behaviorally distinct from FHA borrowers

Both FHA and VA loans involve small down-payments – in the case of VA, frequently 0%. However, VA borrowers have higher average credit scores and loan sizes, and these differences, combined with differences in servicing and underwriting processes, lead to lower delinquencies and historically faster voluntary speeds on VA loans. The surprisingly high prepays on 2014 vintage Ginnie Mae collateral appears to be driven largely by the VA loans. The increase in VA percentage is an important trend to monitor in tracking Ginnie Mae risk and valuation.

### Recent vintage VA loans have had high prepayments at low WALA

Estimated conditional prepay rates, 2014 vintage 4% coupon Ginnie Mae II



Source: eMBS and Goldman Sachs Global Investment Research

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## VA mortgages are a growing share of the US mortgage market

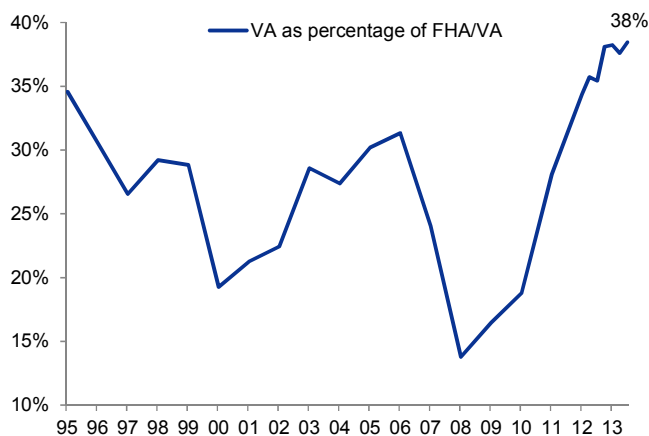
### VA mortgages are an increasing share of Ginnie Mae collateral

Ginnie Mae pools comprise mortgages insured or guaranteed by a US government agency: principally the Federal Housing Administration (FHA) and the Veterans Administration (VA), and also to a smaller extent the Department of Agriculture (USDA) and the Office of Public and Indian Housing (PIH). Over the past year, VA loans have come to account for an increasingly large share of Ginnie Mae collateral.

Exhibit 1 shows the percentage of VA mortgages, as a percentage of total FHA/VA balance, by origination vintage: the percentage of VA has risen from 14% in 2008 to 38% in 2014. Exhibit 2 shows that, as a result of this, the VA share now varies substantially across Ginnie Mae II cohorts, ranging from 6% in the 2010 5% cohort to 47% in the 3.5% 2014 cohort.

As we show below, both VA and FHA are dominated by low-to-no down-payment mortgages, but VA borrowers tend to have higher credit scores and larger loan sizes than FHA mortgages. In addition, VA mortgages have different underwriting rules, and are serviced differently, factors which, combined with the higher credit scores, lead to lower delinquency rates. The higher loan sizes have also helped lead to historically faster voluntary prepayment rates on VA mortgages. Thus, the growth in VA concentration can negatively influence Ginnie Mae valuations.

**Exhibit 1: VA mortgages have become an increasingly large share of the mortgage market...**  
VA origination balance, as a percentage of FHA/VA balance, by origination vintage



Source: LPS, Goldman Sachs Global Investment Research

**Exhibit 2: ... leading to substantial variation in VA percentage across Ginnie Mae cohorts**  
Percentage of VA mortgages in Ginnie Mae II 30-year MBS cohorts, September 2014

Coupon	Vintage	Bal (\$B)	WALA	Aug 14 CPR	%VA
3.0	2012	75	22	10	36
3.0	2013	110	16	8	40
3.5	2011	20	33	14	34
3.5	2012	121	26	14	31
3.5	2013	80	13	10	31
3.5	2014	34	4	4	47
4.0	2010	19	46	17	18
4.0	2011	44	37	17	24
4.0	2012	19	27	19	18
4.0	2013	50	10	17	30
4.0	2014	59	4	12	33
4.5	2009	21	60	19	13
4.5	2010	40	50	19	12
4.5	2011	36	38	20	16
4.5	2013	24	10	19	18
5.0	2009	23	59	20	7
5.0	2010	29	52	19	6

Source: eMBS, Goldman Sachs Global Investment Research

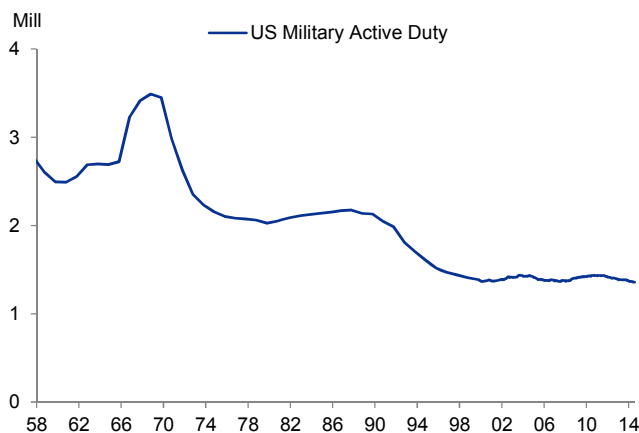
## Growth of VA program is not due to growth in veteran population

The large growth in the VA share within the Ginnie Mae program raises the question of the drivers of VA vs. FHA mix. The growth does not appear to be driven by a growth in the eligible veteran population. Exhibit 3 shows that the military active duty population has declined over the past several decades following a peak in the 1960s during the Vietnam War period. Exhibit 4 shows that the population of veterans – a lagged and accumulated version of the active duty population – has also been declining. However, while the US veteran population has declined, Exhibit 4 shows there are still a very substantial number of Americans – over 20 million – with veteran status as of 2014, suggesting that the VA program could potentially be a large part of the US mortgage market.

The growth in VA share, if not driven by growth in absolute number of veterans, seems more likely to be driven by the increase in FHA Mortgage Insurance Premiums (MIPs) over the past several years. Exhibit 5 shows that the annual MIP has increased by 80 bp since 2008; by contrast, the VA upfront funding fee has remained roughly constant, and unlike the FHA there is no recurring monthly mortgage insurance premium charge for a VA mortgage. Thus, the VA program has increasingly become the most efficient option for borrowers seeking a low down-payment mortgage. The recent reduction in FHA loan limits for certain metro areas has provided a further impulse toward the growing VA share within Ginnie Mae pools.

### Exhibit 3: Military active duty population in the US has declined over time...

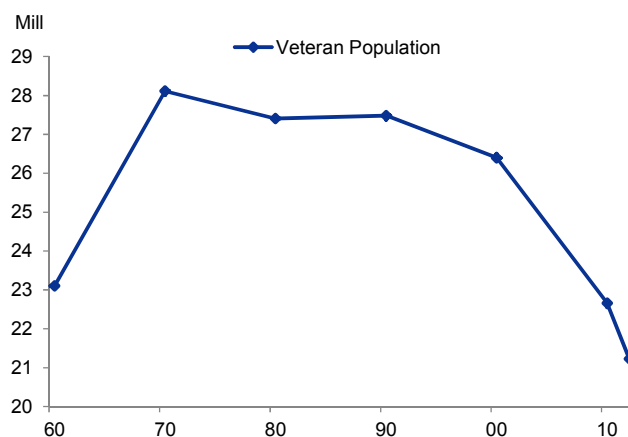
Population of US military active duty personnel



Source: Haver and Goldman Sachs Global Investment Research

### Exhibit 4: ... leading to a declining veteran population

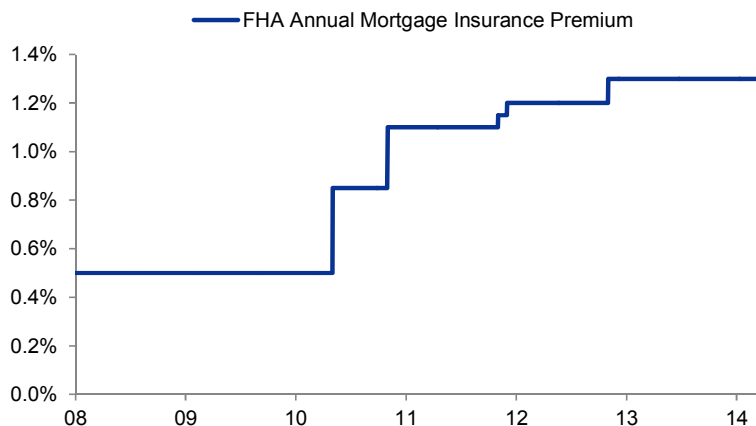
Population of US veterans



Source: VA and Goldman Sachs Global Investment Research

**Exhibit 5: FHA annual Mortgage Insurance Premium has increased by 80 bp since 2008**

Annual FHA Mortgage Insurance Premium, 95 LTV 30-year fixed rate mortgage



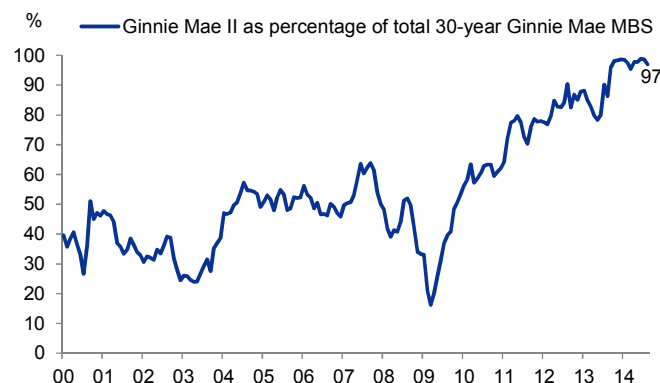
Source: HUD and Goldman Sachs Global Investment Research

**Growth of GNM-II program means VA mortgages cannot be evaded**

In addition to the trend toward higher VA percentages of Ginnie Mae collateral, a parallel trend has been the growth in Ginnie Mae II program as a percentage of total Ginnie Mae MBS issuance volume. Ginnie Mae provides two separate MBS programs, Ginnie Mae I and II, with distinct pooling rules. Among the differences in the programs, Ginnie Mae I pools are typically small single-lender securities, while Ginnie Mae II pools are much larger, with only a small number of pools issued per month. While many idiosyncratic G1 pools exist with low VA concentrations, all recently issued G2 pools have a significant VA representation. Exhibit 7 shows that the most recently issued (low WALA) pools in the 2014 3.5% cohort have higher VA concentrations than pools issued earlier in the year. Thus, while one cannot select MBS with very low VA concentration, there is some room for adjusting VA exposure through pool selection.

**Exhibit 6: Ginnie Mae issuance has shifted toward Ginnie Mae II program**

Ginnie Mae II as a percentage of 30-year Ginnie Mae issuance



Source: eMBS and Goldman Sachs Global Investment Research

**Exhibit 7: VA percentage is higher among the most recently issued (low WALA) G2 pools**

VA percentage, 2014 vintage 3.5% coupon Ginnie Mae II 30-year MBS

Cusip	Bal (\$B)	WALA	% VA
36179QL58	12	1	51
36179QJS1	10	2	51
36179QGC9	7	3	48
36179QBF7	5	5	48
36179QDY4	6	5	47
36179N5V6	3	6	44
36179N2J6	4	7	43

Source: eMBS and Goldman Sachs Global Investment Research

## VA borrowers have stronger credit characteristics than FHA

Like the FHA program, VA mortgages involve small down-payment: over 55% of the 2014 vintage VA population had an origination LTV at or above 100%. However, VA and FHA mortgages have different credit scores and loan sizes. Exhibit 8 shows the distribution of FHA original FICO scores for 2014 originations: the mode (most common) score is 650. Exhibit 9 shows the distribution of FICO scores among the 2014 VA borrowers: the mode score is 680, and 30% of borrowers have FICO above 750.

VA loan sizes are also larger than FHA loan sizes: for the 2014 vintage, the average VA loan size was \$225K, vs. \$168K for the FHA. The larger loan sizes for VA may partly be driven by the residual income test involved in VA underwriting, which requires that VA borrowers have adequate income, in absolute dollars, net of debt and housing costs. The residual income test is different from a Debt-to-Income (DTI) test: a borrower with a small income but also small debt expense could have a low DTI ratio but also have a small absolute residual income, which could disqualify the borrower from the VA program.<sup>1</sup>

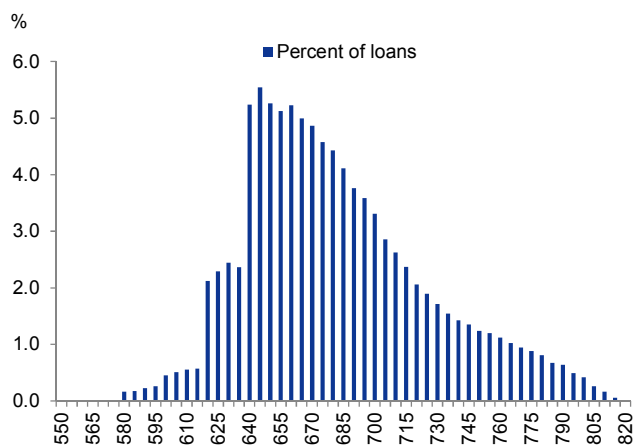
Exhibit 10 shows the historical delinquency rates on FHA and VA mortgages; VA rates have been substantially lower, consistent with the higher VA credit scores. Exhibit 10 shows the prepay rates for a seasoned Ginnie Mae cohort (2011 vintage, 4.5% coupon); the VA prepayments are consistently higher, particularly during the beginning of 2013, when low interest rates were still available. The VA Interest Rate Reduction Refinance Loan (IRRRL) program requires no appraisal or credit underwriting for a non-cashout refi; this helps elevate VA voluntary prepay efficiency.

In addition to the historically higher prepay rates for VA which are explainable by differences in loan sizes and credit scores, VA collateral also appears to be connected to surprisingly high prepayments on recent vintages at low WALA. The 2014 vintage 4% coupon cohort prepaid at 20 CPR by 8 WALA; Exhibit 11 shows that FHA collateral prepaid at 11 CPR while VA collateral prepaid at 35 CPR. The differences in attributes such as FICO, loan size, DTI, and TPO percentage across the VA and FHA loan subsets cannot explain this large difference. The difference may not be sustainable over a long horizon, but in the short term there appears to be a risk of high prepayments for low WALA VA collateral.

<sup>1</sup> "VA Loans Outperform FHA Loans. Why? And What Can We Learn?", L. Goodman, E. Seidman and J. Zhu, Urban Institute Housing Finance Policy Center Commentary, 2014.

**Exhibit 8: FICO score distribution for FHA mortgages is concentrated near 650...**

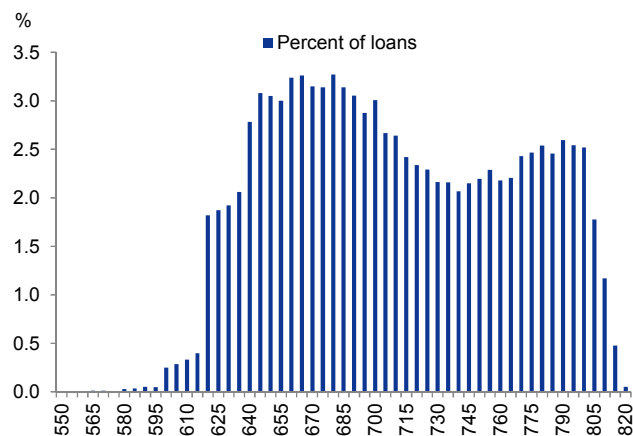
FICO distribution, 2014 vintage FHA mortgages



Source: eMBS and Goldman Sachs Global Investment Research

**Exhibit 9: ... while a large proportion of VA mortgages have FICO scores above 750**

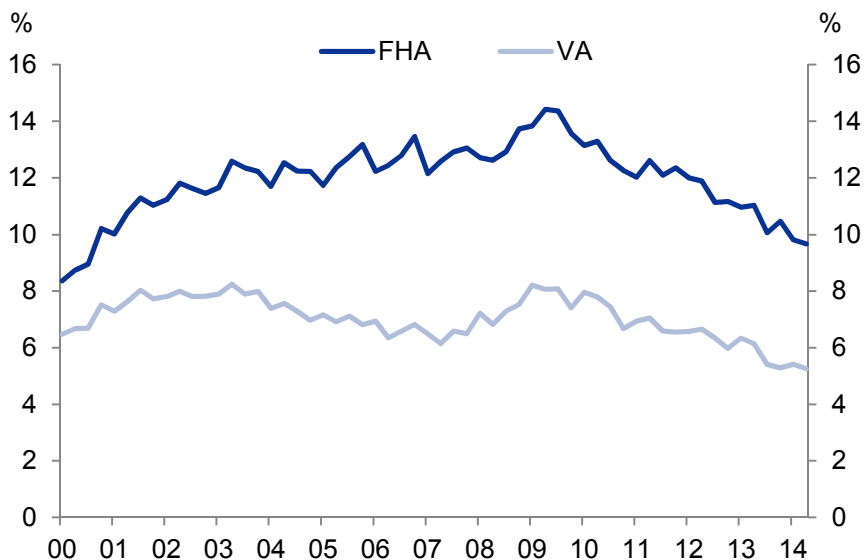
FICO distribution, 2014 vintage FHA mortgages



Source: eMBS and Goldman Sachs Global Investment Research

**Exhibit 10: Delinquency rates for VA collateral are substantially below FHA rates**

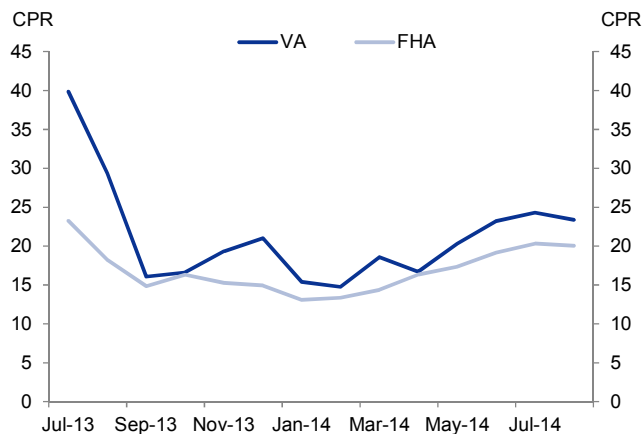
FHA and VA mortgage delinquency rates, MBA delinquency survey



Source: MBA

**Exhibit 11: Total prepayment rates for VA have been higher than for FHA...**

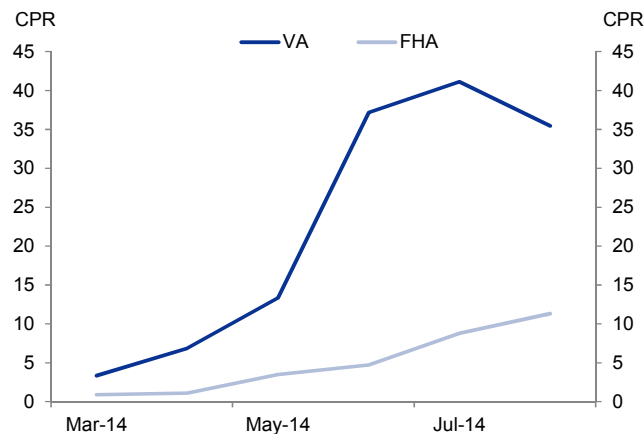
Estimated prepayments, 4.5% coupon, 2011 vintage Ginnie II, FHA vs. VA



Source: eMBS and Goldman Sachs Global Investment Research

**Exhibit 12: VA prepayments have been surprisingly high for recent vintage, unseasoned pools**

Estimated prepayments 4.0% coupon, 2014 vintage Ginnie Mae II, 36179N2K3 cusip, FHA vs. VA



Source: eMBS and Goldman Sachs Global Investment Research

## FHA/VA difference may narrow through increased FHA prepaays

While historical data suggest VA mortgages have been more negatively convex than FHA mortgages, the increases to FHA Mortgage Insurance Premiums make the convexity comparison between VA and FHA less straightforward. New production VA loans will still be behaviorally more likely to refinance due to higher credit scores and larger loan sizes, but on the other hand FHA borrowers have an added incentive to refinance into a conventional mortgage, in order to shed the high FHA MIP. A 4.5% note rate FHA loan originated at 97 LTV will reach 80 LTV within 48 months, assuming 3% per year house price growth; thus FHA-to-conventional refinancings should occur under scenarios in which mortgage market rates have not increased dramatically. The prospect of growing FHA refinance rates is a negative for Ginnie Mae valuation, but would narrow the performance gap between FHA and VA.

All in, in the short term we view the rise of VA percentage as a modest negative in terms of convexity and so will continue to monitor VA percentages as a potential driver of Ginnie Mae valuations and risk.

**Marty Young**

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