HECM PLF changes unlikely to trigger prepayments

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HUD announced changes to the Home Equity Conversion Mortgage (HECM) program, as well as a new HECM Saver program.

- HUD reduced the principal limit factors (PLFs) for new HECM loans on September 21. This will result in a lower initial principal limit than for a borrower taking out a new loan at the same WAC as before.
- Somewhat unexpectedly, HUD reduced the floor WAC for calculating PLFs to 5% from 5.5%. This has the effect of effectively increasing PLFs for most borrowers if they take out a new loan at sub-5.5% WACs. This creates some incentive to refinance.
- HUD also announced the HECM Saver program, which reduces the upfront mortgage insurance premium (MIP) in return for a lower PLF.
- Finally, HUD increased the running MIP to 125bp from 50bp.
- Despite the potential for higher prepayments from older vintages due to the increase in PLFs in the lower WAC range, we believe the concerns may be overblown, given the past performance of HECM loans, refinancing costs and negative amortization of loans.

HUD decreases, and increases, PLFs at the same time

We covered the calculation of the initial principal limit (IPL) in *Reverse mortgages and HMBS*, March 18, 2010. IPL is the maximum loan amount that can potentially be taken out by a borrower at the start of a HECM loan. The IPL is calculated from the maximum claim amount (MCA), which is the lower of the current value of the home or the prevailing FHA loan limit. Conceptually, the IPL is the PV of the MCA over the expected lifetime of the borrower, discounted at the WAC offered on the loan. In reality, other adjustments are added to that theoretical framework.

To calculate the IPL on a HECM loan, HUD provides a table of PLFs. Using the table, it is possible to look up the PLF for a borrower of a certain age with a loan of a given WAC. Once the PLF is found, the IPL can be calculated as follows:

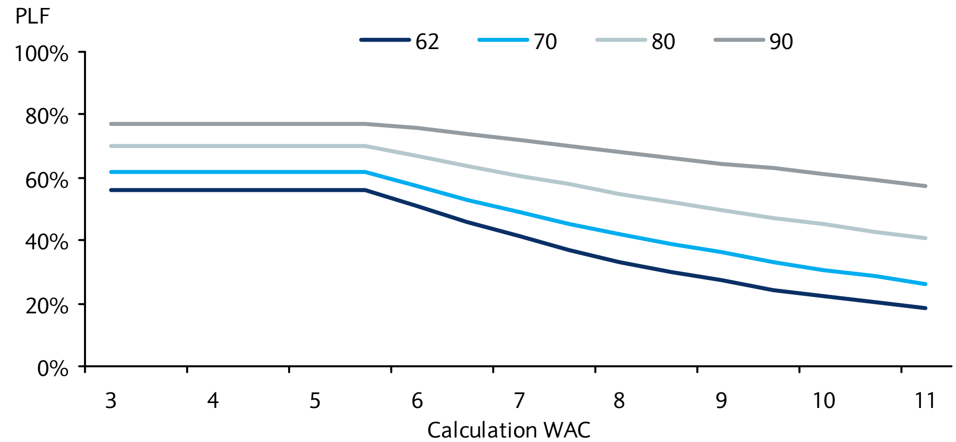
$$IPL = PLF * MCA$$

Sensitivity of the PLF to WAC and age of borrower

As we mentioned above, the PLF table is a function of the loan WAC and the age of the youngest borrower. Figure 1 shows the relationship between the variables for the PLF table that was in force till the latest announcement. Note that the PLF increases with an increase in borrower age. As the life expectancy of a borrower goes down, MCA is discounted over a shorter time period and hence the IPL goes up.

Figure 1 also shows that PLFs increase with decreasing WACs. This is also intuitive because a lower WAC means that the discounting factor is lower, which results in a higher value. However, note that the PLF remains flat once WAC falls below 5.5%. This was an intentional design feature that was put in to ensure a certain safety margin on negatively amortizing loans.

Figure 1: PLF sensitivity to borrower age and loan WAC



Source: HUD, Barclays Capital

HUD reduces PLFs

For all WACs of 5.5% and above, HUD reduced the PLFs in the September 21 announcement. The agency gave plenty of notice and provided the rationale for this move. Due to rapid deterioration in the housing environment, as well as falling recoveries on liquidated loans, HUD has long indicated that this program has been losing money. In the absence of appropriation requests being met, HUD had warned of a reduction of up to 21% in PLFs.

The actual reduction is much lower than that. Figure 2 shows the reduction for a 5.5%-WAC loan. The reduction in PLFs will mean a lower IPL for borrowers.

Obtaining a higher balance is the main driver of prepayments in the reverse mortgage space. A lower WAC in itself does not affect the borrower unless it comes with a higher balance. The simple reason for that is that the borrower is making no monthly payments. Hence, a lower WAC is of limited utility unless it provides a higher balance.

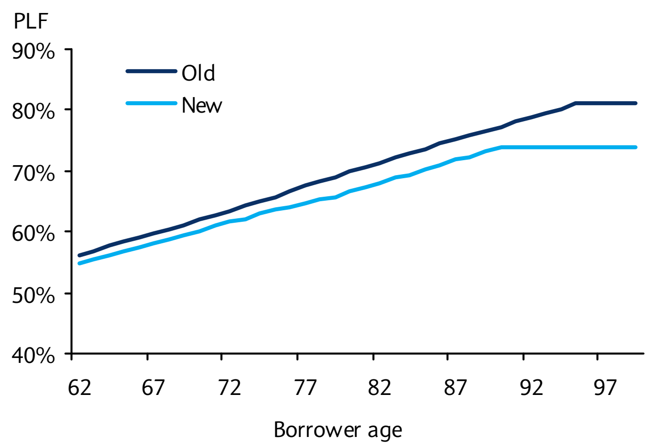
Thus, the lower PLFs for these WACs can be expected to dampen prepayments.

Unexpected reduction in WAC floor for determining PLFs

In an unexpected move, HUD also lowered the WAC floor for calculating the PLF to 5% from 5.5%. Given HUD's comments on looking to reduce the exposure in this space due to prior losses, this move is surprising. For WACs below 5.5%, this move effectively increases the PLF for many borrowers, despite the overall reduction in PLFs. Given that there is a lot of origination potential in this area, the true effect of these changes is likely to be an increase in overall PLFs.

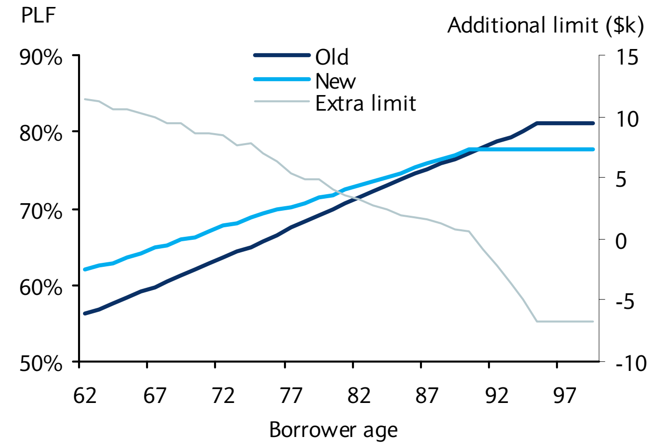
In Figures 3 and we show the new PLFs versus the old PLFs across borrower age for 5% WAC. In addition, we show the average cost savings under the new PLFs (aggregate, not adjusted for upfront MIP and origination fees) for a borrower with a home valued at $200k.

Figure 2: Old and new PLFs by age for 5.5% WAC



Source: HUD, Barclays Capital

Figure 3: Old vs new PLF by age for 5% WAC



Source: HUD, Barclays Capital

We note that a 62-year old-borrower with a 5%-WAC loan can now potentially take out $10k more that before.

Effect of new PLFs on prepayments

The new PLFs effectively increased the balance that borrowers can take out, given that most of the origination is likely to shift to lower WACs. This has the potential to increase prepayments in existing cohorts. However, we believe fears of a "prepayment rally" are overblown and discuss a few factors below that indicate to us that the effect may be much more muted.

In analyzing the prepayment risk, we first divided the universe of existing HECM loans into seasoned and recent-vintage loans, with seasoned being defined as pre-October 2009 loans. We discuss the risks to each separately.

Minimal risk for pre-October 2009 loans

For seasoned loans, we believe there are many factors that make refinancing an uneconomic proposition. Therefore the likelihood of a prepayment rally due to this week's HUD announcement is low for these loans.

The factors have not really increased for older-vintage loans

In September 2009, HUD reduced the PLFs for all HECM loans originated from October 2009 onwards by 10%. These changes to the PLFs come on top of adjustments made last year. In mid 2009, a 62-year-old borrower with a 5.5% WAC would have received a PLF of 62.5%. If that borrower were to seek to refinance now, they would be looking at a PLF of 62% at a 5% WAC (Figure 4). Thus, there has been no effective increase in PLFs for seasoned loans that were originated close to the earlier floor WAC.

Seasoned loans have negatively amortized

A loan taken out by a 62-year-old borrower on a house worth $200,000 with a 62.4% PLF at 5.5% in 2008 would have grown to more than $146,000 today. This includes amortization due to WAC, MIP and servicing fee. That borrower, now 64 years old, can get a PLF of only 62.9% at a 5% WAC today (Figure 4). Adding in some minimal originations costs, and assuming that the value of the home has remain unchanged, we find that the

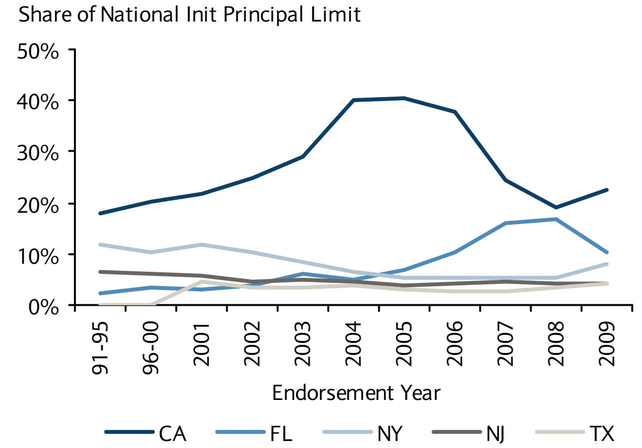
Figure 4: Different PLF Tables

January-08	
Borrower Age	62 years
Prevailing WAC	5.50%
Home Value	200,000
PLF	62.4%
Initial Principal Limit	124,800
MIP	0.50%

October-10	
Borrower Age	64 years
Prevailing WAC	5.00%
Home Value	200,000
PLF	62.9%
Initial Principal Limit	125,800
Outstanding balance	146,822
Origination fees	2,000
Net Savings	(23,022)

Source: HUD, Barclays Capital

Figure 5: HECM geographical distribution



Source: HUD, Barclays Capital

borrower may have to pay out almost $23,000 to get the new loan. Thus, the negative amortization of seasoned loans overcomes the pace at which the PLF increases as a function of age, even for the lowest WACs. And the higher the WAC of the original loan, the faster the pace of amortization.

As a result, it would be difficult for a borrower with a seasoned loan to fund a higher initial balance today.

Effect of falling home prices

Reverse mortgage have a strong presence in Florida and California (Figure 5). There has been a significant correction in home prices in these states. Thus, at reappraisal, the value of a home is most likely to be lower than it was in all years from 2003 to 2008. This will overcome any benefit that one might seek to get from the marginal increase in PLFs (if any). This is another economic disincentive to refinancing.

Historical data argue against a significant prepay rally for recent origination

The main risk of refinancing mostly comes from the most recent 2010 origination. Most of those loans were originated at a WAC of about 5.5% and will receive a slightly higher PLF now. However, we believe historical experience with newly originated loans, the costs involved in refinancing, and anti-churning disclosures will dampen potential prepayments for these loans.

HECM loans have show little prepayment sensitivity

We looked at HECM originations back to 2000 and found that borrowers were very slow to react to potential economic benefits in the form of higher balances – if they reacted at all. In Figure 8, we use loan level HECM data to analyze the prepayment response of HECM loans endorsed between 2002 and 2006 to different levels of cost savings.

Given data limitations, we have made certain assumptions. Instead of using a dollar incentive, we use the difference between the rate at which the HECM was originated and the current rate represents the cost saving. As long as the rate is above the WAC floor for PLFs, this is a fair assumption. Additionally, we did not incorporate the negative amortization of the loans when looking at the rate incentive. This makes or analysis more conservative, since the effective incentive would be lower than was we are showing here.

Note that almost all of these loans are floating rate ones. For floating rate HECMs, the 10yr rate plus a margin is used to determine the PLF.

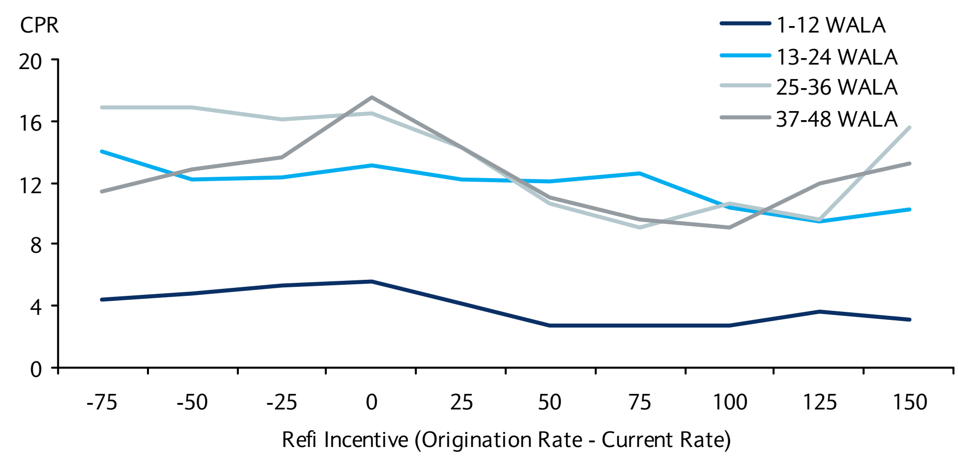
Figure 6 shows the prepayment response of HECM borrowers to different levels of rate incentive. It is clear from the data that there is almost no response to such economic incentive. These borrowers seem to be fairly prepayment insensitive.

There are a few other issues that we did not consider in this analysis that make our argument on lack of prepayment sensitivity even stronger. Most of these loans were lines of credit that were not fully drawn out, unlike the present day fully drawn loans. Thus they would have had a clearer possibility of getting a bigger balance despite some negative amortization. In addition to the direct balance incentive due to lower rates, this was also a period when home prices were increasing significantly. Nonetheless, prepay rates remained very stable.

We believe older borrowers do not react much to small potential increases in balances. They may not be aware of the benefit or they may be unwilling to take the extra effort. This would lead to the sort of prepayment experience that we see in the data.

No doubt, there is much more publicity about reverse mortgage deals these days. There is also an army of mortgage brokers who are looking for extra business, given that the activity in the regular forward mortgage market has been scaled down significantly. However, we find no conclusive evidence of this being the case – prepayment rates on reverse mortgages have remained stable over time. Hence, in the base case, we expect little reaction from borrowers, unless the incentive is significant. As we will discuss in the following sections, the incentives are not too large either.

Figure 6: HECM prepays by rate incentive 2002-2005 vintage



Note: Data shown for California loans only. Source: HUD, Barclays Capital

Cost to refinance remain high

Refinancing includes many costs. First, there are significant origination fees. Although it can be tempting for originators to overlook these, HUD's strict enforcement of anti-churning laws leaves little room to game the system by cutting the fees too far.

HUD also has an upfront insurance premium, which has been reduced for refinancing. It is now 2% of the increase in the MCA, which is not likely to increase in most cases. In addition, significant paperwork must be filled out, including anti-churning disclosure material. In some cases, borrowers may need to certify that the increase in principal is more than five-times the cost of the refinancing. All of these factors tend to raise the breakeven economic incentive at which significant prepayments will occur.

At the same time, the effective cost of the loan has increased due to the 75bp increase in running MIP. This will lead to much faster accrual on the loan leading to higher effective borrower indebtedness.

Though we do not think there is strong case for higher prepayments given the historical evidence, it is clear that the borrowers at the lower end of the HECM age scale will see some economic incentives. Also, if any borrowers are to prepay, it will most likely be a brief and quick affair, with remaining borrowers continuing to exhibit prepay behavior as seen in the past.

Possible impact of other HECM announcements

In addition to the changes in PLFs, HUD also made other announcements related to HECM.

New HECM Saver product

This product targets borrowers who do not want to make significant upfront payments. To help them, HUD set the upfront MIP to 1bp for the HECM Saver. In exchange of that, the PLF has been reduced compared with the standard HECM product. This product is likely to appeal to borrowers who intend to stay in the product for a short time before paying it off or moving to another product, or simply borrowers who like a lower debt burden.

Higher running MIP across all products

This adjustment has been in the making for a long time. HUD sees a potential risk that it has mispriced its affordability products and has sought to increase the monthly insurance premium across its entire portfolio. This increase follows the recent approval that HUD received from Congress. The increase is significant – from 50bp initially to 125bp now. Although this change does not play a role in the upfront PLF, it will increase the accrual rate for the loans, which should result in faster buyouts because loans will hit 98 LTV sooner.

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