HECM Portfolio Valuation

Recent Valuations
Current Programmatic Risks & Challenges
FY 2011 Policy Considerations

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Agenda

- Recent Portfolio Valuations:
  – GAO Report (July 2009)
  – HECM Actuarial Review (October 2009)
  – President's Budget (January 2010)
- Current Program Risks & Challenges
- Proposed Solutions to:
  – FY 2011 Policy Budget Appropriation Request
    - Sustaining program viability
- Action Items and Timeframe

HECM Portfolio Valuations

GAO REPORT, ACTUARIAL REVIEW, PRESIDENT’S BUDGET

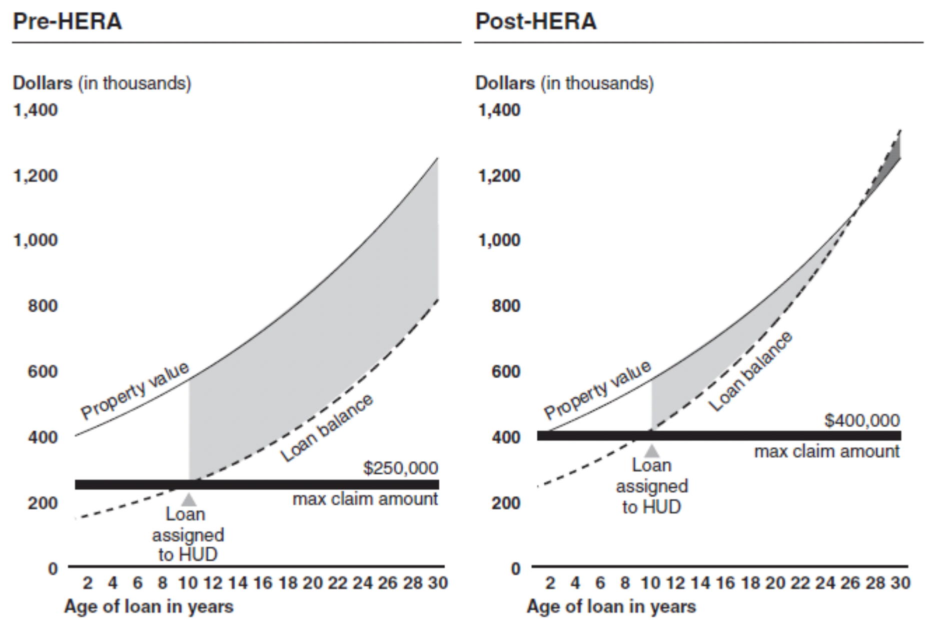
GAO Report

- HERA 2008 Legislation authorized higher loan limits for HECM, which GAO suggests increases FHA's risk exposure.

- The average equity "cushion"[1] for the life of the program prior to HERA was 35% of the book. Post-HERA the 2009 book had roughly half the number of borrowers with home values above the loan limits (18%).

- Many have suggested that the higher loan limits played a part in recent increases in credit subsidy estimates. That is not the case. There is no assumed equity "cushion" in budget formulation. The increase in loan limits is not a cause for increased credit subsidy estimates for recent books.

Figure 12: Illustration of How Increasing the HECM Loan Limit Could Increase HUD's Losses



[1] An Equity "Cushion" is when the property appraised value is greater than the maximum claim amount

GAO Report

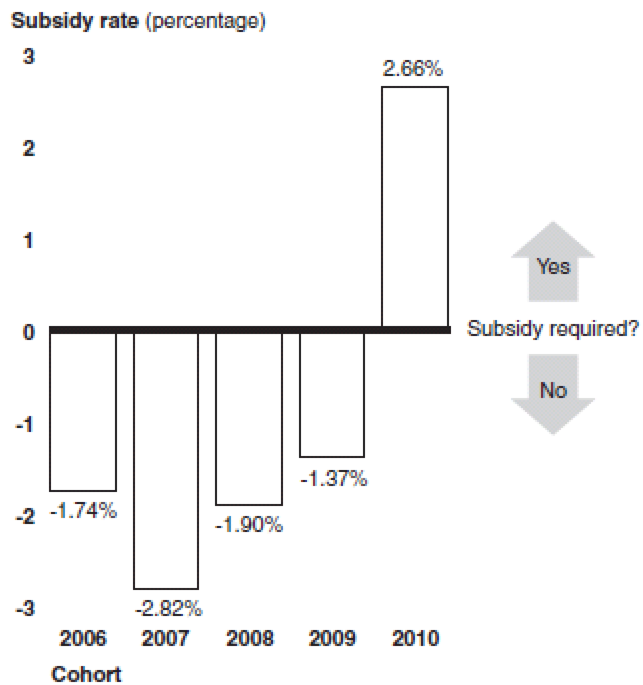
"HUD officials told us that if they had used IHS Global Insight (GI) projections to develop the fiscal year 2010 credit subsidy estimate, there would be no need for an appropriation because the credit subsidy rate would be negative."[1]

•HECM portfolio valuations are very sensitive to *long-run* house-price appreciation (HPA) forecasts & interest rates used for discounting cash flows.

- GI long-run projection of HPA was roughly 6% at that time.
- Discount rates were very favorable for 2010.

•First time inclusion of a home maintenance risk discount of 50 bps also increased credit subsidy rate (CSR).

Figure 10: HECM Credit Subsidy Rates, Fiscal Years 2006 through 2010



Source: GAO analysis of OMB federal credit supplement data (2006 through 2010).

[1] Reverse Mortgages: Policy Changes Have Had Mostly Positive Effects on Lenders and Borrowers, but These Changes and Market Developments Have Increased HUD's Risk, Report Number: GAO-09-836, Issuance date: July 30, 2009. http://www.gao.gov/new.items/d09836.pdf

HECM Actuarial Review

- "Due to the timing of HUD's announcement, the impact of the recent PLF reduction for the FY 2010 book-of-business is not captured in these economic estimates... As a result, with all other modeling assumptions held constant, the actual economic value of the FY 2010 book-of-business is expected to be greater than the estimates presented in this review."
- Actuarial Review used HIS Global Insight's HPA forecast, which assumed a sharp dip in 2010 followed by an overcorrection in years 2015 – 2021, reaching a high of 6.5% in 2020.
- Actuarial Review also included a 0.50% home maintenance risk discount.

Table III-2 Projected Economic Value of the HECM portfolio in the MMI Fund in Future Years ($ Millions)

Fiscal Year(1)	Economic Value	Insurance-in-Force(2)	Volume of New Endorsements(3)	Economic Value of Each New Book-of-Business	Investment Income
2009	$909	$28,696	$29,053	$909	$0
2010	1,875	51,016	26,266	964	2
2011	3,629	70,830	25,247	1,718	36
2012	5,921	90,688	26,885	2,190	102
2013	8,827	109,980	29,212	2,745	162
2014	12,037	128,543	31,676	2,945	265
2015	15,739	146,137	34,829	3,322	380
2016	19,830	162,868	38,264	3,601	490

1. All values, except the volume of new endorsements, are expressed as of the end of the fiscal year.
2. Insurance-in-force is estimated as the sum of the maximum claim amounts of the remaining insured loans.
3. Projections provided by HUD.

IBM Global Business Services (2009). *An Actuarial Analysis of FHA Home Equity Conversion Mortgage Loans in the Mutual Mortgage Insurance Fund Fiscal Year 2009. Arlington, VA: IBM Global Business Services, under contract with the U.S. Department of Housing and Urban Development, October 12, 2009. http://www.hud.gov/offices/hsg/comp/rpts/actr/2009actr_hecm.pdf*

FHA Single Family Insurance FY 2009 MMI Fund Capital Ratio

Table 5. MMI Fund Economic Value and Capital Ratio Calculations for FY 2009 (all dollars are in millions)

	Fy 2008 MMI Fund[a]	FY 2009 Activity and End-of-Year Positions Single Family	HECM[b]	MMI Fund
Beginning-of-Year Positions[c]				
Cash	$ 9,210			
Investments	19,244			
Properties and Mortgages	2,261			
Other Assets and Receivables	127			
Total Assets	$ 30,842			
Liabilities (Accounts Payables)	3,639			
Net Capital Resources	$ 27,203	$ 27,203		$ 27,203
Actuarial Calculations[d]				
Net Gain from Investments		$ 386	$ 0	$ 386
Net Insurance Income		2,516	614	3,130
Expected Recoveries on Assigned HECM Mortgages[e]		0	0	0
Capital Resources at End-of-Year		**$30,105**	**$ 614**	**$30,719**
Present Value of Future Cash Flows on Outstanding Insurance		(27,373)	295	(27,078)
Economic Net Worth	**$ 12,908**	**$ 2,732**	**$ 909**	**$ 3,641**
End-of-Year Unamortized Insurance-In-Force[f]	$ 429,634	$686,263	$28,696	$714,959
Capital Ratio Using Unamortized Insurance-in-Force	**3.00%**	**0.40%**	**3.17%**	**0.51%**
End-of-year Amortized Insurance-in-Force[g]	$ 401,461	$656,012	$28,696	$684,708
Capital Ratio Using Amortized Insurance-in-Force[h]	**3.22%**	**0.42%**	**3.17%**	**0.53 %**

- HECM is now in the Mutual Mortgage Insurance (MMI) Fund, which is required to maintain a 2% capital ratio.

Annual Report to Congress Regarding the Financial Status of the FHA Mutual Mortgage Insurance Fund . U.S. Department of Housing and Urban Development. November 12, 2009. http://www.hud.gov/offices/hsg/comp/rpts/actr/2009actr_subltr.pdf

FY 2011 HECM Reestimate in the Federal Budget

- Every year during budget formation, credit subsidy rates (CSR) are reestimated based on actual program experience and updated economic forecasts.
- For cohort 2009, the original negative subsidy rate for the book (-1.37%) was updated to (5.73%).
- This suggests that rather than generating roughly $400 Million in receipts, the book will cost $1.7 Billion.
- President's Budget forecasts were used to complete the reestimate as well as Budget-year specific discount rates.
- Reestimate also included an 82 bp home maintenance risk discount to projected house-price growth rates. This discount was not in the original subsidy rate estimate.

Federal Credit Supplement
Table 8. LOAN GUARANTEES: SUBSIDY REESTIMATES
(In percentages of dollar amount of loans guaranteed)

Agency, Bureau, Program, Risk Category, and Cohort Year	Original Subsidy Rate	Current Reestimate Rate
MMI—HECM FY 2009…	-1.37	5.73

Budget of the United States Government: Federal Credit Supplement Fiscal Year 2011. http://www.gpoaccess.gov/usbudget/fy11/cr_supp.html

President's Budget: FY 2010 & FY 2011 Cohorts

- FY 2010 baseline Credit Subsidy Rate (CSR) of 2.66% was reduced to -0.50% by cutting the Principal Limit Factors (PLF) by 10%.
- FY 2011 President's Budget:
  - Baseline CSR w/ no change in premiums or PLFs = 3.07%.
  - Policy CSR in the Budget proposal with increased premiums and reduced PLFs = 0.83%.
- FY 2011 economic assumptions less favorable for HECM:
  - Lower HPA forecast than in FY 2010.
  - Higher discount rates.
  - Larger home maintenance discount to HPA (82 bps).

Federal Credit Supplement
Table 2. LOAN GUARANTEES: SUBSIDY RATES, COMMITMENTS, AND AVERAGE LOAN SIZE

	2010		2011	
	Subsidy rate (%)	Commit. ($ Billion)	Subsidy rate (%)	Commit. ($ Billion)
MMI—HECM	-0.50	30.8	0.83	30

Budget of the United States Government: Federal Credit Supplement Fiscal Year 2011. http://www.gpoaccess.gov/usbudget/fy11/cr_supp.html

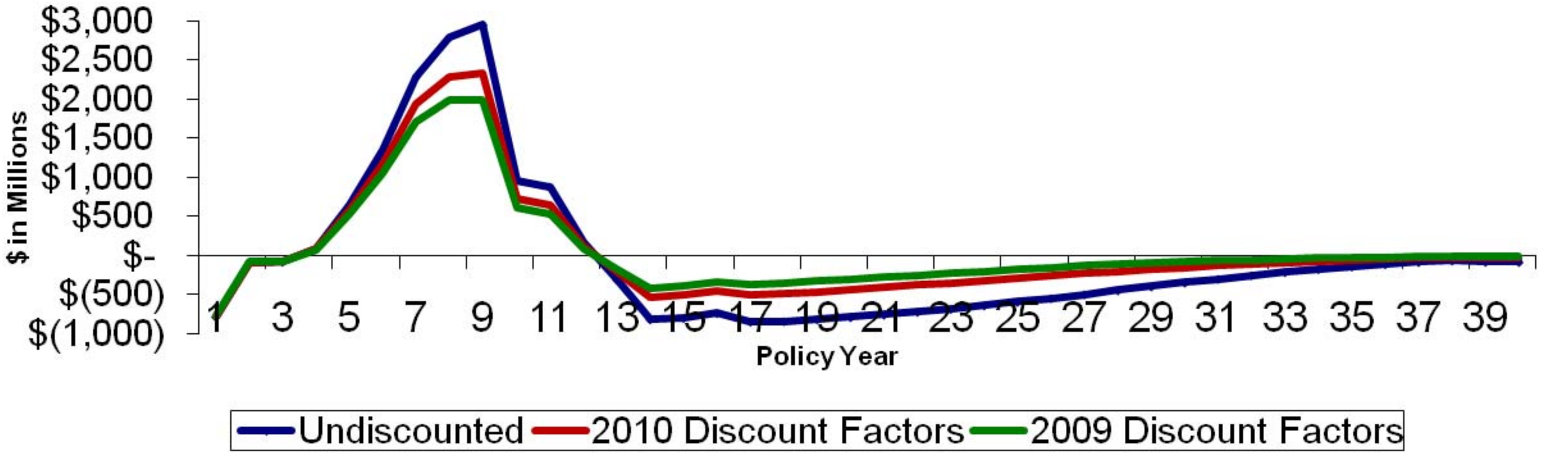
HECM Performance

CURRENT PROGRAM RISKS & CHALLENGES

Impact of Discount Rates on Net HECM Cash Flows

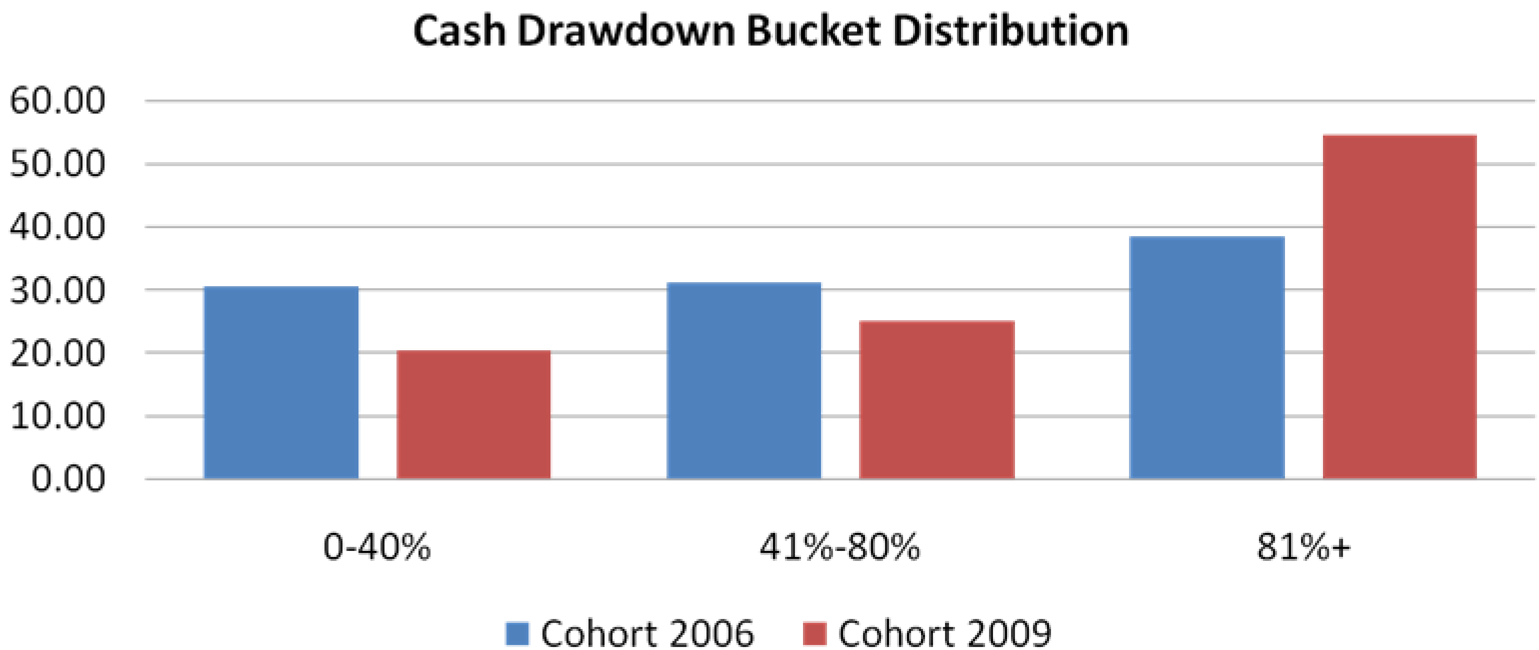
- Rising loan balances, and the deferral of repayment until the time of borrower exit from the home, mean the financial stability of the HECM program is very sensitive to the juxtaposition of interest rates and house price growth over long periods of time. HECM loans do not reveal their final economic value until years 10 to 20, when most of the insurance losses will finally be booked.

- Discount rates are Budget-year specific and created annually by the Office of Management & Budget (OMB).



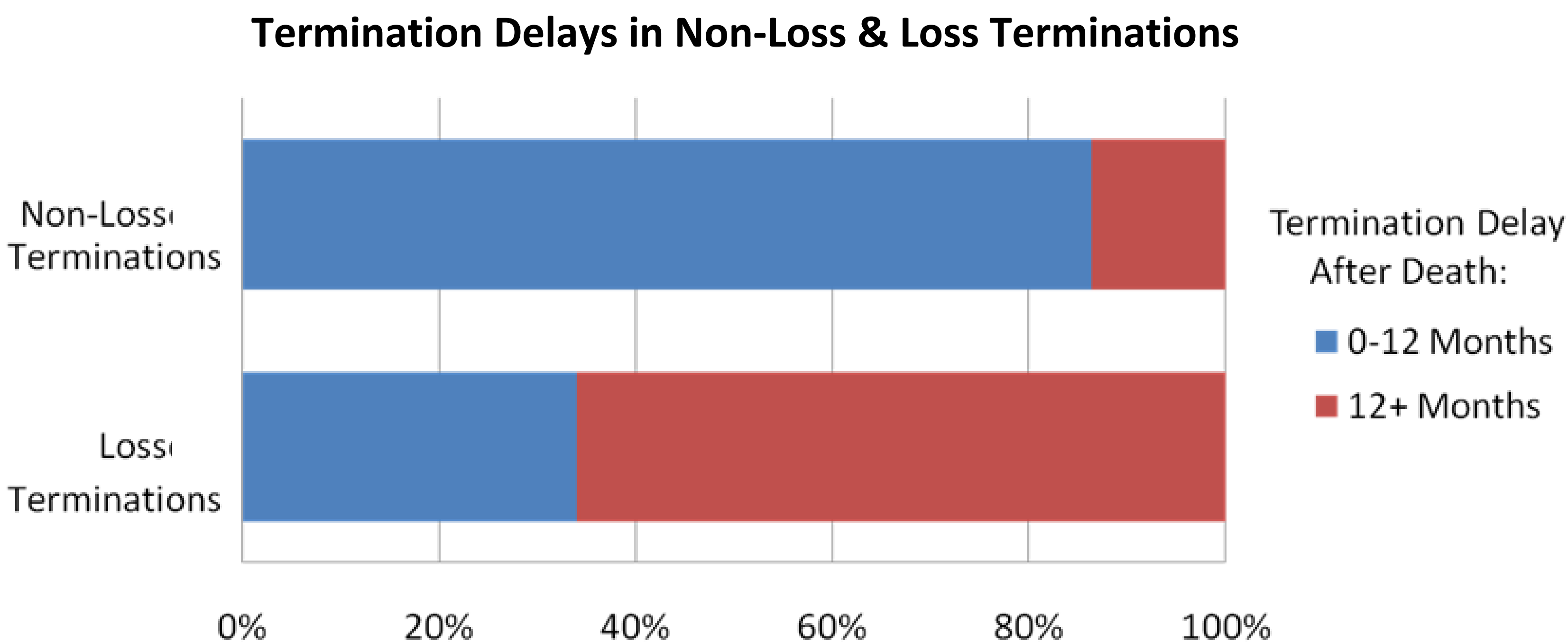
Cash Draw Rates as a Percentage of the Initial Principal Limit (IPL)

- The 2009 cohort is comprised of borrowers that take an increasingly high initial cash draw, relative to older cohorts.
- A high initial draw results in a loan balance that grows more quickly, increasing the probability of a loss at termination.



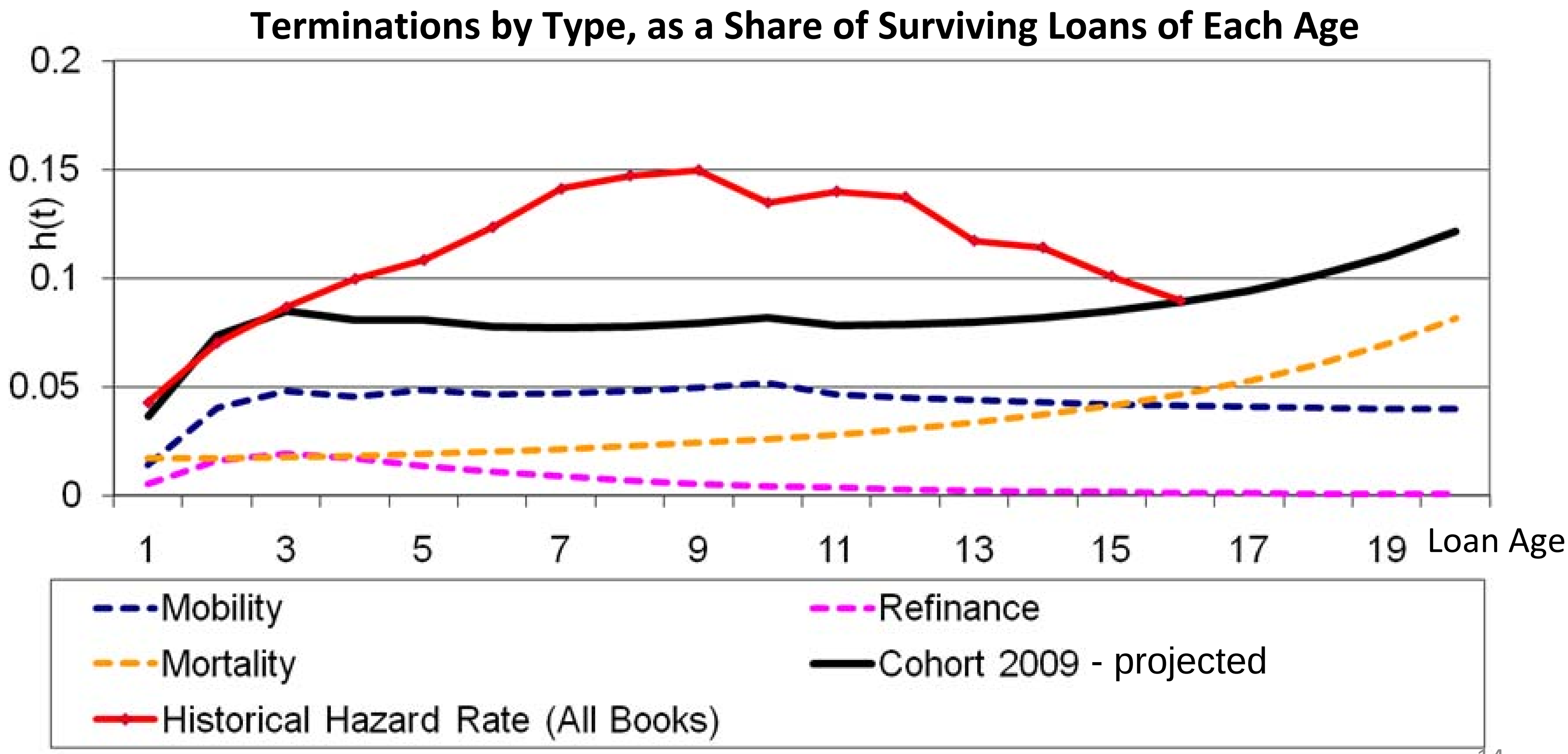
Time Between Death and Termination of the HECM

- Delayed termination of the HECM after the death of the borrower increases program risk.



Slower Termination Speeds Expected for New Books-of-Business

- Slower termination speeds due to younger borrowers entering the program, lower expected refinance activity (due to lower home values and reduced PLFs), and less mobility (due to economic conditions) increase the risk of losses.



Home Maintenance Risk

- Appreciation of HECM-borrower homes beats the market for early termination
- It steadily underperforms market HPA rated for terminations after year 6.

Loan Age Bucket	Count of Total HECM Termination Events	Sum of Actual Loss Events	Actual Loss Rate	Ave. Expected Loss Rate (No HPA Discount)	Ave. Expected Loss Rate (w/ HPA Discount)	Discount Regime
1 to 2 Years	47,555	579	1.2%	2.3%	1.2%	+825 bps
3 to 4 Years	29,259	1,120	3.8%	4.5%	3.8%	+100 bps
5 to 6 Years	13,345	618	4.6%	5.0%	5.0%	0 bps
7 to 8 Years	6,357	332	5.2%	4.2%	5.0%	- 50 bps
9 to 10 Years	2,946	227	7.7%	5.0%	7.3%	- 100 bps
11 to 12+ Years	1,590	226	14.2%	7.6%	14.1%	- 160 bps
Grand Total	**101,052**	**3,102**	**3.1%**	**3.6%**	**3.1%**	

Capone, Chang, & Cushman. *Identification of Home Maintenance Risk in Reverse Mortgages: An Empirical Examination of Home Price Appreciation among HECM Borrowers*, AREUEA Mid-Year Conference, Washington, DC. June 2010.

HECM FY 2011

CURRENT POLICY CONSIDERATIONS

What Changed from Last Year?

- Fannie Mae pulled back as the primary investor
  - Raised required index margin on (adjustable-rate) loans in the Spring of 2009.
  - This made fixed-rate loans competitive in terms of initial interest rates and principal limits.

- Fixed-rate loans are pooled into Ginnie Mae HMBS. *Investors require that borrowers take-out all of their principal limit at time of origination, increasing risk to FHA*.
  - Adjustable-rate loan borrowers traditionally have taken out less than 80% of their principal limit in the first year, any many never take out 100%.
  - Borrowers do not have the option of taking out smaller amounts.; this prompted internal work on developing a HECM "Lite" product.

Current Program Challenges

- FY 2011 is the second year for which the Administration requested appropriations for HECM.
  - President's Budget Economic Assumptions are less favorable.
    - Lower long-term house-price growth rate
    - Higher interest rates used for discounting future revenues and claim expenses.
      - Claims are paid to buy loans from lenders many years before the average loan termination. The multiple-year difference in timing between claim payments and ultimate recoveries becomes more expensive for FHA as interest rates rise.
    - Higher home maintenance discount rate
  - HECM is in a budget box due to differences between long-run house price growth rate assumptions used in the original PLF table calculation (4%) and assumptions now being used for the budget.

- Volumes are down significantly this year and that is likely due to the 10% PLF haircut last October.
  - HUD understands that another deep cut for FY2011 could cause demand to drop further and does not want to see that be the outcome.

- Tax & Insurance Defaults
  - Not accounted for in original PLFs or in budget valuations.
  - Policy to prevent and/or cure still in progress.

Policy Levers Available

- **Upfront Premium**
  - Taken from cash available to borrower.
  - The current 2% is considered a large entry fee.
- **Annual premium:** Diminishing marginal returns: higher premiums mean faster loan balance accruals, which accelerates when home price becomes the binding constraint on recoveries (HUD gets the lesser of the loan amount or the house value).
- **Principal Limits:** Lower limits may affect demand for the program, especially as interest rates rise.
- **First-years' cash draws as a percent of principal limit:** Restricting initial cash draws could reduce long-run credit risk.
  - Does not work for fixed-rate loans
- **Timing of assignment:** accelerating timing of assignment would permit HUD to earn interest over a longer holding period.
  - Reduces value to initial investors
- **Shared Appreciation Option:** never been tested; possibility that borrowers could receive a lower interest rate in exchange for the lender sharing some of the property value appreciation.
- **Diversify Product Option:** Offer two HECM products (lower cost / lower PLFs & higher cost / higher PLFs) to attract more diverse borrower mix.
- **Underwriting Standards:** HUD to issue guidance to better assure that tax and hazard insurance can and will be paid; open issue of requiring escrows.

2-Product Solution Currently Being Considered

- Offer 2 HECM products:
  - Standard HECM: MIP = 2.00% upfront/1.25% annual with roughly the same PLFs as offered today (for need based borrower; provides max cash take-out)
  - HECM Lite: MIP = 0.00% upfront/1.25% annual with lower PLFs (pay as you go product)

NOTE: FHA would like to thank the industry working group[1] for all its valuable insights and recommendations for developing this option.

[1] Industry Working Group: Wells Fargo, Bank of America, MetLife, Generation Mortgage, Fannie Mae, Ginnie Mae, FHA

Action Items and Timeline

- FHA is currently working with OMB to evaluate the 2-product solution.
  - In the event the 2-product solution is not feasible by October 1st a bridge appropriation, heightened premiums, and/or reduced PLFs may be required to operate the HECM program.
- Legislative change to permit MIP changes.
  - Change for upfront premium rate to be based on MCA and not initial loan balance & higher annual premium rates (Statutory fix needed for current program as well as proposed lite product).
  - Allowance for 0 upfront premium and 125 annual premium (Reg changes required).
- Completely new PLF tables need to be estimated for both products.
- FHA system changes needed to identify HECM product type for MIP collection.
- 30 day notice to industry of all changes –premium rates, products, PLF tables, and T&I guidance.
  - Most likely very little lead time will be provided.