FHA's 2011 Actuarial Review: Combining Rosy Scenarios and Mission Gallop

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2011 Actuarial Review: Combining rosy scenarios and mission gallop

- Policies set by Congress are at the core of FHA’s problems:
  - FHA’s forward single-family program would be effectively insolvent under loan loss reserving provisions applied to private institutions.
    - It likely has expected losses of about $40 billion on the 800,000 plus loans that are currently 60+ days delinquent.
      - These losses exhaust the $28 billion in current reserves and leave a $12 billion hole.
    - Rosy scenarios are used to create future economic value.
  - FHA has gone from mission creep to mission gallop.
    - 54% of its guarantees were on homes costing more than 125% of area median income.
      - This is up from 22% in 2009.
    - 38% of its guarantees were on homes costing more than 150% of area median income.
      - This is up from 12% in 2009.
  - FHA is now crowded in.
    - The reinstatement of FHA’s “temporary” loan limits makes the task of reforming the GSEs even more difficult.
      - As the GSE footprint shrinks, FHA, not the private market, will take its place.

FHA is effectively insolvent

- The Actuarial Study notes that FHA's forward single-family program has total capital resources of $28.2 billion offset by $27 billion in negative cash flows on its outstanding business (Study, p. 25).
  - This sounds reassuring; however a private company would be required to set aside this amount plus $12 billion more to cover expected losses from known delinquent loans:
    - FHA is responsible for 100% of the losses on the loans it insures. As a result its loss severities are extremely high.
      - In 2009 FHA experienced a 64% loss ratio (Study, p. E-2).
    - In September FHA had over 800,000 loans 60+ days delinquent with an estimated total outstanding balance of $112 billion (September 2011 FHA Neighborhood Watch).
    - FHA would have losses of $40 billion if 55% of these loans eventually go to claim and losses average 64% (calculation based on private mortgage insurance company reserving practices).
- FHA would need another $21 billion to meet its congressionally mandated 2% capital cushion.
- Rosy scenarios will lead to additional losses.

FHA is effectively insolvent

- FHA’s forward single-family program has a 846:1 leverage ratio ($1.193 billion capital cushion divided by $1.009 trillion of exposure).
  - This is about 10-12 times the leverage ratios of Fannie and Freddie when they failed.
  - Besides the obvious problems this poses, FHA will likely suffer an “unexpected” market downturn before it rebuilds its capital, resulting in substantial losses to taxpayers.

Rosy scenarios are used to inflate future economic value.

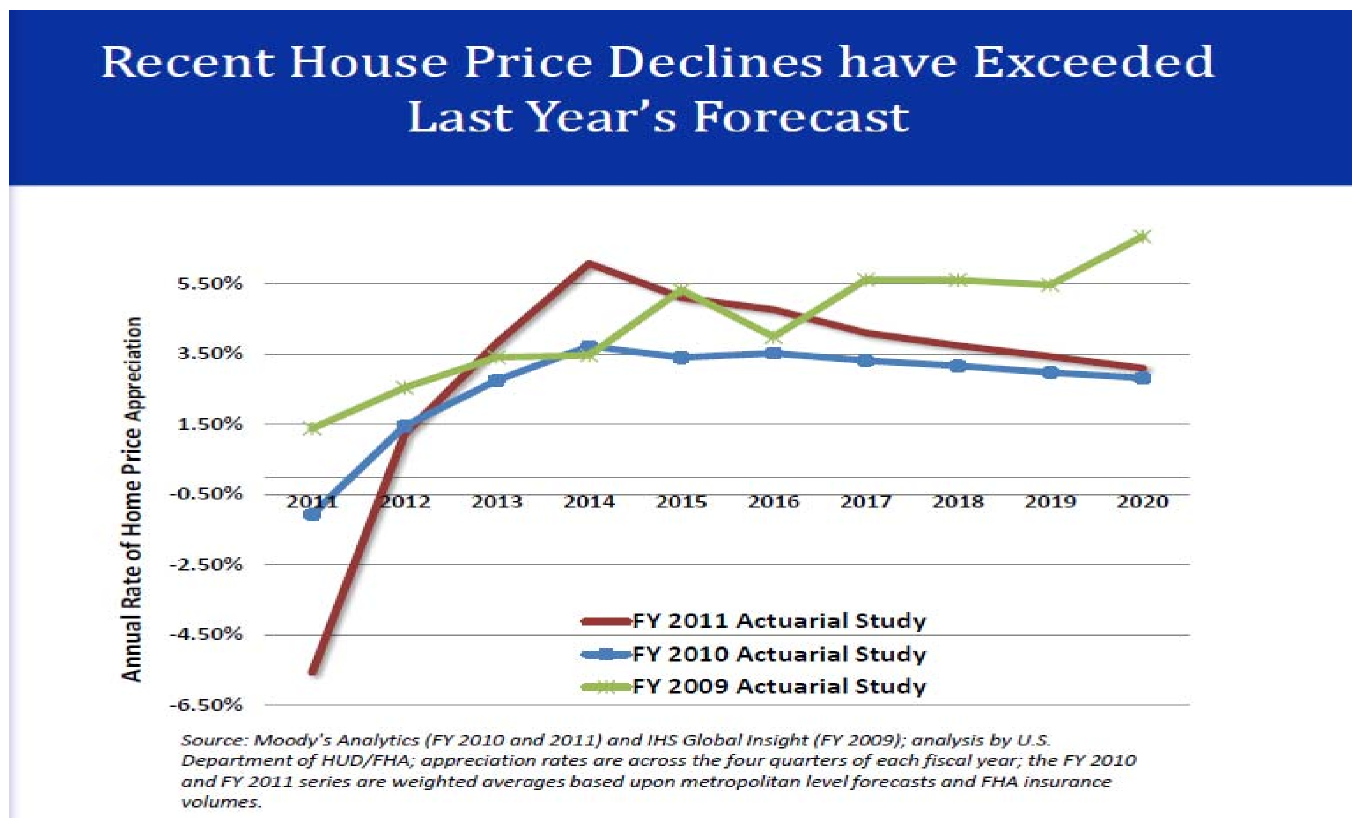
- The method of determining economic value as set out in statute is not a simple exercise and is not used by any safety and soundness regulator:
  - The FHA compares the "economic value" of its outstanding insurance over a thirty year time horizon versus the current balance of its capital resources.
  - This calculation is based on projecting future performance of insured mortgages that is dependent on sophisticated actuarial modeling and a myriad of assumptions.
    - Small changes in either can have a huge impact on results.
      - Many of the assumptions date from June-July 2011 and are already out of date.
  - As noted on the previous slides, looking just at what is known near term – assets and known liabilities pertaining to over 800,000 delinquent loans demonstrates that FHA is effectively insolvent.

Rosy scenarios are used to inflate future economic value.

- FHA's serious delinquency rate for September 2011 was 8.7% up from 8.2% in June 2011 (Source: FHA Outlook Reports).
  - As a result, there were 50,000 more seriously delinquent FHA loans in September compared to June.
- News reports indicate that house prices continue to fall.
  - In September 2011 MarcoMarkets reported house price expectations of 100 financial experts.
    - On average these experts expect house prices to increase by a cumulative 5.4% from the end of 2011 to the end of 2015.
    - Mark Zandi of Moody's Analytics, the firm used by FHA, expects rates to increase a cumulative 14.1%.
- For FY 2011 the 10-year Treasury rate is projected to average 4.43% - yet today it is at about 2%.
  - The Actuarial Report notes that these low rates will lead to adverse selection resulting in a $5 billion negative effect on the economic value of the 2011 book of business.

Rosy scenarios are used to inflate future economic value.

- FHA assumes a cumulative house price growth of about 18% over 2012-2015.
- This compares to an estimate of about 8% based on expectations of over 100 participants in the MacroMarkets' September 2011 survey.
  - The forecast of the economist relied on by FHA is more than one standard deviation away on the high side from the average forecast.



Non-rosy scenarios lead to large bailouts

Exhibit V-7

Projected Fund Economic Value by Scenario for Next 8 Years						
Fiscal Year	Base-Case	Stronger Near-Term Rebound	Mild 2nd Recession	Deeper 2nd Recession	Protracted Slump	Low Interest Rates
2011	1,193	4,416	-17,995	-31,538	-42,754	-4,931
2012	9,351	14,365	-12,780	-27,530	-39,592	5,122
2013	15,637	21,363	-8,540	-24,790	-37,814	16,991
2014	23,500	29,844	-2,652	-20,522	-34,833	28,591
2015	32,515	39,337	4,710	-14,568	-29,975	37,431
2016	41,134	48,342	11,938	-8,443	-24,795	45,147
2017	49,865	57,464	19,205	-2,261	-19,566	53,591
2018	59,448	67,465	27,169	4,542	-13,773	63,156

- As reported at www.calculatedriskblog.com, Tom Lawler observed:
  - the 'economic value' of the 2011 book in a 'near-term' rebound scenario in the FY 2011 Actuarial Report [shown above] is substantially lower than the projected economic value of the 2011 book in the 'base-case' scenarios [shown below from the 2010 Actuarial Report]; and (2) the economic values of the FY 2011 under the 'worse-than-base-case' scenarios are massively worse than was the case last year."

Exhibit V-7

Projected Fund Economic Value by Scenario for Next 8 Years						
Fiscal Year	Base-Case	Stronger 2010 Recovery	Mild 2nd Recession	Deeper 2nd Recession	Complete Collapse	Volatile Interest Rate
2010	5,160	8,022	-7,856	-13,881	-17,796	7,017
2011	10,969	12,662	-2,364	-8,707	-13,621	15,620
2012	14,858	16,845	2,279	-3,757	-9,615	22,610
2013	19,777	21,884	6,641	675	-5,533	28,631
2014	24,243	26,486	10,512	4,226	-2,248	34,256
2015	29,016	31,415	14,667	8,071	1,272	40,488
2016	34,033	36,647	19,034	12,111	4,970	47,215
2017	39,582	42,470	23,931	16,662	9,155	54,522

FHA is dangerously overextended

- FHA's market share of total home purchase loan originations going into the crisis was only about 5%. Now, its market share has ballooned to 30%.
    - Over the last 5 years FHA's exposure to high cost areas has increased dramatically, with dollar exposure to California real estate increasing over tenfold from 1.52% of 2006 volume to 17.47% in 2011.

FHA been operating in violation of Congress' minimum capital requirements for 3+ years

FHA's strategy has been to take on ever larger volumes of new business in an effort to rebuild its capital to the congressionally mandated level of 2%. Instead, FHA has gotten further out of compliance. Its 2008 estimate for its capital by the end of FY2011 was off by over 2% or about $22 billion:

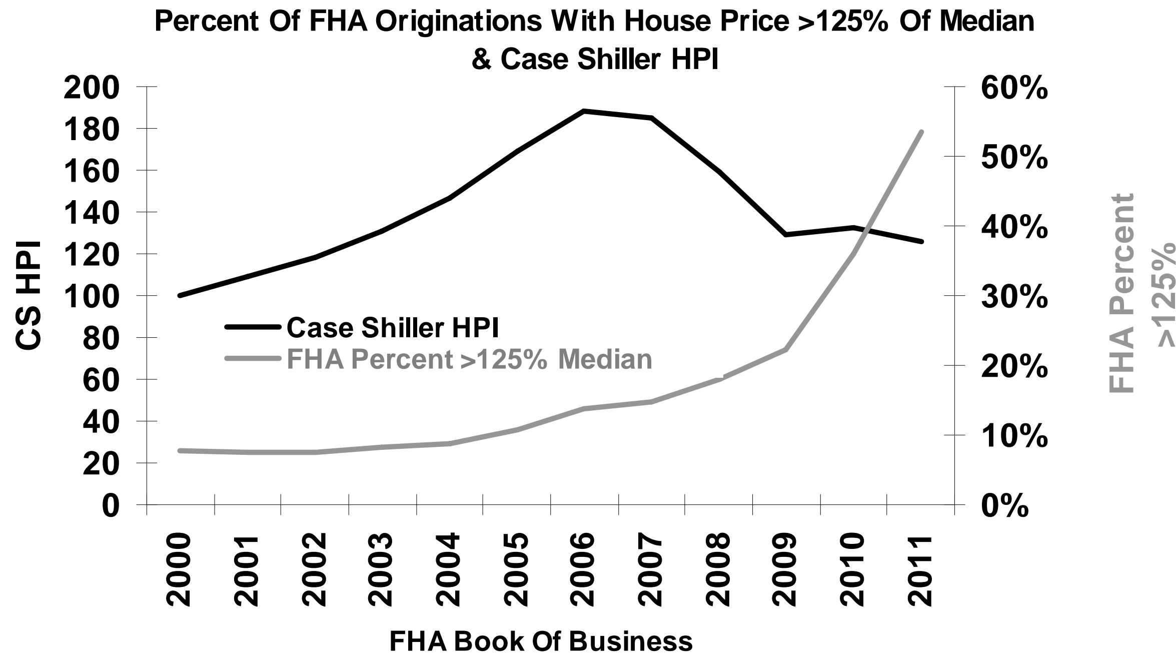
	Fiscal year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Actuarial study											
FY2008		**3.22%**	***2.65%***	***2.40%***	***2.38%***	***2.49%***	***2.65%***	***2.85%***	***3.07%***	NA	NA
FY2009		------	**0.53%**	***1.10%***	***1.74%***	***2.27%***	***2.68%***	***2.95%***	***3.26%***	***3.57%***	NA
FY2010		------	------	**0.50%**	***0.99%***	***1.24%***	***1.58%***	***1.99%***	***2.43%***	***2.86%***	NA
FY2011		------	------	------	**0.24%**	***1.00%***	***1.56%***	***2.17%***	***2.72%***	***3.11%***	***3.68%***

Actual

Projection

Projection – 1st year MMI back above 2%

FHA: from mission creep to mission gallop



- FHA now primarily finances higher priced homes.
  - In FY 2011, 54% of FHA's dollar volume went to finance homes that were greater than 125% of an area's median house price, up from 36% in 2009 and 38% had a home price greater than 150% of area median, up from 22% in 2010.
  - How does this happen if FHA has been limited to 125% of the median priced home?
    - The law mandates the use of 2008 home prices even though prices today are substantially lower.
    - The county with the highest median home price has that price applied to the entire MSA.

Sources: Case Shiller National HPI NSA as of Q1, Actuarial Review of FHA MMIF FY 2011 Ex. IV-7, and James E. Lynn Consulting

Mission creep: Market share projected to remain high through 2018

- The 2011 Actuarial Report projects:
  - 2012: 30% share
  - 2013: 28% share
  - 2014: 26% share
  - 2015: 23% share
  - 2016-2018: 20% share
- Twelve years (2018) after the beginning of the crisis FHA will not have returned to its traditional 10%-15% market share.
  - At these share levels FHA will starve the private mortgage insurance industry of the new business it needs to thrive.

FHA is now crowded in

- Congress' reinstatement of FHA's "temporary" loan limits makes the task of reforming the GSEs even more difficult.
  - As the GSEs' footprint shrinks, FHA, not the private market, will take its place.
    - The private sector will be unable to compete with FHA.
    - FHA's growth will place the taxpayers at greater and greater risk.