# FEDERAL HOUSING FINANCE AGENCY



### **NEWS RELEASE**

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# FHFA Updates Projections of Potential Draws for Fannie Mae and Freddie Mac

**Washington, DC** – The Federal Housing Finance Agency (FHFA) today released updated projections of the financial performance of Fannie Mae and Freddie Mac, including potential draws under the Senior Preferred Stock Purchase Agreements with the U.S. Department of the Treasury. FHFA first released financial projections in October 2010, and these updated projections show similar results for two out of three scenarios, and a decrease in cumulative Treasury draws in one scenario. Through the FHFA Conservator's Report, FHFA tracks actual performance versus projections on a quarterly basis.

(Attachment follows)

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The Federal Housing Finance Agency regulates Fannie Mae, Freddie Mac and the 12 Federal Home Loan Banks. These government-sponsored enterprises provide more than \$5.7 trillion in funding for the U.S. mortgage markets and financial institutions.



Federal Housing Finance Agency

# Projections of the Enterprises' Financial Performance

October 2011

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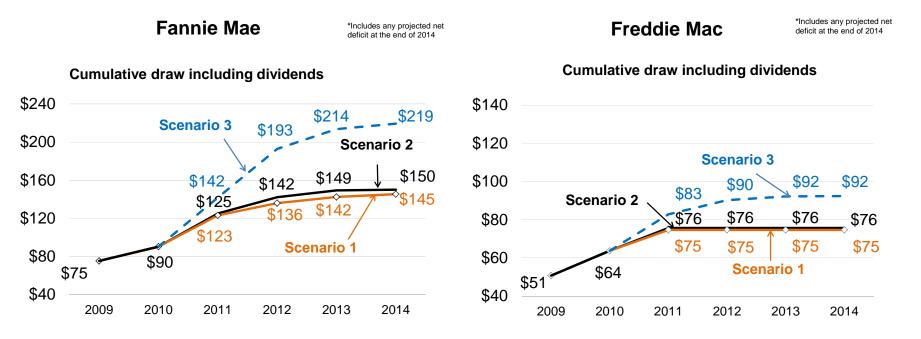
# Summary

- This report provides updated information on possible future Treasury draws by Fannie Mae and Freddie Mac (the "Enterprises") under specified scenarios, using consistent assumptions for both Enterprises. FHFA published initial projections of the Enterprises' financial performance in October 2010. The report on the initial projections can be found in <u>FHFA's Projections of the Enterprises' Financial Performance, October 2010</u>. The projections have been updated to reflect the current outlook for house prices, interest rates, and recent trends in borrower behavior. The projection period has been extended an additional year.
- To date, the Enterprises have drawn \$169 billion from Treasury under the terms of the Senior Preferred Stock Purchase Agreements (PSPAs), as amended, between the Treasury and each of the Enterprises. FHFA worked with the Enterprises to develop forward-looking financial projections across three possible house price paths. Under the three scenarios used in the projections, cumulative Treasury draws (including dividends) at the end of 2014 range from \$220 billion to \$311 billion. In the initial projections released in October 2010, cumulative Treasury draws (including dividends) at the end of 2013 ranged from \$221 billion to \$363 billion.
- The difference in the range of ending cumulative Treasury draws between the October 2010 projections and the October 2011 projections can be attributed primarily to the fact that actual results for the first year of the projection period in the October 2010 projections were substantially better than projected. (See page 8 for further details.)
- The projections reported here are not expected outcomes. They are modeled projections in response to "what if" exercises based on assumptions about Enterprise operations, loan performance, macroeconomic and financial market conditions, and house prices. The projections do not define the full range of possible outcomes. Actual outcomes may be very different. This effort should be interpreted as a sensitivity analysis of future draws to possible house price paths.
- FHFA provided the Enterprises with key assumptions for each scenario. The Enterprises used their respective internal models to project their financial results based on the assumptions provided by FHFA. While this effort achieves a degree of comparability between the Enterprises, it does not allow for actions that the Enterprises might undertake in response to the economic conditions specified in the scenarios. Those Enterprise-specific business changes could lead to different results across the scenarios than are presented in these projections.

# Results

The assumptions used in each of the three scenarios are described on page 11. The projected combined cumulative Treasury draws for both Enterprises through December 31, 2014 reach \$220 billion under Scenario 1, \$226 billion under Scenario 2, and \$311 billion under Scenario 3. Fannie Mae's cumulative draws are higher than Freddie Mac's in part because Fannie Mae's mortgage book of business is approximately fifty percent larger than Freddie Mac's. In addition, Fannie Mae's serious delinquency rates are higher than Freddie Mac's.

# Figure 1: Cumulative Treasury Draws\* (\$ in billions)



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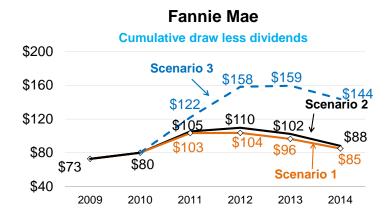
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2014

#### Results (continued)

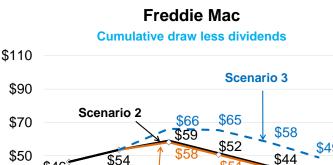
The Enterprises are required to pay a 10 percent dividend on the amount of funds drawn by the Enterprises under the Senior Preferred Stock Purchase Agreements (PSPAs) with Treasury. The PSPAs do not allow for dividends to reduce prior draws. However, for illustrative purposes, if dividend payments were subtracted from the projected cumulative draws, the net amounts would reach \$121 billion under Scenario 1, \$124 billion under Scenario 2, and \$193 billion under Scenario 3. Most dividends to date have been paid from funds acquired with additional draws. The projections show a portion of future dividends being paid out of comprehensive income.

#### Figure 2: Cumulative Treasury Draws less dividends paid (\$ in billions)



#### **Cumulative Treasury Draw through 2014**

Related to operating losses and other* Related to senior preferred dividends Cumulative Treasury Draw	Scenario 1 \$105 <u>40</u> \$145	<b>Scenario 2</b> \$110 <u>40</u> \$150	<b>Scenario 3</b> \$161 <u>58</u> \$219
Senior preferred dividends (not financed through Treasury Draws) Total senior preferred dividends	t \$20 \$60	\$22 \$62	\$18 \$76



Scenário 1

2011

2012

2013

#### Cumulative Treasury Draw through 2014

2010

\$46

2009

\$30

	Scenario 1	Scenario 2	Scenario 3
Related to operating losses and other*	\$58	\$59	\$66
Related to senior preferred dividends	17	<u>17</u>	26
Cumulative Treasury Draw	\$75	\$76	\$92
Senior preferred dividends (not financed	ł		
through Treasury Draws)	\$22	\$22	\$17
Total senior preferred dividends	\$39	\$39	\$43

\*Operating losses and other refers to net losses reported on the income statement, changes in unrealized losses reported on the balance sheet, and the impact of other accounting changes for consolidation and security impairments. In accordance with Senior Preferred Stock Purchase Agreements (PSPAs), the Enterprises are not permitted to paydown the Treasury draw amounts, even if the Enterprises generate positive net income or total comprehensive income. Numbers may not foot due to rounding.

#### Results (continued)

Credit-related expenses, particularly the provision for credit losses, continue to drive projected Treasury draws across all three scenarios. Fannie Mae's credit-related expenses increase by \$57 billion from Scenario 1 to Scenario 3, and for Freddie Mac that increase amounts to \$23 billion. Thus \$80 billion of the projected \$92 billion difference in Treasury draws across those scenarios is directly related to credit-related expense projections.

#### Figure 3: Cumulative Financial Results (2009-2014) (\$ in billions)

	F	annie Mae	9	F	Freddie Ma	ac
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Revenues	\$112	\$112	\$110	\$104	\$104	\$103
Provision for credit losses	(135)	(139)	(189)	(64)	(66)	(86)
Other credit-related expenses <sup>1</sup>	<u>(35)</u>	<u>(35)</u>	<u>(38)</u>	<u>(26)</u>	<u>(26)</u>	<u>(27)</u>
Total Credit-related Expenses/Losses	(170)	<u> </u> →   (174)	<u>−</u> → (227)	(90)	<b>2</b> (92)	→ (113)
Other expenses <sup>2</sup>	<u>(33)</u>	<u>(33)</u>	<u>(33)</u>	<u>(26)</u>	<u>(26)</u>	<u>(26)</u>
Net Income (Loss)	(\$91)	(\$94)	(\$150)	(\$12)	(\$14)	(\$36)
Capital Change						
Net Income	(91)	(94)	(150)	(12)	(14)	(36)
Dividends	(60)	(62)	(76)	(39)	(39)	(43)
Other <sup>3</sup>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>22</u>	<u>31</u>
Total Capital Change	(130)	(135)	(204)	(30)	(31)	(48)
Beginning Net Worth (12/31/2008)	<u>(15)</u>	<u>(15)</u>	<u>(15)</u>	<u>(31)</u>	<u>(31)</u>	<u>(31)</u>
Capital Deficit (2009-2014)	(145)	(150)	(219)	(61)	(62)	(79)
Senior Preferred Treasury Draw (2009-2014)	145	<b>→</b> 150	<u>69</u> 219	61	<b>1</b> 62	17 79
Cumulative Senior Preferred Treasury Draw <sup>4</sup>	\$145	<b>\$</b> 150	\$219	\$75	\$76	\$92
Cumulative Draw less Dividends <sup>4</sup>	\$85	\$88	\$144	\$36	\$36	\$49

<sup>1</sup>Consists of foreclosed property expenses, SOP 03-3 losses, net, and other than temporary impairments.

<sup>2</sup>Consists of mark-to-market gains/losses, administrative expenses, tax expense/benefit and other expenses.

<sup>3</sup>Consists of change in accumulated other comprehensive income, and other accounting changes for consolidation and security impairments, less positive net worth as of 12/31/14, if any.

<sup>4</sup>Freddie Mac's cumulative draw includes \$13.8 billion of Treasury draw received in 2008.

Projected financial results assume that the Senior Preferred Stock Purchase Agreement (PSPA) commitment fee has been waived at both Enterprises.

Numbers may not foot due to rounding.

# Results (continued)

The Enterprises have received \$169 billion from Treasury to maintain positive net worth. For the selected scenarios an additional \$51 to \$142 billion would be required to support the Enterprises over the projection period. In Scenarios 1 and 2, dividend payments to Treasury exceed additional Treasury draws. Per the terms of the Senior Preferred Stock Purchase Agreements with Treasury, senior preferred stock accrues dividends at 10 percent per year.

### Figure 4: Additional Treasury Draws and Dividends (Jul 2011 through Dec 2014) (\$ in billions)

		ent Draw 06/30/11	Scenario 1		Scen	ario 2	Scen	ario 3
	Total Draw	Total Dividends	Additional Draw	Additional Dividends	Additional Draw	Additional Dividends	Additional Draw	Additional Dividends
Fannie Mae	\$104	\$15	\$41	\$45	\$46	\$47	\$115	\$61
Freddie Mac	<u>65</u>	<u>13</u>	<u>    10    </u>	_26	<u>_11</u>	26	27	30
Total	\$169	\$28	\$51	\$71	\$57	\$73	\$142	\$91

# Comparison of October 2011 Projections to October 2010 Projections

The projection period for the current projections and the previous projections runs three and a half years. The current projection period runs through the end of 2014. The prior projection period runs through the end of 2013.

- In the October 2011 projections, the ending combined cumulative Treasury draw is \$1 billion lower for scenario 1 and \$51 billion lower for scenario 3 than the ending cumulative Treasury draw in the October 2010 projections. The difference can be attributed to three primary factors:
  - Actual results for the first year of the projection period were substantially better than projected. The actual combined Treasury draw was \$19 billion lower for scenario 1 and \$73 billion lower for scenario 3 than the projections (See Figure 5). This factor is partially offset by the next two factors.
  - Projected Treasury draws for the remainder of the initial projection period were \$14 billion higher for scenario 1 and \$16 billion higher for scenario 3 in the October 2011 projections; and
  - The projection period has been extended through 2014, adding \$3 billion in Treasury draws for scenario 1 and \$6 billion in Treasury draws for scenario 3.
- Drivers of the differences in the projected pattern of financial results include the following factors:
  - Recent observed trends show that borrowers with high MTM LTV loans and modified loans are performing better than previously projected.
  - The number of serious delinquent loans has declined as transition rates to later stages of delinquency are lower than previously projected.
  - Foreclosure delays pushed some defaults into later years of the projection period and beyond.
  - o Recent observed trends indicate higher REO sales prices than previously projected.
  - Net interest income is higher in the current projection results due to lower interest rates, resulting in decreased funding costs and slightly higher average portfolio balances, driven by slower portfolio liquidations than previously projected.
  - The house price path in scenario 3 used in the current projections is better through the second quarter of 2012 and worse thereafter, compared to the corresponding house price path used in the October 2010 projections.

# Comparison of October 2011 Projections to October 2010 Projections (continued)

### Figure 5: Comparison of Oct 2011 Projections to Oct 2010 Projections (\$ in billions)

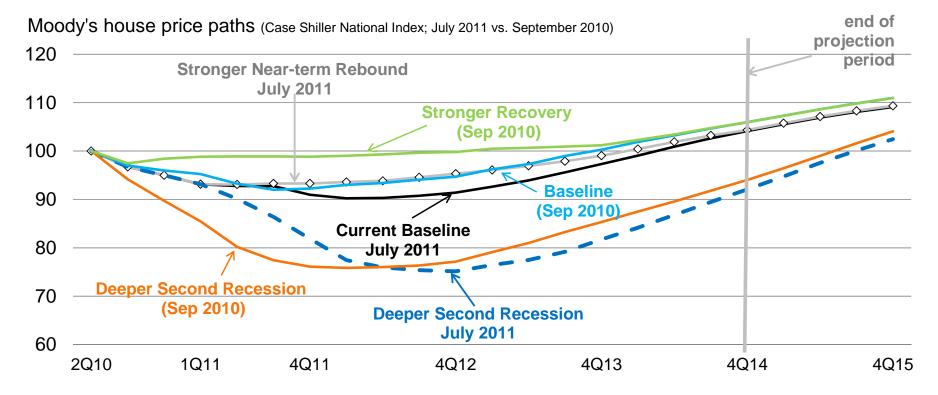
	Scenario 1	Scenario 2	Scenario 3
October 2010 Projections			
Beginning Cumulative Draw 6/30/10	148	148	148
Projected Treasury draw - Year 1 (Second half of 2010 and first half of 2011)	39	50	93
Projected Treasury draw - Years $2-3^{1}/_{2}$ (Second half of 2011; 2012 and 2013)	<u>34</u>	<u>40</u>	<u>121</u>
Ending Cumulative Draw 2013	221	238	363
October 2011 Projections			
Beginning Cumulative Draw 6/30/10	148	148	148
Actual Treasury draw - Year 1 (Second half of 2010 and first half of 2011)	<u>21</u>	<u>21</u>	<u>21</u>
Beginning Cumulative Draw 6/30/11	169	169	169
Projected Treasury draw - Years $2-3^{1}/_{2}$ (Second half of 2011; 2012 and 2013)	48	56	137
Projected Treasury draw - Year $3^{1}/_{2}$ - $4^{1}/_{2}$ (2014)	<u>3</u>	1	<u>6</u>
Ending Cumulative Draw 2014	220	226	311
Difference in ending Cumulative Draw			
Actual versus Projection - Year 1 (Second half of 2010 and first half of 2011)	(19)	(29)	(73)
Difference in Projections - Years $2-3^{1}/_{2}$ (Second half of 2011; 2012 and 2013)	14	16	16
Additional year of Projection (2014)	<u>3</u>	<u>1</u>	<u>6</u>
Total difference in ending cumulative draw	(1)	(12)	(51)

Numbers may not foot due to rounding

# Comparison of October 2011 Projections to October 2010 Projections (continued)

Actual and forecasted house price paths for Scenarios 1 and 2 used in the October 2011 projections are worse compared to the corresponding house price paths used in the October 2010 projections. The house price path in Scenario 3 used in the October 2011 projections is better through the second quarter of 2012 and worse thereafter, compared to the corresponding house price path used in the October 2010 projections.

### Figure 6: Comparison of Current and Previous House Price Paths



# **Projection Scenarios**

Key factors that influence the Enterprises' financial results are listed in Figure 7. FHFA requested that the Enterprises project financial results for three scenarios. Because changes in house prices have had the largest impact on the Enterprises' financial results, we chose to change only this factor across the three scenarios.

## Figure 7: Scenario Assumptions

Factor	Scenario 1	Scenario 2	Scenario 3
House prices*	Moody's "Stronger Near-term Rebound" house price paths	Moody's "Current Baseline" house price paths	Moody's "Deeper Second Recession" house price paths
Interest rates	Future interest rates are implied by the forward curves as of June 30, 2011.	Same as Scenario 1	Same as Scenario 1
Securities prices	ABS and CMBS prices fall by 5 points at the beginning of the period	Same as Scenario 1	Same as Scenario 1
Agency MBS spreads	Agency MBS spreads to swaps remain unchanged.	Same as Scenario 1	Same as Scenario 1
Credit Guarantee growth	Zero growth in credit guarantees through year end 2014.	Same as Scenario 1	Same as Scenario 1
Retained Portfolio growth	Additions to retained portfolios are limited to nonperforming loans bought out of pools backing Fannie Mae's MBS and Freddie Mac's PCs.	Same as Scenario 1	Same as Scenario 1

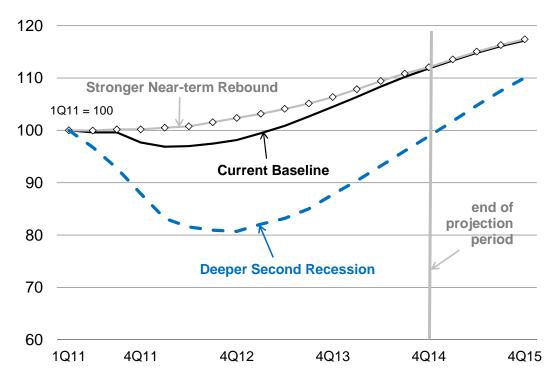
\*Moody's house price paths as of July 2011

#### Projections of the Enterprises' Financial Performance October 2011

#### House Price Assumptions

House price changes have been the major driver of credit losses at the Enterprises. A wide range of possible future paths exist for house prices at the national and local levels. Given the high level of uncertainty about overall economic conditions in general and the U.S. housing markets in particular, FHFA directed the Enterprises to project financial results for Moody's current baseline and two additional house price paths. Moody's considers "Deeper Second Recession" to be a downside alternative to the Current Baseline and "Stronger Near-term Rebound" to be an upside alternative to the Current Baseline.

#### Figure 8: Moody's House Price Paths (Case-Shiller National Index; July 2011)



#### Descriptions

**Stronger Near-term Rebound (FHFA Scenario 1)** An expansion of credit supports above-baseline growth. As a result, house prices start to increase after 2Q11, although additional increases are minimal in 2011 and 2012. The peakto-trough decline is 33% based on the Case-Shiller National Index. From the trough in 2Q11 to the end of the forecast period house prices increase by 12%. Total new housing permits reach an annual pace above 1 million units by the first quarter of 2012.

#### Current Baseline (FHFA Scenario 2)

Remaining home price declines contribute to a 35% peak-totrough decline based on the Case-Shiller National Index. From the trough in 1Q12 to the end of the forecast period, house prices increase by 15%. Total new housing permits reach an annual pace above 1 million units by the second quarter of 2012.

#### Deeper Second Recession (FHFA Scenario 3)

As a result of continuing high unemployment, the moderate rebound in housing construction that occurred over the first half of 2009 and then stalled reverses course. Housing starts resume their decline, bottoming out in mid-2012, more than 80% below their peak in 2005. The peak-to-trough decline is 46% based on the Case-Shiller National Index. From the trough in 4Q12 to the end of the forecast period house prices increase by 23%.

### House Price Assumptions (continued)

#### **Selection of House Price Assumptions**

Figure 8 shows national-level paths for the Case-Shiller house price index associated with the selected Moody's house price paths. Scenario 2 uses house price paths associated with Moody's "Current Baseline (July 2011)." That house price path is derived from Moody's assumptions regarding monetary and fiscal policy, U.S. dollar, and energy prices. Scenario 1 and Scenario 3 use house price paths associated with better and worse economic performance relative to Moody's "Current Baseline (July 2011)."

Moody's describes the house price paths associated with "Stronger Near-term Rebound", as being consistent with "a 10% probability that the economy will perform better than in this scenario, broadly speaking, and a 90% probability that it will perform worse." Conversely, Moody's describes the house price paths associated with "Deeper Second Recession" as being consistent with "a 90% probability that the economy will perform better, broadly speaking, and a 10% probability that it will perform worse." FHFA chose the "Deeper Second Recession" house price path to ensure a stringent test that would provide information tied to a continued severe weakening in housing.

#### Use of Moody's Localized Forecasts

FHFA chose to base the scenarios on Moody's house price paths because Moody's is a widely used benchmark. Moody's provides a full set of quarterly, forward-looking house price paths for each of the 384 Metropolitan Statistical Areas (MSAs) and Divisions for which FHFA publishes a historical house price index. FHFA does not forecast house prices. Such localized forecasts enable the Enterprises to project credit losses on a more comparable basis as opposed to a simple national projection of peak-to-trough change in house prices, which would require each Enterprise to translate that house price path into its own local house price index.

Defining a house price path at just the national level for the Enterprises would limit the usefulness of the results because house prices often behave quite differently in different local markets. The mix of local market price projections associated with a given national average price projection can have a substantial impact on the aggregate loss projection for an Enterprise. Similarly, defining the path with only a peak-to-trough measure is problematic because the timing of the trough and the rate of recovery beyond the trough can also greatly affect expected losses.

# Appendix

# **Financial Projections Procedures**

FHFA directed the Enterprises to project revenue, mark-to-market gains and losses, credit-related expenses, administrative expenses, earnings, capital, and, ultimately, cumulative senior preferred Treasury draws under the three scenarios using their own respective models. Both Enterprises routinely prepare financial forecasts using their respective management assumptions. Modeling assumptions were changed at both Enterprises to conform to the assumptions listed in Figure 7.

FHFA directed that the projection period cover the remainder of 2011 and the next three years, similar to projection periods used by the Enterprises for routine management forecasts. Furthermore for the selected house price paths, by the end of the projection period the bulk of credit losses are recognized.

The Enterprises' models use projections of interest rates to calculate future net interest margins, gains and losses on the retained portfolio and derivatives used for hedging, and prepayment speeds on held or guaranteed mortgages, which influence both credit losses and guarantee fee revenue.

To project revenue, the Enterprises projected the size of the retained portfolios and credit guarantee books using assumptions provided by FHFA on business volume growth. Additions to retained portfolios were limited to nonperforming loans bought out of pools backing Fannie Mae's MBS and Freddie Mac's PCs. The balance of outstanding credit guarantees at each Enterprise remained unchanged over the forecast period.

Net interest income (which includes most of the Enterprises' guarantee fee income) is driven primarily by the size of the retained portfolio and net interest margin (the difference between yield on assets and funding costs). For this exercise, funding costs were influenced by the forward curve for swaps, and asset yields were influenced by the forward curve for swaps, and asset yields were influenced by the forward curve for swaps.

Guarantee fee income is driven by the size of the credit guarantee book and guarantee fee pricing. To project the size of the credit guarantee books the Enterprises used assumptions provided by FHFA on new business volume and interest rates, which influence prepayment speeds on guaranteed mortgages. FHFA did not provide explicit assumptions about guarantee fee pricing. However, FHFA reviewed the pricing assumptions of each Enterprise for

the projection period for consistency. For both Enterprises, guarantee fee pricing remained relatively unchanged over the projection period.

Projections of mark-to-market losses reflect changes in the value of securities held in the retained portfolio and changes in the value of derivatives used for hedging. The Enterprises' models use assumptions about future interest rates, securities prices, and spreads to project gains and losses on securities held in the retained portfolio and on derivatives used to hedge interest rate risk.

To project credit-related expenses, each Enterprise uses a multistep process. First, a statistical loan transition model projects the unpaid principal balance (UPB) of loans expected to default over the projection period. House price projections are used to determine the mark-to-market loan-to-value ratios of the guaranteed mortgages, which in turn influence the probabilities of default, and projections of loss given default. Next, a second model projects the severity of losses associated with defaulted loans resolved through various processes. The projections of distressed UPB are combined with the projections of loss severities to arrive at credit losses for each quarter. Next, each Enterprise projected loan loss reserves based on projections of credit losses, to determine its future provisions for credit losses. Finally, projections of credit-related expenses incorporate projections of future provisions for credit losses, foreclosed property expenses, and expenses incurred after foreclosure on the property.

The Enterprises used their own respective management assumptions to project administrative expenses.

FHFA reviews models and methodologies for internal consistency and comprehensiveness as part of the continuing supervision of the Enterprises. However, as with other regulator-driven financial projections that rely on internal models of banks, the internal models of one Enterprise will produce different answers than those of the other given the same set of assumptions and other inputs.

This modeling exercise is not the same as, nor did it follow all the same control procedures as the process followed for formal financial reporting. For instance, the projections did not incorporate management judgment as to how the specific assumptions employed might produce other changes in model assumptions. Nonetheless, FHFA believes that the results of this exercise provide a reasonable indication of plausible future Treasury draws under the specified scenarios, using comparable key assumptions for each Enterprise.