Second Quarter Changes in Interest Rates

Changes in U.S. Treasury rates between the first and second quarter of 2009 were mixed. The Federal Reserve’s decision to maintain the target Federal Funds rate within a range of 0-0.25% kept short-term yields relatively stable while record issuance of long-term Treasuries, in conjunction with rising inflation expectations and an increased investor appetite for risky assets helped to push the long-end of the yield curve higher (Exhibit 1). Three-month and one-year Treasury yields decreased two basis points and one basis point to 0.19% and 0.56%, respectively, while ten-year and thirty-year Treasury yields increased by 82 basis points and 76 basis points to 3.92% and 4.32%. Interest rate movements across all maturities produced a steeper yield curve than was the case at the end of the first quarter, 2009. As a result, the spread between the two-year and ten-year Treasury yield rose to 242 basis points in the second quarter, up from 190 basis points in the first quarter.

Throughout the second quarter, capital markets continued to stabilize in anticipation of economic recovery and many investors gradually exited less risky markets for riskier assets. This investor migration helped to push equity markets higher by roughly 15% and contributed to yield curve steepness by serving to raise intermediate and long-term rates. Concerns over how and when the Federal Reserve would stop pursuing accommodative monetary policies increased inflation expectations and helped to push the long-end of the yield curve higher. Increased inflation expectations could be seen in the ten-year TIPS breakeven spread, or the difference between the yield on the 10-year Treasury Inflation-Protected Security and the yield on the 10-year Treasury security. This spread
widened 46 basis points to 177 basis points in the second quarter. Although still below its five-year average of 222 basis points, the widening spread is indicative of higher rates needed to compensate for expected future inflation. Changes in the LIBOR/Swap curve were also mixed between the first quarter and second quarter (Exhibit 2). Increased willingness to accept credit risk pulled LIBOR rates lower as the three-month LIBOR rate decreased 59 basis points to 0.60% and the six-month LIBOR rate decreased 63 basis points to 1.11%. In contrast, the two-year and ten-year swap rates increased 16 basis points and 87 basis points to 1.54% and 3.75%, respectively, reflecting expectations for a steepening Treasury curve.

The Mortgage Market and NPV Model Results

The value of fixed-rate mortgages fell in the second quarter despite agency MBS purchases by the Federal Reserve that totaled $318.7 (net) billion from March to June. These purchases are part of the Federal Reserve’s $1.25 trillion agency MBS purchase program and are greater than the $302.8 (net) billion of purchases in the first quarter. As shown in Exhibit 3, the price of a FNMA 5% coupon TBA MBS fell from $103.22 in March to $101.75 in June. Accordingly, mortgage rates increased as part of this trend with the Fannie Mae 60-day commitment rate on a 30-year, fixed-rate mortgage rising from 4.40% in the first quarter to 5.03% in the second quarter.

As expected in a higher interest rate environment, the OTS NPV model produced slower prepayment speeds and longer weighted average lives (WAL) for mortgage loans. For example, the 10-year average CPR for a FNMA 5% coupon TBA MBS decreased from 31 CPR to 20 CPR while its WAL increased from 2.25 years to 4.58 years (Exhibit 3). This served to lengthen asset durations and

<table>
<thead>
<tr>
<th>30-YEAR CONVENTIONAL</th>
<th>31-Mar-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupon (%)</td>
<td>WAC (%)</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>4.50</td>
<td>5.14</td>
</tr>
<tr>
<td>5.00</td>
<td>5.59</td>
</tr>
<tr>
<td>5.50</td>
<td>5.82</td>
</tr>
<tr>
<td>6.00</td>
<td>6.54</td>
</tr>
<tr>
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<td>7.00</td>
<td>7.60</td>
</tr>
<tr>
<td>7.50</td>
<td>8.11</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>30-YEAR CONVENTIONAL</th>
<th>30-Jun-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupon (%)</td>
<td>WAC (%)</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>4.50</td>
<td>5.04</td>
</tr>
<tr>
<td>5.00</td>
<td>5.59</td>
</tr>
<tr>
<td>5.50</td>
<td>6.02</td>
</tr>
<tr>
<td>6.00</td>
<td>6.44</td>
</tr>
<tr>
<td>6.50</td>
<td>7.03</td>
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<tr>
<td>7.00</td>
<td>7.50</td>
</tr>
<tr>
<td>7.50</td>
<td>8.11</td>
</tr>
</tbody>
</table>
produced a positive median effective duration gap, indicating that the industry is more adversely exposed to rising interest rates. The median effective duration for total assets increased from 1.24 to 1.51, while the median effective duration for liabilities remained unchanged at 1.43 (Exhibit 4). With a widening effective duration gap, median sensitivity for the industry increased (Exhibit 5) from 68 basis points in March to 94 basis points in June.

Industry NPV capital ratios improved in the second quarter. The industry median pre-shock ratio increased from 12.11% in March to 12.56% in June while the industry median post-shock ratio increased from 11.22% in March to 11.40% in June (Exhibit 6). It should be noted, however, that this improvement is more attributable to balance sheet deleveraging and liability re-pricing than with an improvement in asset valuations. For those institutions that submitted Schedule CMR in both the first and second quarter, the value of aggregate total assets decreased from $103.44 to $103.17. Total liabilities, on the other hand, improved in value from $101.84 in March to $101.46 in June, with specific improvements coming in fixed maturity borrowings and structured FHLB advances. This served to widen the gap between the value of total assets and total liabilities, thus increasing total NPV.

It is also clear that many institutions have been deleveraging their balance sheets and improving their capital ratios during the second quarter. Total assets reported on Schedule CMR decreased by 0.33% while total liabilities reported on Schedule CMR decreased by 1.09%. This balance sheet restructuring also contributed to higher NPV capital ratios throughout the industry.

In addition to deleveraging efforts seen in the second quarter, many institutions have also adjusted some of their off-balance sheet positions as part of the balance sheet restructuring process. When holding those institutions that reported CMR in June equal for both the first and second quarters as noted above, future commitments to originate 25-year and 30-year fixed rate mortgages dropped from $20.19 billion in the first quarter to $10.12 billion in the second quarter. This...
may suggest a reluctance to increase certain assets going forward and indicates a possible end to the refinance wave that peaked between the fourth quarter of 2008 and first quarter of 2009.

Changes in Industry Interest Rate Risk Profile

From a supervisory perspective, the number of institutions with a “High” or “Significant” risk rating as defined by TB-13a dropped from 12 in March to 11 in June (Exhibit 7). Despite this improvement, however, the overall interest rate risk profile of the industry worsened from the previous quarter. This deterioration was primarily due to a rise in interest rate sensitivity which offset the benefits of improving NPV ratios. As a result, the number of institutions with sensitivity measures above 200 basis points increased from 60 in the first quarter to 146 in the second quarter. Additionally, the number of institutions with a “Moderate” rating increased from 25 in the first quarter to 58 in the second quarter. This movement from the top left hand corner of the matrix (where interest rate risk is minimal) to the bottom right hand corner of the matrix (where interest rate risk is more severe) underscores the potential for institutions to assume increased interest rate risk in a rising interest rate environment going forward.

### Exhibit - 7

#### Post-Shock NPV Ratio and Sensitivity Measure Matrix

<table>
<thead>
<tr>
<th></th>
<th>Post-Shock NPV Ratio and Sensitivity Measure Matrix</th>
<th>June 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 100bp</td>
<td>101-200bp</td>
</tr>
<tr>
<td>Over 10%</td>
<td>281</td>
<td>128</td>
</tr>
<tr>
<td>6% to 10%</td>
<td>99</td>
<td>68</td>
</tr>
<tr>
<td>4% to 6%</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Below 4%</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>394</td>
<td>207</td>
</tr>
</tbody>
</table>

#### Post-Shock NPV Ratio and Sensitivity Measure Matrix

<table>
<thead>
<tr>
<th></th>
<th>Post-Shock NPV Ratio and Sensitivity Measure Matrix</th>
<th>March 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 100bp</td>
<td>101-200bp</td>
</tr>
<tr>
<td>Over 10%</td>
<td>351</td>
<td>109</td>
</tr>
<tr>
<td>6% to 10%</td>
<td>155</td>
<td>53</td>
</tr>
<tr>
<td>4% to 6%</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Below 4%</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>169</td>
</tr>
</tbody>
</table>
Appendix A — All Thrifts

**Sensitivity Measure Distribution**

### All Thrifts

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>All Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis Points</td>
<td>0 33 66 100 133 166 200 233 266 300 333 366 400 433 466 500 533 More</td>
</tr>
<tr>
<td>Percent of Thrifts</td>
<td>18 12 6 0</td>
</tr>
</tbody>
</table>

### Descriptive Statistics

- Median = 94
- Mean = 125
- Standard Deviation = 98
- Skewness = 1.35
- Kurtosis = 2.38
- Minimum = 0
- Maximum = 666.839
- Count = 747

---

**Pre-Shock NPV Ratio Distribution**

### All Thrifts

<table>
<thead>
<tr>
<th>NPV Ratio (Percent)</th>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95</td>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95</td>
</tr>
</tbody>
</table>

### Descriptive Statistics

- Median = 12.56
- Mean = 14.95
- Standard Deviation = 10.1
- Skewness = 4.69
- Kurtosis = 29.13
- Maximum = 95.853
- Minimum = -1.253
- Count = 747

---

**Post-Shock NPV Distribution**

### All Thrifts

<table>
<thead>
<tr>
<th>NPV Ratio (Percent)</th>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 3 6 9 12 15 18 21 24 27</td>
<td>0 3 6 9 12 15 18 21 24 27</td>
</tr>
</tbody>
</table>

### Descriptive Statistics

- Median = 11.4
- Mean = 13.69
- Standard Deviation = 10.12
- Skewness = 4.82
- Kurtosis = 30.34
- Maximum = 95.607
- Minimum = -3.132
- Count = 747

---

**Asset Duration Distribution**

### All Thrifts

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.25 0.25 0.75 1.25 1.75 2.25 2.75 3.25 3.75 4.25 More</td>
<td>-0.25 0.25 0.75 1.25 1.75 2.25 2.75 3.25 3.75 4.25 More</td>
</tr>
</tbody>
</table>

### Descriptive Statistics

- Median = 1.51
- Mean = 1.52
- Standard Deviation = 0.82
- Skewness = 1.9
- Kurtosis = 3.908
- Maximum = 3.908
- Minimum = 1.253
- Count = 747

---

**Liabilities Duration Distribution**

### All Thrifts

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 0.5 0.75 1 1.25 1.5 1.75 2 2.25 2.5 More</td>
<td>0.25 0.5 0.75 1 1.25 1.5 1.75 2 2.25 2.5 More</td>
</tr>
</tbody>
</table>

### Descriptive Statistics

- Median = 1.43
- Mean = 1.41
- Standard Deviation = 0.5
- Skewness = -1.62
- Kurtosis = 29.65
- Maximum = 4.863
- Minimum = -4.538
- Count = 747
Appendix B — Northeast Region

Sensitivity Measure Distribution

Northeast

Descriptive Statistics
Median = 162
Mean = 166
Standard Deviation = 92
Skewness = 0.37
Kurtosis = -0.67
Maximum = 388.877
Minimum = 4.478
Count = 162

Pre-Shock NPV Ratio Distribution

Northeast

Descriptive Statistics
Median = 12.45
Mean = 14.09
Standard Deviation = 6.08
Skewness = 2.55
Kurtosis = 9.64
Maximum = 48.015
Minimum = 5.62
Count = 162

Post-Shock NPV Distribution

Northeast

Descriptive Statistics
Median = 11.02
Mean = 12.43
Standard Deviation = 6.07
Skewness = 2.56
Kurtosis = 10
Maximum = 47.822
Minimum = 3.775
Count = 162

Asset Duration Distribution

Northeast

Descriptive Statistics
Median = 1.82
Mean = 1.79
Standard Deviation = 0.56
Skewness = -0.35
Kurtosis = 0
Maximum = 3.035
Minimum = 0.305
Count = 162

Liabilities Duration Distribution

Northeast

Descriptive Statistics
Median = 1.51
Mean = 1.56
Standard Deviation = 0.46
Skewness = 2.56
Kurtosis = 15.94
Maximum = 4.863
Minimum = 0.422
Count = 162
Appendix C — Southeast Region

Sensitivity Measure Distribution
Southeast

Pre-Shock NPV Ratio Distribution
Southeast

Asset Duration Distribution
Southeast

Liabilities Duration Distribution
Southeast

Descriptive Statistics
Median = 86
Mean = 114
Standard Deviation = 98
Skewness = 1.55
Kurtosis = 2.84
Maximum = 545.447
Minimum = 0
Count = 182

Descriptive Statistics
Median = 12.39
Mean = 14.87
Standard Deviation = 10.44
Skewness = 4.02
Kurtosis = 22.79
Maximum = 88.108
Minimum = 0.263
Count = 182

Descriptive Statistics
Median = 1.36
Mean = 1.4
Standard Deviation = 0.6
Skewness = 0.98
Kurtosis = 1.86
Maximum = 3.908
Minimum = 0.237
Count = 182

Descriptive Statistics
Median = 1.23
Mean = 1.22
Standard Deviation = 0.6
Skewness = -4.71
Kurtosis = 45.85
Maximum = 2.771
Minimum = -4.538
Count = 182

Descriptive Statistics
Median = 11.42
Mean = 13.73
Standard Deviation = 10.45
Skewness = 4.14
Kurtosis = 23.81
Maximum = 87.917
Minimum = -3.132
Count = 182
Appendix D — Central Region

Sensitivity Measure Distribution
Central

Descriptive Statistics
Median = 85
Mean = 119
Standard Deviation = 100
Skewness = 2.13
Kurtosis = 6.17
Maximum = 666.84
Minimum = 3.41
Count = 244

Pre-Shock NPV Ratio Distribution
Central

Descriptive Statistics
Median = 12.69
Mean = 14.7
Standard Deviation = 9.38
Skewness = 5.48
Kurtosis = 39.86
Maximum = 93.114
Minimum = 0.983
Count = 244

Post-Shock NPV Distribution
Central

Descriptive Statistics
Median = 11.5
Mean = 13.51
Standard Deviation = 9.38
Skewness = 5.65
Kurtosis = 41.54
Maximum = 92.759
Minimum = 0.747
Count = 244

Asset Duration Distribution
Central

Descriptive Statistics
Median = 1.54
Mean = 1.55
Standard Deviation = 0.58
Skewness = 0.73
Kurtosis = 1.93
Maximum = 3.755
Minimum = -0.127
Count = 244

Liabilities Duration Distribution
Central

Descriptive Statistics
Median = 1.45
Mean = 1.46
Standard Deviation = 0.38
Skewness = -0.34
Kurtosis = 1.03
Maximum = 2.445
Minimum = 0.089
Count = 244
Appendix F — Western Region

Sensitivity Measure Distribution

Western

Descriptive Statistics
Median = 67
Mean = 107
Standard Deviation = 88
Skewness = 1.04
Kurtosis = 0.31
Maximum = 371.155
Minimum = 0
Count = 159

Pre-Shock NPV Ratio Distribution

Western

Descriptive Statistics
Median = 12.59
Mean = 16.29
Standard Deviation = 13.46
Skewness = 3.98
Kurtosis = 18.07
Maximum = 95.853
Minimum = -1.253
Count = 159

Post-Shock NPV Distribution

Western

Descriptive Statistics
Median = 11.35
Mean = 15.22
Standard Deviation = 13.49
Skewness = 4.08
Kurtosis = 18.75
Maximum = 95.607
Minimum = -1.253
Count = 159

Asset Duration Distribution

Western

Descriptive Statistics
Median = 1.34
Mean = 1.34
Standard Deviation = 0.64
Skewness = -0.75
Kurtosis = 4.41
Maximum = 2.857
Minimum = -2.047
Count = 159

Liabilities Duration Distribution

Western

Descriptive Statistics
Median = 1.42
Mean = 1.41
Standard Deviation = 0.51
Skewness = 0.68
Kurtosis = 4.17
Maximum = 3.945
Minimum = 0.022
Count = 159