Second Quarter Changes in Interest Rates

U.S. Treasury rates decreased across most maturities between the first and second quarter of 2010. Yields on the six-month bill and two-year note decreased two basis points (bps) and 41 bps to 0.22% and 0.61%, respectively. Similarly, yields on the ten-year note and thirty-year bond decreased 87 bps and 81 bps to 2.97% and 3.91%, respectively (Exhibit 1). As a result of these interest rate changes, the Treasury yield curve flattened in the second quarter. The spread between the yield on the ten-year note and the yield on the two-year note narrowed 46 bps in the second quarter to 236 bps. Although this spread has fallen since reaching record levels in the beginning of 2010, it remains well above its historical average and continues to indicate a very steep yield curve. As noted in previous issues of this Review, a steep yield curve is advantageous to most financial institutions. However, the benefit of higher yield spreads should be balanced with the possibility that a change in monetary policy and/or a decline in market liquidity could have an adverse effect on those institutions that do not actively manage their interest rate risk or liquidity risk exposures.

Similar to previous quarters, the Federal Reserve maintained the target federal funds rate within a range of 0-0.25% throughout the second quarter. Since the end of the second quarter, the Federal Open Market Committee (FOMC) has decided to maintain this target range at both of its monetary policy meetings (August and September) and has preserved language in its statement to indicate low interest rates will be likely for an “extended period”. After its August meeting, however, the FOMC announced that it will reinvest principal payments from its agency debt and agency mortgage-backed securities (MBS) holdings into longer-term Treasury securities and will continue to roll over maturing Treasury securities. By reinvesting MBS and agency debt principal payments
into Treasury securities, the Federal Reserve is preventing its balance sheet (roughly $2.2 trillion at the end of August) from contracting to avoid a de-facto policy of monetary tightening and to reduce the risk of deflation. In addition to its reinvestment program the FOMC also recognized the possibility for additional stimulus measures in the statement for its September meeting and will address the need for a second quantitative easing program in the coming months.

Changes in LIBOR/Swap rates were mixed in the second quarter. Three-month and six-month LIBOR increased 24 bps and 31 bps to 0.53% and 0.75%, respectively. Conversely, two-year and ten-year swap rates decreased 24 bps and 81 bps to 0.97% and 3.02%, respectively (Exhibit 2).

Mortgage rates decreased in the second quarter. The FNMA 60-day commitment rate for a 30-year mortgage declined 71 bps to 4.19%. Since the end of the second quarter, the commitment rate has fallen further to 3.82% as of third-quarter end. Accordingly, mortgage prices increased in the second quarter as shown in Exhibit 3. For example, the price of a FNMA 5% coupon TBA MBS increased from $103.16 in March to $105.81 in June.

**Thrift Industry Developments**

The thrift industry continued to decrease its holdings of fixed rate mortgage assets in the second quarter. In the second quarter of 2010 the median percentage ratio of all fixed rate-rate mortgages loans and securities to total assets was 40.2% compared to 40.6% in the first quarter 2010 and 40.9% in the same quarter last year. Similarly, the median percentage ratio of all adjustable-rate mortgage loans to total assets decreased to 21.5% in the second quarter from 22.3% in the first quarter and 24% in the same quarter last year. The median percentage

<table>
<thead>
<tr>
<th>30-YEAR CONVENTIONAL</th>
<th>June-10</th>
<th>30-YEAR CONVENTIONAL</th>
<th>March-10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coupon (%)</strong></td>
<td><strong>WAC (%)</strong></td>
<td><strong>WAM (Months)</strong></td>
<td><strong>Price</strong></td>
</tr>
<tr>
<td>4.50</td>
<td>4.97</td>
<td>339</td>
<td>103.69</td>
</tr>
<tr>
<td>5.00</td>
<td>5.53</td>
<td>307</td>
<td>105.81</td>
</tr>
<tr>
<td>5.50</td>
<td>6.01</td>
<td>298</td>
<td>107.34</td>
</tr>
<tr>
<td>6.00</td>
<td>6.53</td>
<td>304</td>
<td>108.47</td>
</tr>
<tr>
<td>6.50</td>
<td>7.01</td>
<td>293</td>
<td>109.56</td>
</tr>
<tr>
<td>7.00</td>
<td>7.58</td>
<td>280</td>
<td>111.00</td>
</tr>
</tbody>
</table>
ratio of 30-year, single-family, fixed-rate mortgage loans and securities to total assets increased slightly to 9.1% in the second quarter from 8.9% in the first quarter, although the ratio was down from 9.2% in the same quarter a year ago. Consistent with recent interest rate changes, the median weighted average coupon of 30-year, single-family, fixed-rate mortgage loans decreased to 5.89% in the second quarter from 5.94% in the first quarter and 6.02% in the same quarter a year ago. Over the past year thrift institutions have increased their holdings of liquid assets. The median percentage ratio of cash, deposits and cash-equivalent securities to total assets increased to 16.2% in the second quarter from 14.1% in the same quarter a year ago.

On the liability side of the balance sheet, the thrift industry continues to increase its deposit base. The median percentage ratio of fixed-rate, fixed maturity (FRFM) deposits and non-maturity deposits to total assets increased to 79.2% in the second quarter from 78.5% in the first quarter and 77.1% in the same quarter a year ago. Consistent with prevailing interest rates, interest paid on FRFM deposits continues to decrease. The median weighted average coupon for FRFM deposits decreased to 2.04% in the second quarter from 2.19% in the first quarter and 2.83% in the same quarter a year ago. While interest costs for FRFM deposits have steadily decreased, deposit weighted average maturities (WAM) have been increasing across the thrift industry. The median WAM of FRFM deposits at thrift institutions increased to 12.0 months in the second quarter from 11.4 months in the first quarter and 10.3 months in the second quarter. The use of brokered deposits for funding has decreased over the past year as total industry brokered deposits as a percent of total industry assets decreased to 4.6% in the second quarter, from 5.7% in the same quarter a year ago.

Thrifts continue to increase their use of non-maturity deposits to fund assets. The median percentage ratio of non-maturity deposits to total assets increased to 32.4% in the second quarter from 32.0% in the first quarter and 29.5% in the same quarter a year ago. Non-maturity deposits typically represent a stable source of funding that reduces an institution’s sensitivity to rising interest rates. The intangible value associated with non-maturity deposits is derived from an institution’s ability to change offered rates with a lag relative to market rate increases. The median percentage ratio of core deposit intangibles to pre-shock NPV capital, as measured by the OTS NPV Model, decreased to 10.0% in the second quarter from 12.6% in the second quarter and 13.4% in the same quarter a year ago. It is important to remember, however, that the OTS NPV Model provides only an approximate valuation of an institution’s deposit intangible value. As noted in previous issues of this Review, thrift institutions should fully understand their customers’ deposit behavior. Without recognizing the customer behavior profile that is unique to each institution, financial institutions run the risk of experiencing higher sensitivity levels than previously expected in a rising interest rate environment.
Second Quarter NPV Model Results and the Thrift Industry’s IRR Profile

Pre-shock and post-shock NPV ratios improved in the second quarter. The median pre-shock NPV ratio increased to 13.56% in the second quarter from 13.41% in the first quarter. Likewise, the median post-shock NPV ratio increased to 12.55% in the second quarter from 12.06% in the first quarter (Exhibit 4). Accordingly, the industry’s median sensitivity measure decreased to 80 bps in the second quarter from 106 bps in the first quarter (Exhibit 5).

Contributing to lower sensitivity measures were lower asset durations and higher liability durations. The industry’s median effective duration of total assets decreased to 1.28 in the second quarter from 1.55 in the first quarter. Conversely, the industry’s median effective duration of total liabilities increased to 1.43 in the second quarter from 1.38 in the first quarter. Taken together, these changes produced a negative median duration gap for the industry for the first time since September 2009 (Exhibit 6). Contributing to lower total asset durations were 30-year, single family, fixed rate mortgage loans. The median effective duration for these assets decreased to 2.09 in the second quarter from 3.28 in the first quarter.

The thrift industry’s interest rate risk profile improved in the second quarter. From a supervisory standpoint the number of institutions with a “High” or “Significant” risk rating as defined by Thrift Bulletin 13a decreased to two in June, down from sixteen in March. The number of institutions with a sensitivity measure over 200 bps decreased to 108 in the second quarter from 196 in the first quarter (Exhibit 7). It is important to recognize, however, that because the OTS NPV model assumes all loans to be prime, agency-conforming exposures, pre-shock NPV ratios may be overstated and sensitivity measures may be understated for those institutions that hold a large amount of non-conforming loans and other non-prime assets.
Appendix A — All Thrifts

**Sensitivity Measure Distribution**

**All Thrifts**

<table>
<thead>
<tr>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>Basis Points</td>
</tr>
</tbody>
</table>

**Descriptive Statistics**
- Median = 80
- Mean = 108
- Standard Deviation = 89
- Skewness = 1.39
- Kurtosis = 1.91
- Maximum = 556.922
- Minimum = 0
- Count = 709

**Pre-Shock NPV Ratio Distribution**

**All Thrifts**

<table>
<thead>
<tr>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>NPV Ratio (Percent)</td>
</tr>
</tbody>
</table>

**Descriptive Statistics**
- Median = 13.65
- Mean = 15.79
- Standard Deviation = 9.56
- Skewness = 4.92
- Kurtosis = 31.55
- Maximum = 92.682
- Minimum = -1.003
- Count = 709

**Post-Shock NPV Ratio Distribution**

**All Thrifts**

<table>
<thead>
<tr>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>NPV Ratio (Percent)</td>
</tr>
</tbody>
</table>

**Descriptive Statistics**
- Median = 12.55
- Mean = 14.72
- Standard Deviation = 9.52
- Skewness = 5.09
- Kurtosis = 33.25
- Maximum = 92.175
- Minimum = -1.867
- Count = 709

**Asset Duration Distribution**

**All Thrifts**

<table>
<thead>
<tr>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>Duration</td>
</tr>
</tbody>
</table>

**Descriptive Statistics**
- Median = 1.28
- Mean = 1.32
- Standard Deviation = 0.59
- Skewness = -0.22
- Kurtosis = 3.01
- Maximum = 3.233
- Minimum = -2.784
- Count = 709

**Liabilities Duration Distribution**

**All Thrifts**

<table>
<thead>
<tr>
<th>Percent of Thrifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>Duration</td>
</tr>
</tbody>
</table>

**Descriptive Statistics**
- Median = 1.43
- Mean = 1.43
- Standard Deviation = 0.45
- Skewness = 1.24
- Kurtosis = 12.52
- Maximum = 5.78
- Minimum = 0.003
- Count = 709
Appendix B — Northeast Region

**Sensitivity Measure Distribution**

Northeast

Descriptive Statistics
- Median = 116
- Mean = 139
- Standard Deviation = 93
- Skewness = 0.82
- Kurtosis = -0.1
- Maximum = 428.047
- Minimum = 8.426
- Count = 159

**Pre-Shock NPV Ratio Distribution**

Northeast

Descriptive Statistics
- Median = 13.96
- Mean = 14.95
- Standard Deviation = 5.24
- Skewness = 2.19
- Kurtosis = 8.31
- Maximum = 46.483
- Minimum = 6.886
- Count = 159

**Post-Shock NPV Distribution**

Northeast

Descriptive Statistics
- Median = 12.1
- Mean = 13.57
- Standard Deviation = 5.11
- Skewness = 2.07
- Kurtosis = 7.09
- Maximum = 42.946
- Minimum = 4.687
- Count = 159

**Asset Duration Distribution**

Northeast

Descriptive Statistics
- Median = 1.56
- Mean = 1.57
- Standard Deviation = 0.58
- Skewness = -0.12
- Kurtosis = 0.69
- Maximum = 3.23
- Minimum = 0.244
- Count = 159

**Liabilities Duration Distribution**

Northeast

Descriptive Statistics
- Median = 1.52
- Mean = 1.59
- Standard Deviation = 0.53
- Skewness = 3.43
- Kurtosis = 25.24
- Maximum = 5.78
- Minimum = 0.386
- Count = 159
Appendix C — Southeast Region

Sensitivity Measure Distribution
Southeast

Descriptive Statistics
- Median = 74
- Mean = 101
- Standard Deviation = 92
- Skewness = 1.59
- Kurtosis = 2.47
- Maximum = 446.976
- Minimum = 0
- Count = 164

Pre-Shock NPV Ratio Distribution
Southeast

Descriptive Statistics
- Median = 13.89
- Mean = 15.83
- Standard Deviation = 9.33
- Skewness = 4.23
- Kurtosis = 26.39
- Maximum = 80.292
- Minimum = -1.003
- Count = 164

Post-Shock NPV Distribution
Southeast

Descriptive Statistics
- Median = 12.95
- Mean = 14.81
- Standard Deviation = 9.29
- Skewness = 4.39
- Kurtosis = 27.8
- Maximum = 80.014
- Minimum = -1.867
- Count = 164

Asset Duration Distribution
Southeast

Descriptive Statistics
- Median = 1,18
- Mean = 1.24
- Standard Deviation = 0.55
- Skewness = 0.59
- Kurtosis = 0.12
- Maximum = 2.741
- Minimum = 0.144
- Count = 164

Liabilities Duration Distribution
Southeast

Descriptive Statistics
- Median = 1.27
- Mean = 1.29
- Standard Deviation = 0.43
- Skewness = 0.45
- Kurtosis = 1.6
- Maximum = 3.047
- Minimum = 0.055
- Count = 164
Appendix D — Central Region

### Sensitivity Measure Distribution

**Central**

**Descriptive Statistics**
- Median = 75
- Mean = 96
- Standard Deviation = 79
- Skewness = 1.79
- Kurtosis = 5.14
- Maximum = 556.922
- Minimum = 0
- Count = 232

### Pre-Shock NPV Ratio Distribution

**Central**

**Descriptive Statistics**
- Median = 13.28
- Mean = 15.48
- Standard Deviation = 9.7
- Skewness = 5.59
- Kurtosis = 38.73
- Maximum = 92.682
- Minimum = 0
- Count = 232

### Post-Shock NPV Distribution

**Central**

**Descriptive Statistics**
- Median = 12.56
- Mean = 14.52
- Standard Deviation = 9.67
- Skewness = 5.74
- Kurtosis = 40.37
- Maximum = 92.175
- Minimum = 2.452
- Count = 232

### Asset Duration Distribution

**Central**

**Descriptive Statistics**
- Median = 1.24
- Mean = 1.29
- Standard Deviation = 0.56
- Skewness = 0.09
- Kurtosis = 0.41
- Maximum = 3.084
- Minimum = -0.329
- Count = 232

### Liabilities Duration Distribution

**Central**

**Descriptive Statistics**
- Median = 1.47
- Mean = 1.45
- Standard Deviation = 0.36
- Skewness = -0.57
- Kurtosis = 1.15
- Maximum = 2.333
- Minimum = 0.065
- Count = 232
Appendix F — Western Region

**Sensitivity Measure Distribution**

**Descriptive Statistics**
- Median = 71
- Mean = 100
- Standard Deviation = 90
- Skewness = 1.47
- Kurtosis = 1.83
- Maximum = 427.17
- Minimum = 0
- Count = 154

**Pre-Shock NPV Ratio Distribution**

**Descriptive Statistics**
- Median = 13.8
- Mean = 17.09
- Standard Deviation = 12.52
- Skewness = 4.04
- Kurtosis = 18.44
- Maximum = 88.498
- Minimum = 3.653
- Count = 154

**Post-Shock NPV Distribution**

**Descriptive Statistics**
- Median = 12.97
- Mean = 16.09
- Standard Deviation = 12.49
- Skewness = 4.16
- Kurtosis = 19.38
- Maximum = 88.487
- Minimum = 3.148
- Count = 154

**Asset Duration Distribution**

**Descriptive Statistics**
- Median = 1.19
- Mean = 1.21
- Standard Deviation = 0.64
- Skewness = -1.23
- Kurtosis = 9.14
- Maximum = 3
- Minimum = -2.784
- Count = 154

**Liabilities Duration Distribution**

**Descriptive Statistics**
- Median = 1.39
- Mean = 1.39
- Standard Deviation = 0.46
- Skewness = -0.2
- Kurtosis = 0.64
- Maximum = 2.707
- Minimum = 0.003
- Count = 154